

CCI 2.0

API Reference

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1 Before You Start

Welcome to *Cloud Container Instance API Reference*. CCI is a serverless container engine that allows you to run containers without creating or managing server clusters.

This document describes how to use application programming interfaces (APIs) to perform operations on CCI, such as creating or deleting workloads or modifying workload specifications.

If you plan to access CCI through an API, ensure that you are familiar with CCI concepts and learn basic Kubernetes knowledge. For details, see [Service Overview](#).

CCI supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS. For details about API calling, see [Calling APIs](#).

Obtaining CCI Endpoints

An endpoint is the **request address** for calling an API. Endpoints vary with services and regions. An endpoint can be obtained from [Regions and Endpoints](#).

Select an endpoint based on your service requirements.

Table 1-1 Regions and endpoints

Region Name	Region	Endpoint
TR-Istanbul	tr-west-1	cci.tr-west-1.myhuaweicloud.com
AF-Johannesburg	af-south-1	cci.af-south-1.myhuaweicloud.com
AP-Singapore	ap-southeast-3	cci.ap-southeast-3.myhuaweicloud.com
ME-Riyadh	me-east-1	cci.me-east-1.myhuaweicloud.com

Region Name	Region	Endpoint
LA-Mexico City2	la-north-2	cci.la-north-2.myhuaweicloud.com
LA-Sao Paulo1	sa-brazil-1	cci.sa-brazil-1.myhuaweicloud.com
LA-Santiago	la-south-2	cci.la-south-2.myhuaweicloud.com

Constraints

- The number of CCI instances that you can create is determined by your quota. For details, see [Service Quota](#). For details about how to increase quotas, see [Quotas](#).
- For more constraints, see API description.

Concepts

- Account

An account is created upon successful signing up. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity, which should not be used directly to perform routine management. To ensure account security, create Identity and Access Management (IAM) users and grant them permissions for routine management.
- User

An IAM user is created by an account in IAM to use cloud services. Each IAM user has its own identity credentials (password and access keys).

API authentication requires information such as the account name, username, and password.
- Region

Regions are divided based on geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS), are shared within the same region. Regions are classified into universal regions and dedicated regions. A universal region provides universal cloud services for common tenants. A dedicated region provides specific services for specific tenants.

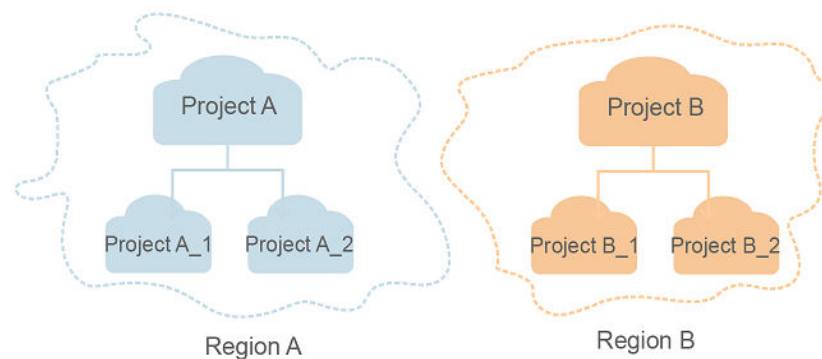
For details, see [Region and AZ](#).
- AZ

An AZ comprises one or more physical data centers equipped with independent ventilation, fire, water, and electricity facilities. Computing, network, storage, and other resources in an AZ are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to allow you to build cross-AZ high-availability systems.

- Project

A project corresponds to a region. Default projects are defined to group and physically isolate resources (including computing, storage, and network resources) across regions. Users can be granted permissions in a default project to access all resources under their accounts in the region associated with the project. If you need more refined access control, create subprojects under a default project and create resources in subprojects. Then you can assign users the permissions required to access only the resources in the specific subprojects.

Figure 1-1 Project isolation model



- Enterprise project

Enterprise projects group and manage resources across regions. Resources in different enterprise projects are logically isolated. An enterprise project can contain resources of multiple regions, and resources can be added to or removed from enterprise projects.

For details about enterprise projects and about how to obtain enterprise project IDs, see [Enterprise Management User Guide](#).

Selecting an API Type

CCI provides Kubernetes-like APIs to better meet your requirements.

2 API Overview

CCI provides proprietary APIs for you to better manage resources. With these APIs, you can use all functions provided by CCI, such as creating a Deployment.

Subtype	Description
Namespace	Namespace management APIs, such as the APIs for creating, querying, updating, and deleting a namespace. A namespace provides a method of allocating resources among multiple users. When you have a large number of projects and personnel, you can define namespaces by project attributes, such as production, testing, and development.
Network	Network management APIs, such as the APIs for creating, querying, modifying, and deleting a network. Network is a new object added to CCI to define the mapping between the network in a namespace and the subnet and VPC.
Pod	Pod management APIs, such as the APIs for creating, querying, modifying, and deleting a pod. A pod is the smallest and simplest unit in the Kubernetes object model that you create or deploy. A pod encapsulates one or more containers, storage resources, an independent network IP address, and policies for managing container running.
Deployment	Deployment management APIs, such as the APIs for creating, querying, modifying, and deleting a Deployment. Deployment is a type of pod controller. A Deployment can contain one or more pod replicas. Each pod replica has the same role. Therefore, the system automatically distributes requests to multiple pod replicas of a Deployment. All pod replicas in a Deployment share storage volumes.

Subtype	Description
ReplicaSet	ReplicaSet management APIs, such as the API for querying a ReplicaSet. ReplicaSet is used to maintain the number of replicas for a group of pods to ensure that the specified number of pods are always running.
Service	Service management APIs, such as the APIs for creating, querying, modifying, and deleting a Service. A Service is an object that manages interfaces for exposing a collection of pods on the network. Each Service object defines a logical set of endpoints (usually pods) and a policy for accessing these pods.
ConfigMap	ConfigMap management APIs, such as the APIs for creating, querying, modifying, and deleting a ConfigMap. A ConfigMap is an API object used to save non-confidential data to key-value pairs. Pods can use it as an environment variable, a command line parameter, or a configuration file in storage volumes.
Secret	Secret management APIs, such as the APIs for creating, querying, modifying, and deleting a secret. A secret is similar to a ConfigMap but is used to store confidential data, such as passwords, tokens, or keys.
PersistentVolume Claim	PersistentVolumeClaim management APIs, such as the APIs for creating, querying, modifying, and deleting a PersistentVolumeClaim. A PersistentVolumeClaim is a request for and claim to a PersistentVolume. Similar to a pod that requests CPU and memory, a PersistentVolumeClaim requests storage resources.
HorizontalPodAutoscaler	HorizontalPodAutoscaler management APIs, such as the APIs for creating, querying, modifying, and deleting a HorizontalPodAutoscaler. HorizontalPodAutoscaler configures horizontal pod scaling. It automatically manages the number of replicas of a Deployment based on the specified metrics.

Namespace

API	Description
Creating a Namespace	Creates a namespace.
Querying a Namespace	Queries the details about a namespace.
Listing Namespaces	Queries the details about all namespaces of a tenant.

API	Description
Deleting a Namespace	Deletes a namespace.

Network

API	Description
Listing Networks in a Namespace	Queries the details about all networks in a namespace.
Creates a network.	Creates a network.
Deleting a Network	Deletes a network in a namespace.
Querying a Network	Queries the details about a network in a namespace.
Updates a network.	Updates a network in a namespace.
Replaces a network.	Replaces a network in a namespace.

Pod

API	Description
Listing Pods in a Namespace	Queries the details about all pods in a namespace.
Creating a Pod	Creates a pod.
Deleting a Pod	Deletes a pod in a namespace.
Querying a Pod	Queries the details about a pod in a namespace.
Updating a Pod	Updates a pod in a namespace.
Replacing a Pod	Replaces a pod in a namespace.
Running Commands in a Container of a Pod	Runs commands in the containers of a pod in a namespace.
Querying Pod Logs	Queries the logs of a pod in a namespace.
Listing Pods	Queries the details about all pods of a tenant.

Deployment

API	Description
Listing Deployments	Queries the details about all Deployments of a tenant.

API	Description
Listing Deployments in a Namespace	Queries the details about all Deployments in a namespace.
Creating a Deployment	Creates a Deployment.
Deleting a Deployment	Deletes a Deployment in a namespace.
Querying a Deployment	Queries the details about a Deployment in a namespace.
Updating a Deployment	Updates a Deployment in a namespace.
Replacing a Deployment	Replaces a Deployment in a namespace.

ReplicaSet

API	Description
Listing ReplicaSets in a Namespace	Queries the details about all ReplicaSets in a namespace.
Querying a ReplicaSet	Queries the details about a ReplicaSet in a namespace.

Service

API	Description
Listing Services in a Namespace	Queries the details about all Services in a namespace.
Creating a Service	Creates a Service.
Deleting a Service	Deletes a Service in a namespace.
Querying a Service	Queries the details about a Service in a namespace.
Updating a Service	Updates a Service in a namespace.
Replacing a Service	Replaces a Service in a namespace.

ConfigMap

API	Description
Listing ConfigMaps in a Namespace	Queries the details about all ConfigMaps in a namespace.

API	Description
Creating a ConfigMap	Creates a ConfigMap.
Deletes a ConfigMap	Deletes a ConfigMap in a namespace.
Querying a ConfigMap	Queries the details about a ConfigMap in a namespace.
Updating a ConfigMap	Updates a ConfigMap in a namespace.
Replacing a ConfigMap	Replaces a ConfigMap in a namespace.

Secret

API	Description
Listing Secrets in a Namespace	Queries the details about all secrets in a namespace.
Creating a Secret	Creates a secret.
Deleting a Secret	Deletes a secret in a namespace.
Querying a Secret	Queries the details about a secret in a namespace.
Updating a Secret	Updates a secret in a namespace.
Replacing a Secret	Replaces a secret in a namespace.

PersistentVolumeClaim

API	Description
Listing PersistentVolumeClaims in a Namespace	Queries the details about all PersistentVolumeClaims in a namespace.
Creating a PersistentVolumeClaim	Creates a PersistentVolumeClaim.
Deleting a PersistentVolumeClaim	Deletes a PersistentVolumeClaim in a namespace.
Querying a PersistentVolumeClaim	Queries the details about a PersistentVolumeClaim in a namespace.
Updating a PersistentVolumeClaim	Updates a PersistentVolumeClaim in a namespace.
Replacing a PersistentVolumeClaim	Replaces a PersistentVolumeClaim in a namespace.

HorizontalPodAutoscaler

API	Description
Listing HorizontalPodAutoscalers in a Namespace	Queries the details about all HorizontalPodAutoscalers in a namespace.
Creating a HorizontalPodAutoscaler	Creates a HorizontalPodAutoscaler.
Deletes a HorizontalPodAutoscaler.	Deletes a HorizontalPodAutoscaler in a namespace.
Querying a HorizontalPodAutoscaler	Queries the details about a HorizontalPodAutoscaler in a namespace.
Updating a HorizontalPodAutoscaler	Updates a HorizontalPodAutoscaler in a namespace.
Replacing a HorizontalPodAutoscaler	Replaces a HorizontalPodAutoscaler in a namespace.

3 Calling APIs

3.1 Making an API Request

This section describes the structure of a REST API request, and uses the IAM API for [creating an IAM user](#) as an example to demonstrate how to call an API.

Request URI

A request URI is in the following format:

{URI-scheme}://{Endpoint}/{resource-path}?{query-string}

Although a request URI is included in the request header, most programming languages or frameworks require the request URI to be transmitted separately.

Table 3-1 URI parameter description

Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.
Endpoint	Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from Regions and Endpoints . For example, the endpoint of IAM in region CN-Hong Kong is iam.ap-southeast-1.myhuaweicloud.com .
resource-path	Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the resource-path of the API used to obtain a user token is /v3/auth/tokens .
query-string	Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of <i>Parameter name=Parameter value</i> . For example, ?limit=10 indicates that a maximum of 10 data records will be displayed.

IAM is a global service. You can create an IAM user using the endpoint of IAM in any region. For example, to create an IAM user in the **CN-Hong Kong** region, obtain the endpoint of IAM (**iam.ap-southeast-1.myhuaweicloud.com**) for this region and the **resource-path** (**/v3.0/OS-USER/users**) in the URI of the API for **creating an IAM user**. Then construct the URI as follows:

```
https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
```

Figure 3-1 Example URI



NOTE

To simplify the URI display in this document, each API is provided only with a **resource-path** and a request method. The **URI-scheme** of all APIs is **HTTPS**, and the endpoints of all APIs in the same region are identical.

Request Methods

The HTTP protocol defines the following request methods that can be used to send a request to the server.

Table 3-2 HTTP methods

Method	Description
GET	Requests the server to return specified resources.
PUT	Requests the server to update specified resources.
POST	Requests the server to add resources or perform special operations.
DELETE	Requests the server to delete specified resources, for example, an object.
HEAD	Same as GET except that the server must return only the response header.
PATCH	Requests the server to update partial content of a specified resource. If the resource does not exist, a new resource will be created.

For example, in the case of the API for **creating an IAM user**, the request method is **POST**. An example request is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
```

Request Header

You can also add additional header fields to a request, such as the fields required by a specified URI or HTTP method. For example, to request for the authentication information, add **Content-Type**, which specifies the request body type.

Common request header fields are as follows.

Table 3-3 Common request header fields

Parameter	Description	Mandatory	Example Value
Host	Specifies the server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. The value is in the format of <i>Hostname:Port number</i> . If the port number is not specified, the default port is used. The default port number for https is 443 .	No This field is mandatory for AK/SK authentication.	code.test.com or code.test.com:443
Content-Type	Specifies the type (or format) of the message body. The default value application/json is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Specifies the length of the request body. The unit is byte.	No	3495
X-Project-Id	Specifies the project ID. Obtain the project ID by following the instructions in Obtaining a Project ID .	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cbaa340f9c0f4

Parameter	Description	Mandatory	Example Value
X-Auth-Token	Specifies the user token. It is a response to the API for obtaining a user token (This is the only API that does not require authentication). After the request is processed, the value of X-Subject-Token in the response header is the token value.	No This field is mandatory for token authentication.	The following is part of an example token: MIIPAgYJKoZlhvc NAQcCo...ggg1B BIINPXsidG9rZ

 NOTE

In addition to supporting authentication using tokens, APIs support authentication using AK/SK, which uses SDKs to sign a request. During the signature, the **Authorization** (signature authentication) and **X-Sdk-Date** (time when a request is sent) headers are automatically added in the request.

For more details, see "Authentication Using AK/SK" in [Authentication](#).

The following shows an example request of the API for **creating an IAM user** when AK/SK authentication is used:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Sdk-Date: 20240416T095341Z
Authorization: SDK-HMAC-SHA256 Access=*****, SignedHeaders=content-type;host;x-sdk-date,
Signature=*****
```

(Optional) Request Body

This part is optional. A request body is generally sent in a structured format (for example, JSON or XML), which is specified by **Content-Type** in the request header. It is used to transfer content other than the request header. If the request body contains full-width characters, these characters must be coded in UTF-8.

The request body varies depending on APIs. Certain APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

The following shows an example request (a request body included) of the API for **creating an IAM user**. You can learn about request parameters and related description from this example. The bold parameters need to be replaced for a real request.

- **accountid**: account ID of an IAM user
- **username**: name of an IAM user
- **email**: email of an IAM user
- *********: login password of an IAM user

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Sdk-Date: 20240416T095341Z
```

```
Authorization: SDK-HMAC-SHA256 Access=*****, SignedHeaders=content-type;host;x-sdk-date,  
Signature=*****
```

```
{  
  "user": {  
    "domain_id": "accountid",  
    "name": "username",  
    "password": "*****",  
    "email": "email",  
    "description": "IAM User Description"  
  }  
}
```

If all data required for the API request is available, you can send the request to call the API through [curl](#), [Postman](#), or coding.

3.2 Authentication

Requests for calling an API can be authenticated using either of the following methods:

- AK/SK authentication: Requests are encrypted using AK/SK pairs. AK/SK authentication is recommended because it is more secure than token authentication.
- Token authentication: Requests are authenticated using tokens.

AK/SK Authentication

NOTE

- AK/SK authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token authentication is recommended.
- An AK/SK pair can either be permanent or temporary. If it is temporary, the **X-Security-Token** field must be included in the request header. The value is the security token of the temporary AK/SK pair.
- API Gateway checks the time format and compares the request time with the time when API Gateway received the request. If the time difference exceeds 15 minutes, API Gateway will reject the request. So, the local time on the client must be synchronized with the clock server to avoid a large offset in the value of **X-Sdk-Date** in the request header.

In AK/SK authentication, an AK/SK pair is used to sign requests and the signature is then added to the requests for authentication.

- AK: access key ID, which is a unique identifier used in conjunction with a secret access key to sign requests cryptographically.
- SK: secret access key, which is used in conjunction with an AK to sign requests cryptographically. It identifies a request sender and prevents the request from being modified.

In AK/SK authentication, you can use an AK/SK pair to sign requests based on the signature algorithm or using the signing SDK. For details about how to sign requests and use the signing SDK, see [API Request Signing Guide](#).

NOTE

The signing SDK is only used for signing requests and is different from the SDKs provided by services.

Token Authentication

NOTE

- A token remains valid for 24 hours after it is generated. You can cache a token and reuse it for authentication instead of generating a new one each time.
- Before using a token, ensure that it has sufficient time remaining before expiration. Using a near-expiry token may cause API call failures.

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to requests to get permissions for calling the API. You can obtain a token by calling the [Obtaining a User Token](#) API.

IMS is a project-level service. When you call the API, set **auth.scope** in the request body to **project**.

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username", // IAM user name
          "password": $ADMIN_PASS, // IAM user password. You are advised to store it in ciphertext in
the configuration file or an environment variable and decrypt it when needed to ensure security.
          "domain": {
            "name": "domainname" // Name of the account that the IAM user belongs to
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "xxxxxxxx" // Project name
      }
    }
  }
}
```

After a token is obtained, the **X-Auth-Token** header field must be added to requests to specify the token when calling other APIs. For example, if the token is **ABCDEFGH....**, **X-Auth-Token: ABCDEFGH....** can be added to a request as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Auth-Token: ABCDEFGH....
```

3.3 Response

Status Code

After sending a request, you will receive a response, including a status code, response header, and response body.

A status code is a group of digits, ranging from 1xx to 5xx. It indicates the status of a request. For more information, see [Status Codes](#).

For example, if status code **201** is returned for calling the API used to [create an IAM user](#), the request is successful.

Response Header

Similar to a request, a response also has a header, for example, **Content-Type**.

Figure 3-2 shows the response header for the API used to [create an IAM user](#).

NOTE

For security purposes, you are advised to set the token in ciphertext in configuration files or environment variables and decrypt it when using it.

Figure 3-2 Header fields of the response to the request for creating an IAM user

```
"X-Frame-Options": "SAMEORIGIN",
"X-IAM-ETag-id": "2562365939-d8f6f12921974cb097338ac11fcec8a",
"Transfer-Encoding": "chunked",
"Strict-Transport-Security": "max-age=31536000; includeSubdomains;",
"Server": "api-gateway",
"X-Request-Id": "af2953f2bcc67a42325a69a19e6c32a2",
"X-Content-Type-Options": "nosniff",
"Connection": "keep-alive",
"X-Download-Options": "noopen",
"X-XSS-Protection": "1; mode=block;",
"X-IAM-Trace-Id": "token_ null_af2953f2bcc67a42325a69a19e6c32a2",
"Date": "Tue, 21 May 2024 09:03:40 GMT",
"Content-Type": "application/json; charset=utf8"
```

(Optional) Response Body

The body of a response is often returned in a structured format (for example, JSON or XML) as specified in the **Content-Type** header field. The response body transfers content except the response header.

The following shows part of the response body for the API used to [create an IAM user](#).

```
{
  "user": {
    "id": "c131886aec...",
    "name": "IAMUser",
    "description": "IAM User Description",
    "areacode": "",
    "phone": "",
    "email": "***@***.com",
    "status": null,
    "enabled": true,
    "pwd_status": false,
    "access_mode": "default",
    "is_domain_owner": false,
    "xuser_id": "",
    "xuser_type": "",
    "password_expires_at": null,
    "create_time": "2024-05-21T09:03:41.000000",
    "domain_id": "d78cbac1.....",
    "xdomain_id": "30086000.....",
    "xdomain_type": ""
  }
}
```



```
    "default_project_id": null  
  }  
}
```

If an error occurs during API calling, an error code and a message will be displayed. The following shows an error response body.

```
{  
  "error_msg": "The request message format is invalid.",  
  "error_code": "IMG.0001"  
}
```

In the response body, **error_code** is an error code, and **error_msg** provides information about the error.

4 Getting Started

Overview

You can call APIs to create a workload. An Nginx image is used as an example to show how you can create a workload.

The Nginx image is from the open-source image center, and the container uses 1 vCPU and 2 GiB of memory.

For details about how to call APIs, see [Calling APIs](#).

Procedure

1. Call the API described in [Creating a Namespace](#) to create a namespace.
2. Call the API described in [Creating a Network](#) to create a network, and associate the network with a VPC and subnet.
3. Call the API described in [Creating a Deployment](#) to create an Nginx workload.

Creating an Nginx Workload

Step 1 Call the API described in [Creating a Namespace](#) to create a namespace.

```
{
  "apiVersion": "cci/v2",
  "kind": "Namespace",
  "metadata": {
    "name": "namespace-test"
  }
}
```

You must specify the following parameters:

- **name:** namespace name.

Step 2 Call the API described in [Creating a Network](#) to create a network, and associate the network with a VPC and subnet.

```
{
  "apiVersion": "yangtse/v2",
  "kind": "Network",
  "metadata": {
    "annotations": {
      "yangtse.io/domain-id": "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx",
      "yangtse.io/project-id": "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx"
    }
  }
}
```

```
{
  "name": "test-network",
  "namespace": "namespace-test"
},
"spec": {
  "networkType": "underlay_neutron",
  "securityGroups": [
    "xxxxxxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
  ],
  "subnets": [
    {
      "subnetID": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
    }
  ]
}
}
```

You must specify the following parameters:

- **name:** name of a network object.
- **securityGroups:** security group ID, which can be obtained on the [Security Groups](#) page.
- **yangtse.io/domain-id:** account ID, which can be obtained by following the procedure in [Obtaining an Account ID](#).
- **yangtse.io/project-id:** project ID, which can be obtained by following the procedure in [Obtaining a Project ID](#).
- **subnetID:** ID of the subnet in the VPC, which can be obtained on the [VPC](#) console or by calling the API for [querying subnets](#).

Step 3 Call the API described in [Creating a Deployment](#) to create an Nginx workload.

In this example, a workload whose name is **nginx** and specifications are set to 1 vCPU and 2 GiB of memory will be created from the open-source image `nginx:stable-alpine-perl`. After the API is called, CCI creates a container running nginx.

```
{
  "kind": "Deployment",
  "apiVersion": "cci/v2",
  "metadata": {
    "name": "nginx",
    "labels": {
      "app": "nginx"
    }
  },
  "spec": {
    "replicas": 1,
    "selector": {
      "matchLabels": {
        "app": "nginx"
      }
    },
    "template": {
      "metadata": {
        "labels": {
          "app": "nginx"
        }
      },
      "spec": {
        "containers": [
          {
            "name": "container-0",
            "image": "library/nginx:stable-alpine-perl",
            "resources": {
```

```
    "limits": {  
      "cpu": "1",  
      "memory": "2Gi"  
    },  
    "requests": {  
      "cpu": "1",  
      "memory": "2Gi"  
    }  
  },  
  "imagePullSecrets": [  
    {  
      "name": "imagepull-secret"  
    }  
  ]  
}
```

You must specify the following parameters:

- **name**: Deployment name.
- **replicas**: pod quantity, that is, the number of pods under the Deployment.
- **selector.matchLabels**: labels that are used by the Deployment to select pods. In this example, **app** is set to **nginx** under labels. The pod that has such a label will be selected by the Deployment.
- **template**: pod template, which defines pod configurations and specifications.
 - **metadata.labels**: pod label.
 - **spec.containers**: definition of a container in the pod.
 - **image**: image used to create containers.
 - **resources.limits**: resource limits for a container. The resources used by a container cannot exceed the limits.
 - **resources.requests**: resources requested by a container.

After the Nginx workload is created, you can view it on the CCI console.

Deployments					
Pods					
Create from YAML					
Select a property or enter a keyword					
Workload Name	Status	Normal/Total Pods	Created	Image Name	Operation
nginx	Running	1/1	35 minutes ago	nginx:stable-alpine-perl	Edit YAML, Delete

----End

5 API Description

5.1 Secret

5.1.1 Querying Secrets in a Namespace

Function

This API is used to query the details about all secrets in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces/{namespace}/secrets

Table 5-1 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-3 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.Secret objects	Items is a list of secret objects. More info: https://kubernetes.io/docs/concepts/configuration/secret
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Table 5-4 io.cci.api.pkg.apis.versioned.cci.v2.Secret

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
data	Map<String,String>	Data contains the secret data. Each key must consist of alphanumeric characters, '-', '_' or '.'. The serialized form of the secret data is a base64 encoded string, representing the arbitrary (possibly non-string) data value here. Described in https://tools.ietf.org/html/rfc4648#section-4
immutable	Boolean	Immutable, if set to true, ensures that data stored in the Secret cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
stringData	Map<String,String>	stringData allows specifying non-binary secret data in string form. It is provided as a write-only input field for convenience. All keys and values are merged into the data field on write, overwriting any existing values. The stringData field is never output when reading from the API.
type	String	Used to facilitate programmatic handling of secret data. More info: https://kubernetes.io/docs/concepts/configuration/secret/#secret-types . Currently only 'Opaque', 'kubernetes.io/dockercfg', 'kubernetes.io/dockerconfigjson' and 'kubernetes.io/tls' are supported

Table 5-5 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-6 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-7 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.

Parameter	Type	Description
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "v1",
  "items": [ {
    "apiVersion": "cci/v2",
    "data": {
      "key": "eHh4Cg=="
    },
    "kind": "Secret",
    "metadata": {
      "annotations": {
        "secret.cci.io/namespace-uid": "8fd96f2d-ecfa-4e4f-8f5f-4070766d333c",
        "tenant.cci.io/tenant-id": "08a2*****c03"
      },
      "creationTimestamp": "2024-10-09T17:13:08Z",
      "labels": {
        "sys_enterprise_project_id": "0",
        "tenant.cci.io/tenant-id": "08a2*****c03",
        "tenant.kubernetes.io/domain-id": "08a*****ee60",
        "tenant.kubernetes.io/project-id": "08a2*****c03"
      },
      "name": "test-secret",
      "namespace": "test-api",
      "resourceVersion": "391114527",
      "uid": "77d8dedc-b7ae-40a1-b9a6-6f37cca2c4d1"
    },
    "type": "Opaque"
  } ],
  "kind": "List",
  "metadata": {
    "resourceVersion": ""
  }
}
```

```
}  
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.1.2 Creating a Secret

Function

This API is used to create a secret.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

POST /apis/cci/v2/namespaces/{namespace}/secrets

Table 5-8 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-9 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-10 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Mandatory	Type	Description
data	No	Map<String,String>	Data contains the secret data. Each key must consist of alphanumeric characters, '-', '_' or '.'. The serialized form of the secret data is a base64 encoded string, representing the arbitrary (possibly non-string) data value here. Described in https://tools.ietf.org/html/rfc4648#section-4
immutable	No	Boolean	Immutable, if set to true, ensures that data stored in the Secret cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	Yes	io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
stringData	No	Map<String,String>	stringData allows specifying non-binary secret data in string form. It is provided as a write-only input field for convenience. All keys and values are merged into the data field on write, overwriting any existing values. The stringData field is never output when reading from the API.
type	No	String	Used to facilitate programmatic handling of secret data. More info: https://kubernetes.io/docs/concepts/configuration/secret/#secret-types . Currently only 'Opaque', 'kubernetes.io/dockercfg', 'kubernetes.io/dockerconfigjson' and 'kubernetes.io/tls' are supported

Table 5-11 io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations

Parameter	Mandatory	Type	Description
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Mandatory	Type	Description
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces

Response Parameters

Status code: 200

Table 5-12 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
data	Map<String,String>	Data contains the secret data. Each key must consist of alphanumeric characters, '-', '_' or '.'. The serialized form of the secret data is a base64 encoded string, representing the arbitrary (possibly non-string) data value here. Described in https://tools.ietf.org/html/rfc4648#section-4

Parameter	Type	Description
immutable	Boolean	Immutable, if set to true, ensures that data stored in the Secret cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
stringData	Map<String,String>	stringData allows specifying non-binary secret data in string form. It is provided as a write-only input field for convenience. All keys and values are merged into the data field on write, overwriting any existing values. The stringData field is never output when reading from the API.
type	String	Used to facilitate programmatic handling of secret data. More info: https://kubernetes.io/docs/concepts/configuration/secret/#secret-types . Currently only 'Opaque', 'kubernetes.io/dockercfg', 'kubernetes.io/dockerconfigjson' and 'kubernetes.io/tls' are supported

Table 5-13 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-14 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Status code: 201**Table 5-15** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
data	Map<String,String>	Data contains the secret data. Each key must consist of alphanumeric characters, '-', '_' or '.'. The serialized form of the secret data is a base64 encoded string, representing the arbitrary (possibly non-string) data value here. Described in https://tools.ietf.org/html/rfc4648#section-4
immutable	Boolean	Immutable, if set to true, ensures that data stored in the Secret cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
stringData	Map<String,String>	stringData allows specifying non-binary secret data in string form. It is provided as a write-only input field for convenience. All keys and values are merged into the data field on write, overwriting any existing values. The stringData field is never output when reading from the API.
type	String	Used to facilitate programmatic handling of secret data. More info: https://kubernetes.io/docs/concepts/configuration/secret/#secret-types . Currently only 'Opaque', 'kubernetes.io/dockercfg', 'kubernetes.io/dockerconfigjson' and 'kubernetes.io/tls' are supported

Table 5-16 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-17 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Status code: 202**Table 5-18** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
data	Map<String,String>	Data contains the secret data. Each key must consist of alphanumeric characters, '-', '_' or '.'. The serialized form of the secret data is a base64 encoded string, representing the arbitrary (possibly non-string) data value here. Described in https://tools.ietf.org/html/rfc4648#section-4
immutable	Boolean	Immutable, if set to true, ensures that data stored in the Secret cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
stringData	Map<String,String>	stringData allows specifying non-binary secret data in string form. It is provided as a write-only input field for convenience. All keys and values are merged into the data field on write, overwriting any existing values. The stringData field is never output when reading from the API.
type	String	Used to facilitate programmatic handling of secret data. More info: https://kubernetes.io/docs/concepts/configuration/secret/#secret-types . Currently only 'Opaque', 'kubernetes.io/dockercfg', 'kubernetes.io/dockerconfigjson' and 'kubernetes.io/tls' are supported

Table 5-19 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-20 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Example Requests

```
{
  "apiVersion" : "cci/v2",
  "data" : {
    "key" : "eHh4Cg=="
  },
  "kind" : "Secret",
  "metadata" : {
    "name" : "test-secret"
  }
}
```

Example Responses

Status code: 201

Created

```
{
  "apiVersion" : "cci/v2",
  "data" : {
    "key" : "eHh4Cg=="
  },
  "kind" : "Secret",
  "metadata" : {
    "annotations" : {
      "secret.cci.io/namespace-uid" : "8fd96f2d-ecfa-4e4f-8f5f-4070766d333c",
      "tenant.cci.io/tenant-id" : "08a2*****c03"
    }
  },
  "creationTimestamp" : "2024-10-09T17:13:08Z",
  "labels" : {
    "sys_enterprise_project_id" : "0",
    "tenant.cci.io/tenant-id" : "08a2*****c03",
    "tenant.kubernetes.io/domain-id" : "08a*****ee60",
    "tenant.kubernetes.io/project-id" : "08a2*****c03"
  },
  "name" : "test-secret",
  "namespace" : "test-api",
  "resourceVersion" : "391114527",
  "uid" : "77d8dedc-b7ae-40a1-b9a6-6f37cca2c4d1"
},
"type" : "Opaque"
}
```

Status Codes

Status Code	Description
200	OK
201	Created
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound

Status Code	Description
405	MethodNotAllowed
406	NotAcceptable
409	AlreadyExists
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.1.3 Deleting a Secret

Function

This API is used to delete a secret in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

DELETE /apis/ci/v2/namespaces/{namespace}/secrets/{name}

Table 5-21 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Secret
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-22 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Response Parameters

Status code: 200

Table 5-23 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
code	Integer	Suggested HTTP return code for this status, 0 if not set.
details	io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails object	Extended data associated with the reason. Each reason may define its own extended details. This field is optional and the data returned is not guaranteed to conform to any schema except that defined by the reason type.

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
message	String	A human-readable description of the status of this operation.
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
reason	String	A machine-readable description of why this operation is in the "Failure" status. If this value is empty there is no information available. A Reason clarifies an HTTP status code but does not override it.
status	String	Status of the operation. One of: "Success" or "Failure". More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-24 io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails

Parameter	Type	Description
causes	Array of io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause objects	The Causes array includes more details associated with the StatusReason failure. Not all StatusReasons may provide detailed causes.
group	String	The group attribute of the resource associated with the status StatusReason.

Parameter	Type	Description
kind	String	The kind attribute of the resource associated with the status Reason. On some operations may differ from the requested resource Kind. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	The name attribute of the resource associated with the status Reason (when there is a single name which can be described).
retryAfterSeconds	Integer	If specified, the time in seconds before the operation should be retried. Some errors may indicate the client must take an alternate action for those errors this field may indicate how long to wait before taking the alternate action.
uid	String	UID of the resource. (when there is a single resource which can be described). More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-25 io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause

Parameter	Type	Description
field	String	The field of the resource that has caused this error, as named by its JSON serialization. May include dot and postfix notation for nested attributes. Arrays are zero-indexed. Fields may appear more than once in an array of causes due to fields having multiple errors. Optional. Examples: "name" - the field "name" on the current resource "items[0].name" - the field "name" on the first array entry in "items"

Parameter	Type	Description
message	String	A human-readable description of the cause of the error. This field may be presented as-is to a reader.
reason	String	A machine-readable description of the cause of the error. If this value is empty there is no information available.

Table 5-26 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.

Parameter	Type	Description
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Status code: 202

Table 5-27 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
code	Integer	Suggested HTTP return code for this status, 0 if not set.
details	io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails object	Extended data associated with the reason. Each reason may define its own extended details. This field is optional and the data returned is not guaranteed to conform to any schema except that defined by the reason type.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
message	String	A human-readable description of the status of this operation.
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
reason	String	A machine-readable description of why this operation is in the "Failure" status. If this value is empty there is no information available. A Reason clarifies an HTTP status code but does not override it.

Parameter	Type	Description
status	String	Status of the operation. One of: "Success" or "Failure". More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-28 io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails

Parameter	Type	Description
causes	Array of io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause objects	The Causes array includes more details associated with the StatusReason failure. Not all StatusReasons may provide detailed causes.
group	String	The group attribute of the resource associated with the status StatusReason.
kind	String	The kind attribute of the resource associated with the status StatusReason. On some operations may differ from the requested resource Kind. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	The name attribute of the resource associated with the status StatusReason (when there is a single name which can be described).
retryAfterSeconds	Integer	If specified, the time in seconds before the operation should be retried. Some errors may indicate the client must take an alternate action for those errors this field may indicate how long to wait before taking the alternate action.
uid	String	UID of the resource. (when there is a single resource which can be described). More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-29 io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause

Parameter	Type	Description
field	String	The field of the resource that has caused this error, as named by its JSON serialization. May include dot and postfix notation for nested attributes. Arrays are zero-indexed. Fields may appear more than once in an array of causes due to fields having multiple errors. Optional. Examples: "name" - the field "name" on the current resource "items[0].name" - the field "name" on the first array entry in "items"
message	String	A human-readable description of the cause of the error. This field may be presented as-is to a reader.
reason	String	A machine-readable description of the cause of the error. If this value is empty there is no information available.

Table 5-30 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.

Parameter	Type	Description
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "v1",
  "details": {
    "group": "cci",
    "kind": "secrets",
    "name": "test-secret",
    "uid": "77d8dedc-b7ae-40a1-b9a6-6f37cca2c4d1"
  },
  "kind": "Status",
  "metadata": { },
  "status": "Success"
}
```

Status Codes

Status Code	Description
200	OK
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden

Status Code	Description
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.1.4 Querying a Secret

Function

This API is used to query the details about a secret in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces/{namespace}/secrets/{name}

Table 5-31 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Secret

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-32 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-33 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
data	Map<String,String>	Data contains the secret data. Each key must consist of alphanumeric characters, '-', '_' or '.'. The serialized form of the secret data is a base64 encoded string, representing the arbitrary (possibly non-string) data value here. Described in https://tools.ietf.org/html/rfc4648#section-4

Parameter	Type	Description
immutable	Boolean	Immutable, if set to true, ensures that data stored in the Secret cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
stringData	Map<String,String>	stringData allows specifying non-binary secret data in string form. It is provided as a write-only input field for convenience. All keys and values are merged into the data field on write, overwriting any existing values. The stringData field is never output when reading from the API.
type	String	Used to facilitate programmatic handling of secret data. More info: https://kubernetes.io/docs/concepts/configuration/secret/#secret-types . Currently only 'Opaque', 'kubernetes.io/dockercfg', 'kubernetes.io/dockerconfigjson' and 'kubernetes.io/tls' are supported

Table 5-34 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-35 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion" : "cci/v2",
  "data" : {
    "key" : "eHh4Cg=="
  },
  "kind" : "Secret",
  "metadata" : {
    "annotations" : {
      "secret.cci.io/namespace-uid" : "8fd96f2d-ecfa-4e4f-8f5f-4070766d333c",
      "tenant.cci.io/tenant-id" : "08a2*****c03"
    },
    "creationTimestamp" : "2024-10-09T17:13:08Z",
    "labels" : {
      "sys_enterprise_project_id" : "0",
      "tenant.cci.io/tenant-id" : "08a2*****c03",
      "tenant.kubernetes.io/domain-id" : "08a*****ee60",
      "tenant.kubernetes.io/project-id" : "08a2*****c03"
    },
    "name" : "test-secret",
    "namespace" : "test-api",
    "resourceVersion" : "391114527",
    "uid" : "77d8dedc-b7ae-40a1-b9a6-6f37cca2c4d1"
  },
  "type" : "Opaque"
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests

Status Code	Description
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.1.5 Replacing a Secret

Function

This API is used to replace a secret in a namespace.

The following fields can be updated:

- metadata.labels
- metadata.annotations
- data
- If **type** is set to **Opaque**, the key and value of **data** can be updated.
- If **type** is not set to **Opaque**, only the value of **data** can be updated.

NOTE

Notes:

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

PUT /apis/cci/v2/namespaces/{namespace}/secrets/{name}

Table 5-36 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Secret

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-37 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-38 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Mandatory	Type	Description
data	No	Map<String,String>	Data contains the secret data. Each key must consist of alphanumeric characters, '-', '_' or '.'. The serialized form of the secret data is a base64 encoded string, representing the arbitrary (possibly non-string) data value here. Described in https://tools.ietf.org/html/rfc4648#section-4
immutable	No	Boolean	Immutable, if set to true, ensures that data stored in the Secret cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	Yes	io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
stringData	No	Map<String,String>	stringData allows specifying non-binary secret data in string form. It is provided as a write-only input field for convenience. All keys and values are merged into the data field on write, overwriting any existing values. The stringData field is never output when reading from the API.
type	No	String	Used to facilitate programmatic handling of secret data. More info: https://kubernetes.io/docs/concepts/configuration/secret/#secret-types . Currently only 'Opaque', 'kubernetes.io/dockercfg', 'kubernetes.io/dockerconfigjson' and 'kubernetes.io/tls' are supported

Table 5-39 io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations

Parameter	Mandatory	Type	Description
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Mandatory	Type	Description
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces

Response Parameters

Status code: 200

Table 5-40 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
data	Map<String,String>	Data contains the secret data. Each key must consist of alphanumeric characters, '-', '_' or '.'. The serialized form of the secret data is a base64 encoded string, representing the arbitrary (possibly non-string) data value here. Described in https://tools.ietf.org/html/rfc4648#section-4

Parameter	Type	Description
immutable	Boolean	Immutable, if set to true, ensures that data stored in the Secret cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
stringData	Map<String,String>	stringData allows specifying non-binary secret data in string form. It is provided as a write-only input field for convenience. All keys and values are merged into the data field on write, overwriting any existing values. The stringData field is never output when reading from the API.
type	String	Used to facilitate programmatic handling of secret data. More info: https://kubernetes.io/docs/concepts/configuration/secret/#secret-types . Currently only 'Opaque', 'kubernetes.io/dockercfg', 'kubernetes.io/dockerconfigjson' and 'kubernetes.io/tls' are supported

Table 5-41 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-42 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Status code: 201**Table 5-43** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
data	Map<String,String>	Data contains the secret data. Each key must consist of alphanumeric characters, '-', '_' or '.'. The serialized form of the secret data is a base64 encoded string, representing the arbitrary (possibly non-string) data value here. Described in https://tools.ietf.org/html/rfc4648#section-4
immutable	Boolean	Immutable, if set to true, ensures that data stored in the Secret cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
stringData	Map<String,String>	stringData allows specifying non-binary secret data in string form. It is provided as a write-only input field for convenience. All keys and values are merged into the data field on write, overwriting any existing values. The stringData field is never output when reading from the API.
type	String	Used to facilitate programmatic handling of secret data. More info: https://kubernetes.io/docs/concepts/configuration/secret/#secret-types . Currently only 'Opaque', 'kubernetes.io/dockercfg', 'kubernetes.io/dockerconfigjson' and 'kubernetes.io/tls' are supported

Table 5-44 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-45 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Example Requests

```
{
  "apiVersion": "cci/v2",
  "data": {
    "key": "eHh4Cg=="
  },
  "kind": "Secret",
  "metadata": {
    "annotations": {
      "secret.cci.io/namespace-uid": "8fd96f2d-ecfa-4e4f-8f5f-4070766d333c",
      "tenant.cci.io/tenant-id": "08a2*****c03"
    },
    "creationTimestamp": "2024-10-09T17:13:08Z",
    "labels": {
      "sys_enterprise_project_id": "0",
      "tenant.cci.io/tenant-id": "08a2*****c03",
      "tenant.kubernetes.io/domain-id": "08a*****ee60",
      "tenant.kubernetes.io/project-id": "08a2*****c03"
    },
    "name": "test-secret",
    "namespace": "test-api",
    "resourceVersion": "391114527",
    "uid": "77d8dedc-b7ae-40a1-b9a6-6f37cca2c4d1"
  },
  "type": "Opaque"
}
```

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "cci/v2",
  "data": {
    "key": "eHh4Cg=="
  },
  "kind": "Secret",
  "metadata": {
    "annotations": {
      "secret.cci.io/namespace-uid": "8fd96f2d-ecfa-4e4f-8f5f-4070766d333c",
      "tenant.cci.io/tenant-id": "08a2*****c03"
    },
    "creationTimestamp": "2024-10-09T17:13:08Z",
    "labels": {
      "sys_enterprise_project_id": "0",
      "tenant.cci.io/tenant-id": "08a2*****c03",
      "tenant.kubernetes.io/domain-id": "08a*****ee60",
      "tenant.kubernetes.io/project-id": "08a2*****c03"
    },
    "name": "test-secret",
    "namespace": "test-api",
    "resourceVersion": "391114527",
    "uid": "77d8dedc-b7ae-40a1-b9a6-6f37cca2c4d1"
  },
  "type": "Opaque"
}
```

Status Codes

Status Code	Description
200	OK

Status Code	Description
201	Created
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.2 ConfigMap

5.2.1 Querying ConfigMaps in a Namespace

Function

This API is used to query the details about all ConfigMaps in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces/{namespace}/configmaps

Table 5-46 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-47 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-48 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.ConfigMap objects	Items is the list of ConfigMaps.

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Table 5-49 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMap

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
binaryData	Map<String,String>	BinaryData contains the binary data. Each key must consist of alphanumeric characters, '-', '_' or '.'. BinaryData can contain byte sequences that are not in the UTF-8 range. The keys stored in BinaryData must not overlap with the ones in the Data field, this is enforced during validation process. Using this field will require 1.10+ apiserver and kubelet.

Parameter	Type	Description
data	Map<String,String>	Data contains the configuration data. Each key must consist of alphanumeric characters, '-', '_' or '.'. Values with non-UTF-8 byte sequences must use the BinaryData field. The keys stored in Data must not overlap with the keys in the BinaryData field, this is enforced during validation process.
immutable	Boolean	Immutable, if set to true, ensures that data stored in the ConfigMap cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Table 5-50 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations

Parameter	Type	Description
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-51 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-52 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.

Parameter	Type	Description
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "v1",
  "items": [ {
    "apiVersion": "cci/v2",
    "data": {
      "ca.crt": "-----BEGIN CERTIFICATE-----\n...\n-----END CERTIFICATE-----"
    },
    "kind": "ConfigMap",
    "metadata": {
      "annotations": {
        "kubernetes.io/description": "Contains a CA bundle that can be used\rto verify the kube-apiserver when using internal endpoints such\ras the internal service IP or kubernetes.default.svc. No other\rusage is guaranteed across distributions of Kubernetes clusters.",
        "tenant.cci.io/tenant-id": "08a2*****c03"
      },
      "creationTimestamp": "2024-08-15T12:05:58Z",
      "labels": {
        "sys_enterprise_project_id": "0",
        "tenant.cci.io/tenant-id": "08a2*****c03",
        "tenant.kubernetes.io/domain-id": "08a*****ee60",
        "tenant.kubernetes.io/project-id": "08a2*****c03"
      },
      "name": "kube-root-ca.crt",
      "namespace": "wbtest4",
      "resourceVersion": "363213016",
      "uid": "ebfa11af-0a1b-47c1-b106-0730017a9ca8"
    }
  }, {
    "apiVersion": "cci/v2",
    "data": {
      "rootKey": "xxx",
```

```
    "sharedKey" : "xxx"
  },
  "kind" : "ConfigMap",
  "metadata" : {
    "annotations" : {
      "tenant.cci.io/tenant-id" : "08a2*****c03"
    },
    "creationTimestamp" : "2024-08-21T06:43:42Z",
    "labels" : {
      "sys_enterprise_project_id" : "0",
      "tenant.cci.io/tenant-id" : "08a2*****c03",
      "tenant.kubernetes.io/domain-id" : "08a*****ee60",
      "tenant.kubernetes.io/project-id" : "08a2*****c03"
    },
    "name" : "system-preset-aeskey",
    "namespace" : "wbtest4",
    "resourceVersion" : "368412328",
    "uid" : "65ff7e35-b12f-4f28-81ed-a8df1905952c"
  }
},
"kind" : "List",
"metadata" : {
  "resourceVersion" : ""
}
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.2.2 Creating a ConfigMap

Function

This API is used to create a ConfigMap.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

POST /apis/cci/v2/namespaces/{namespace}/configmaps

Table 5-53 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-54 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-55 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
binaryData	No	Map<String,String>	BinaryData contains the binary data. Each key must consist of alphanumeric characters, '-', '_' or '.'. BinaryData can contain byte sequences that are not in the UTF-8 range. The keys stored in BinaryData must not overlap with the ones in the Data field, this is enforced during validation process. Using this field will require 1.10+ apiserver and kubelet.
data	No	Map<String,String>	Data contains the configuration data. Each key must consist of alphanumeric characters, '-', '_' or '.'. Values with non-UTF-8 byte sequences must use the BinaryData field. The keys stored in Data must not overlap with the keys in the BinaryData field, this is enforced during validation process.

Parameter	Mandatory	Type	Description
immutable	No	Boolean	Immutable, if set to true, ensures that data stored in the ConfigMap cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	Yes	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Table 5-56 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations

Parameter	Mandatory	Type	Description
creationTimestamp	No	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	No	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Mandatory	Type	Description
deletionTimestamp	No	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
finalizers	No	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Mandatory	Type	Description
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	No	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels

Parameter	Mandatory	Type	Description
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	No	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.

Parameter	Mandatory	Type	Description
resourceVersion	No	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	No	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.
uid	No	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-57 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Mandatory	Type	Description
apiVersion	Yes	String	API version of the referent.

Parameter	Mandatory	Type	Description
blockOwnerDeletion	No	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	No	Boolean	If true, this reference points to the managing controller.
kind	Yes	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	Yes	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	Yes	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Response Parameters

Status code: 200

Table 5-58 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
binaryData	Map<String,String>	BinaryData contains the binary data. Each key must consist of alphanumeric characters, '-', '_' or '.'. BinaryData can contain byte sequences that are not in the UTF-8 range. The keys stored in BinaryData must not overlap with the ones in the Data field, this is enforced during validation process. Using this field will require 1.10+ apiserver and kubelet.
data	Map<String,String>	Data contains the configuration data. Each key must consist of alphanumeric characters, '-', '_' or '.'. Values with non-UTF-8 byte sequences must use the BinaryData field. The keys stored in Data must not overlap with the keys in the BinaryData field, this is enforced during validation process.
immutable	Boolean	Immutable, if set to true, ensures that data stored in the ConfigMap cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Table 5-59 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-60 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Status code: 201**Table 5-61** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
binaryData	Map<String,String>	BinaryData contains the binary data. Each key must consist of alphanumeric characters, '-', '_' or '.'. BinaryData can contain byte sequences that are not in the UTF-8 range. The keys stored in BinaryData must not overlap with the ones in the Data field, this is enforced during validation process. Using this field will require 1.10+ apiserver and kubelet.
data	Map<String,String>	Data contains the configuration data. Each key must consist of alphanumeric characters, '-', '_' or '.'. Values with non-UTF-8 byte sequences must use the BinaryData field. The keys stored in Data must not overlap with the keys in the BinaryData field, this is enforced during validation process.
immutable	Boolean	Immutable, if set to true, ensures that data stored in the ConfigMap cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Table 5-62 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-63 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Status code: 202**Table 5-64** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
binaryData	Map<String,String>	BinaryData contains the binary data. Each key must consist of alphanumeric characters, '-', '_' or '.'. BinaryData can contain byte sequences that are not in the UTF-8 range. The keys stored in BinaryData must not overlap with the ones in the Data field, this is enforced during validation process. Using this field will require 1.10+ apiserver and kubelet.
data	Map<String,String>	Data contains the configuration data. Each key must consist of alphanumeric characters, '-', '_' or '.'. Values with non-UTF-8 byte sequences must use the BinaryData field. The keys stored in Data must not overlap with the keys in the BinaryData field, this is enforced during validation process.
immutable	Boolean	Immutable, if set to true, ensures that data stored in the ConfigMap cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Table 5-65 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-66 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Example Requests

```
{
  "apiVersion" : "cci/v2",
  "data" : {
    "key1" : "value1",
    "key2" : "value2"
  },
  "kind" : "ConfigMap",
  "metadata" : {
    "labels" : {
      "usage" : "just-for-test"
    },
    "name" : "test-cm"
  }
}
```

Example Responses

Status code: 201

Created

```
{
  "apiVersion" : "cci/v2",
  "data" : {
    "key1" : "value1",
    "key2" : "value2"
  },
  "kind" : "ConfigMap",
  "metadata" : {
    "annotations" : {
      "tenant.cci.io/tenant-id" : "08a2*****c03"
    },
    "creationTimestamp" : "2024-10-09T12:05:03Z",
    "labels" : {
      "sys_enterprise_project_id" : "0",
      "tenant.cci.io/tenant-id" : "08a2*****c03",
      "tenant.kubernetes.io/domain-id" : "08a*****ee60",
      "tenant.kubernetes.io/project-id" : "08a2*****c03",
      "usage" : "just-for-test"
    },
    "name" : "test-cm",
    "namespace" : "wbtest4",
    "resourceVersion" : "391020615",
    "uid" : "7c6f7981-78bb-42ff-b659-b8b4cbcab5e"
  }
}
```

Status Codes

Status Code	Description
200	OK
201	Created
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden

Status Code	Description
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	AlreadyExists
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.2.3 Deleting a ConfigMap

Function

This API is used to delete a ConfigMap in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

DELETE /apis/cci/v2/namespaces/{namespace}/configmaps/{name}

Table 5-67 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the ConfigMap

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-68 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Response Parameters

Status code: 200

Table 5-69 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
binaryData	Map<String,String>	BinaryData contains the binary data. Each key must consist of alphanumeric characters, '-', '_' or '.'. BinaryData can contain byte sequences that are not in the UTF-8 range. The keys stored in BinaryData must not overlap with the ones in the Data field, this is enforced during validation process. Using this field will require 1.10+ apiserver and kubelet.
data	Map<String,String>	Data contains the configuration data. Each key must consist of alphanumeric characters, '-', '_' or '.'. Values with non-UTF-8 byte sequences must use the BinaryData field. The keys stored in Data must not overlap with the keys in the BinaryData field, this is enforced during validation process.
immutable	Boolean	Immutable, if set to true, ensures that data stored in the ConfigMap cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Table 5-70 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-71 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Status code: 202**Table 5-72** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
binaryData	Map<String,String>	BinaryData contains the binary data. Each key must consist of alphanumeric characters, '-', '_' or '.'. BinaryData can contain byte sequences that are not in the UTF-8 range. The keys stored in BinaryData must not overlap with the ones in the Data field, this is enforced during validation process. Using this field will require 1.10+ apiserver and kubelet.
data	Map<String,String>	Data contains the configuration data. Each key must consist of alphanumeric characters, '-', '_' or '.'. Values with non-UTF-8 byte sequences must use the BinaryData field. The keys stored in Data must not overlap with the keys in the BinaryData field, this is enforced during validation process.
immutable	Boolean	Immutable, if set to true, ensures that data stored in the ConfigMap cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Table 5-73 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-74 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion" : "cci/v2",
  "data" : {
    "key1" : "value1",
    "key2" : "value2",
    "key3" : "value2"
  },
  "kind" : "ConfigMap",
  "metadata" : {
    "annotations" : {
      "tenant.cci.io/tenant-id" : "08a2*****c03"
    },
    "creationTimestamp" : "2024-10-09T12:05:03Z",
    "labels" : {
      "sys_enterprise_project_id" : "0",
      "tenant.cci.io/tenant-id" : "08a2*****c03",
      "tenant.kubernetes.io/domain-id" : "08a*****ee60",
      "tenant.kubernetes.io/project-id" : "08a2*****c03",
      "usage" : "just-for-test"
    },
    "name" : "test-cm",
    "namespace" : "wbtest4",
    "resourceVersion" : "391025175",
    "uid" : "7c6f7981-78bb-42ff-b659-b8b4cbcbab5e"
  }
}
```

Status Codes

Status Code	Description
200	OK
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid

Status Code	Description
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.2.4 Replacing a ConfigMap

Function

This API is used to replace a ConfigMap in a namespace.

The following fields can be updated:

- metadata.labels
- metadata.annotations
- data

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

PUT /apis/cci/v2/namespaces/{namespace}/configmaps/{name}

Table 5-75 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the ConfigMap
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-76 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-77 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
binaryData	No	Map<String,String>	BinaryData contains the binary data. Each key must consist of alphanumeric characters, '-', '_' or '.'. BinaryData can contain byte sequences that are not in the UTF-8 range. The keys stored in BinaryData must not overlap with the ones in the Data field, this is enforced during validation process. Using this field will require 1.10+ apiserver and kubelet.

Parameter	Mandatory	Type	Description
data	No	Map<String,String>	Data contains the configuration data. Each key must consist of alphanumeric characters, '-', '_' or '.'. Values with non-UTF-8 byte sequences must use the BinaryData field. The keys stored in Data must not overlap with the keys in the BinaryData field, this is enforced during validation process.
immutable	No	Boolean	Immutable, if set to true, ensures that data stored in the ConfigMap cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	Yes	io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMetadata object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Table 5-78 io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels

Parameter	Mandatory	Type	Description
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces

Response Parameters

Status code: 200

Table 5-79 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
binaryData	Map<String,String>	BinaryData contains the binary data. Each key must consist of alphanumeric characters, '-', '_' or '.'. BinaryData can contain byte sequences that are not in the UTF-8 range. The keys stored in BinaryData must not overlap with the ones in the Data field, this is enforced during validation process. Using this field will require 1.10+ apiserver and kubelet.
data	Map<String,String>	Data contains the configuration data. Each key must consist of alphanumeric characters, '-', '_' or '.'. Values with non-UTF-8 byte sequences must use the BinaryData field. The keys stored in Data must not overlap with the keys in the BinaryData field, this is enforced during validation process.
immutable	Boolean	Immutable, if set to true, ensures that data stored in the ConfigMap cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Table 5-80 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-81 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Status code: 201**Table 5-82** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
binaryData	Map<String,String>	BinaryData contains the binary data. Each key must consist of alphanumeric characters, '-', '_' or '.'. BinaryData can contain byte sequences that are not in the UTF-8 range. The keys stored in BinaryData must not overlap with the ones in the Data field, this is enforced during validation process. Using this field will require 1.10+ apiserver and kubelet.
data	Map<String,String>	Data contains the configuration data. Each key must consist of alphanumeric characters, '-', '_' or '.'. Values with non-UTF-8 byte sequences must use the BinaryData field. The keys stored in Data must not overlap with the keys in the BinaryData field, this is enforced during validation process.
immutable	Boolean	Immutable, if set to true, ensures that data stored in the ConfigMap cannot be updated (only object metadata can be modified). If not set to true, the field can be modified at any time. Defaulted to nil.

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Table 5-83 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-84 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Example Requests

```
{
  "apiVersion": "cci/v2",
  "data": {
    "key1": "value1",
    "key2": "value2"
  },
  "kind": "ConfigMap",
  "metadata": {
    "annotations": {
      "tenant.cci.io/tenant-id": "08a2*****c03"
    },
    "creationTimestamp": "2024-10-09T12:05:03Z",
    "labels": {
      "sys_enterprise_project_id": "0",
      "tenant.cci.io/tenant-id": "08a2*****c03",
      "tenant.kubernetes.io/domain-id": "08a*****ee60",
      "tenant.kubernetes.io/project-id": "08a2*****c03",
      "usage": "just-for-test"
    },
    "name": "test-cm",
    "namespace": "wbtest4",
    "resourceVersion": "391020615",
    "uid": "7c6f7981-78bb-42ff-b659-b8b4cbcbab5e"
  }
}
```

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "cci/v2",
  "data": {
    "key1": "value1",
    "key2": "value2"
  },
  "kind": "ConfigMap",
  "metadata": {
    "annotations": {
      "tenant.cci.io/tenant-id": "08a2*****c03"
    },
    "creationTimestamp": "2024-10-09T12:05:03Z",
    "labels": {
      "sys_enterprise_project_id": "0",
      "tenant.cci.io/tenant-id": "08a2*****c03",
      "tenant.kubernetes.io/domain-id": "08a*****ee60",
      "tenant.kubernetes.io/project-id": "08a2*****c03",
      "usage": "just-for-test"
    },
    "name": "test-cm",
    "namespace": "wbtest4",
    "resourceVersion": "391020615",
    "uid": "7c6f7981-78bb-42ff-b659-b8b4cbcbab5e"
  }
}
```

Status Codes

Status Code	Description
200	OK

Status Code	Description
201	Created
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.3 Pod

5.3.1 Querying Pods in a Namespace

Function

This API is used to query the details about all pods in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces/{namespace}/pods

Table 5-85 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-86 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-87 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.Pod objects	List of pods. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Table 5-88 io.cci.api.pkg.apis.versioned.cci.v2.Pod

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis.versioned.cci.v2.PodMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Parameter	Type	Description
status	io.cci.api.pkg.apis.versioned.cci.v2.PodStatus object	Most recently observed status of the pod. This data may not be up to date. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-89 io.cci.api.pkg.apis.versioned.cci.v2.PodMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Pod Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-90 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-91 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extraEphemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-92 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-93 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-94 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-95 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-96 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-97 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-98 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-99 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-100 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-101 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-102 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-103 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-104 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-105 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-106 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-107 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis .versioned.cci.v2. Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis .versioned.cci.v2. ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-108 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-109 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-110 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-111 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-112 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-113 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-114 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-115 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-116 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-117 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-118 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-119 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-120 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-121 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-122 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-123 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-124 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-125 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-126 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-127 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-128 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-129 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-130 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-131 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-132 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-133 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-134 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-135 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-136 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-137 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-138 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-139 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-140 io.cci.api.pkg.apis.versioned.cci.v2.PodStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodCondition objects	Current service state of pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions
containerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per container in the manifest. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
initContainerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per init container in the manifest. The most recent successful init container will have ready = true, the most recently started container will have startTime set. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
message	String	A human readable message indicating details about why the pod is in this condition.

Parameter	Type	Description
phase	String	The phase of a Pod is a simple, high-level summary of where the Pod is in its lifecycle. The conditions array, the reason and message fields, and the individual container status arrays contain more detail about the pod's status. There are five possible phase values: Pending: The pod has been accepted by the Kubernetes system, but one or more of the container images has not been created. This includes time before being scheduled as well as time spent downloading images over the network, which could take a while. Running: The pod has been bound to a node, and all of the containers have been created. At least one container is still running, or is in the process of starting or restarting. Succeeded: All containers in the pod have terminated in success, and will not be restarted. Failed: All containers in the pod have terminated, and at least one container has terminated in failure. The container either exited with non-zero status or was terminated by the system. Unknown: For some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-phase Possible enum values: • <i>"Failed"</i> means that all containers in the pod have terminated, and at least one container has terminated in a failure (exited with a non-zero exit code or was stopped by the system). • <i>"Pending"</i> means the pod has been accepted by the system, but one or more of the containers has not been started. This includes time before being bound to a node, as well as time spent pulling images onto the host.

Parameter	Type	Description
		• <i>"Running"</i> means the pod has been bound to a node and all of the containers have been started. At least one container is still running or is in the process of being restarted. • <i>"Stopped"</i> means that the pod has been stopped • <i>"Succeeded"</i> means that all containers in the pod have voluntarily terminated with a container exit code of 0, and the system is not going to restart any of these containers. • <i>"Unknown"</i> means that for some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. Deprecated: It isn't being set since 2015 (74da3b14b0c0f658b3bb8d2def5094686d0e9095)
podIP	String	IP address allocated to the pod. Routable at least within the cluster. Empty if not yet allocated.
podIPs	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodIP objects	podIPs holds the IP addresses allocated to the pod. If this field is specified, the 0th entry must match the podIP field. Pods may be allocated at most 1 value for each of IPv4 and IPv6. This list is empty if no IPs have been allocated yet.

Parameter	Type	Description
qosClass	String	The Quality of Service (QOS) classification assigned to the pod based on resource requirements See PodQOSClass type for available QOS classes More info: https://git.k8s.io/community/contributors/design-proposals/node/resource-qos.md Possible enum values: • <i>"BestEffort"</i> is the BestEffort qos class. • <i>"Burstable"</i> is the Burstable qos class. • <i>"Guaranteed"</i> is the Guaranteed qos class.
reason	String	A brief CamelCase message indicating details about why the pod is in this state. e.g. 'Evicted'
startTime	String	RFC 3339 date and time at which the object was acknowledged by the Kubelet. This is before the Kubelet pulled the container image(s) for the pod.

Table 5-141 io.cci.api.pkg.apis.versioned.cci.v2.PodCondition

Parameter	Type	Description
lastProbeTime	String	Last time we probed the condition.
lastTransitionTime	String	Last time the condition transitioned from one status to another.
message	String	Human-readable message indicating details about last transition.
reason	String	Unique, one-word, CamelCase reason for the condition's last transition.
status	String	Status is the status of the condition. Can be True, False, Unknown. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Parameter	Type	Description
type	String	Type is the type of the condition. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Table 5-142 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br:)<container_id>'
image	String	The image the container is running. More info: https://kubernetes.io/docs/concepts/containers/images .
imageID	String	ImageID of the container's image.
lastState	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's last termination condition.
name	String	This must be a DNS_LABEL. Each container in a pod must have a unique name. Cannot be updated.
ready	Boolean	Specifies whether the container has passed its readiness probe.
restartCount	Integer	The number of times the container has been restarted.
started	Boolean	Specifies whether the container has passed its startup probe. Initialized as false, becomes true after startupProbe is considered successful. Resets to false when the container is restarted, or if kubelet loses state temporarily. Is always true when no startupProbe is defined.
state	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's current condition.

Table 5-143 io.cci.api.pkg.apis.versioned.cci.v2.ContainerState

Parameter	Type	Description
running	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning object	Details about a running container
terminated	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated object	Details about a terminated container
waiting	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting object	Details about a waiting container

Table 5-144 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning

Parameter	Type	Description
startedAt	String	Time at which the container was last (re-)started

Table 5-145 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br)://<container_id>'
exitCode	Integer	Exit status from the last termination of the container
finishedAt	String	Time at which the container last terminated
message	String	Message regarding the last termination of the container
reason	String	(brief) reason from the last termination of the container
signal	Integer	Signal from the last termination of the container
startedAt	String	Time at which previous execution of the container started

Table 5-146 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting

Parameter	Type	Description
message	String	Message regarding why the container is not yet running.
reason	String	(brief) reason the container is not yet running.

Table 5-147 io.cci.api.pkg.apis.versioned.cci.v2.PodIP

Parameter	Type	Description
ip	String	ip is an IP address (IPv4 or IPv6) assigned to the pod

Table 5-148 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.

Parameter	Type	Description
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

None

Example Responses

Status code: 200

OK


```
{
  "apiVersion": "v1",
  "items": [ {
    "apiVersion": "cci/v2",
    "kind": "Pod",
    "metadata": {
      "annotations": {
        "cni.yangtse.io/network-status": "[{\"macAddress\":\"fa:16:3e:1d:75:3a\", \"ipv4Info\":{\"subnet\":\"192.168.0.0/24\", \"ipAddress\":\"192.168.0.197\", \"gateway\":\"192.168.0.1\"}, \"name\":\"test-api\", \"portID\":\"b471658c-caac-4377-94f4-2eeff1192d2b\", \"ips\":[\"192.168.0.197\"], \"vlanID\":\"3687\"}], \"networking.cci.io/vm-network-info\": \"{\\\"vmID\\\":\\\"fda21659-a816-4449-abcf-193ac5a47b4a\\\",\\\"eniID\\\":\\\"ec9f8fae-ae74-445b-b8bb-b533e5342dbd\\\",\\\"maxEniNum\\\":2,\\\"maxSubEniNum\\\":16}\", \"openvessel.io/monitoring-aominfo\" : \"08a2*****c03:4257ecf3-7c47-43a3-86d2-d2b4d4aa3a20\",
        \"resource.cci.io/pod-size-specs\" : \"2.00_4.0\",
        \"resource.cci.io/size\" : \"2.00_4.0\",
        \"scheduling.k8s.io/group-name\" : \"podgroup-ade5799e-9371-4c9f-ab77-0472e97211f8\",
        \"tenant.cci.io/tenant-id\" : \"08a2*****c03\",
        \"topology.kubernetes.io/region\" : \"region1\",
        \"topology.kubernetes.io/zone\" : \"region1c\"
      },
      \"creationTimestamp\" : \"2024-10-09T16:11:23Z\",
      \"finalizers\" : [ \"billing.kubernetes.io/podbilling-finalizer\" ],
      \"labels\" : {
        \"scheduling.cci.io/vmid\" : \"fda21659-a816-4449-abcf-193ac5a47b4a\",
        \"sys_enterprise_project_id\" : \"0\",
        \"tenant.cci.io/tenant-id\" : \"08a2*****c03\",
        \"tenant.kubernetes.io/domain-id\" : \"08a*****ee60\",
        \"tenant.kubernetes.io/project-id\" : \"08a2*****c03\"
      },
      \"name\" : \"test\",
      \"namespace\" : \"test-api\",
      \"resourceVersion\" : \"391095556\",
      \"uid\" : \"ade5799e-9371-4c9f-ab77-0472e97211f8\"
    },
    \"spec\" : {
      \"containers\" : [ {
        \"env\" : [ {
          \"name\" : \"ENV1\",
          \"value\" : \"false\"
        }, {
          \"name\" : \"ENV2\",
          \"value\" : \"xxx\"
        } ],
        \"image\" : \"nginx:latest\",
        \"name\" : \"deploy-example\",
        \"resources\" : {
          \"limits\" : {
            \"cpu\" : \"500m\",
            \"memory\" : \"1Gi\"
          },
          \"requests\" : {
            \"cpu\" : \"500m\",
            \"memory\" : \"1Gi\"
          }
        },
        \"terminationMessagePath\" : \"/dev/termination-log\",
        \"terminationMessagePolicy\" : \"File\"
      } ],
      \"dnsPolicy\" : \"Default\",
      \"imagePullSecrets\" : [ {
        \"name\" : \"imagepull-secret\"
      } ],
      \"nodeName\" : \"compute-cell-001\",
      \"restartPolicy\" : \"Always\",
      \"schedulerName\" : \"volcano\",
      \"securityContext\" : { },
      \"terminationGracePeriodSeconds\" : 30
    },
  } ],
}
```

```
"status": {
  "conditions": [ {
    "lastProbeTime": null,
    "lastTransitionTime": "2024-10-09T16:11:24Z",
    "status": "True",
    "type": "Initialized"
  }, {
    "lastProbeTime": null,
    "lastTransitionTime": "2024-10-09T16:11:28Z",
    "status": "True",
    "type": "Ready"
  }, {
    "lastProbeTime": null,
    "lastTransitionTime": "2024-10-09T16:11:28Z",
    "status": "True",
    "type": "ContainersReady"
  }, {
    "lastProbeTime": null,
    "lastTransitionTime": "2024-10-09T16:11:23Z",
    "status": "True",
    "type": "PodScheduled"
  } ],
  "containerStatuses": [ {
    "containerID": "containerd://
a44eef6b753babaff802d212e78afef2422959e90bd79ab5b385adb302aa3d1e",
    "image": "nginx:latest",
    "imageID": "docker.io/library/
nginx@sha256:416d511ffa63777489af47f250b70d1570e428b67666567085f2bece3571ad83",
    "lastState": { },
    "name": "deploy-example",
    "ready": true,
    "restartCount": 0,
    "started": true,
    "state": {
      "running": {
        "startedAt": "2024-10-09T16:11:27Z"
      }
    }
  } ],
  "phase": "Running",
  "podIP": "192.168.0.197",
  "podIPs": [ {
    "ip": "192.168.0.197"
  } ],
  "qosClass": "Guaranteed",
  "startTime": "2024-10-09T16:11:24Z"
} ],
"kind": "List",
"metadata": {
  "resourceVersion": ""
}
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden

Status Code	Description
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.3.2 Creating a Pod

Function

This API is used to create a pod.

NOTE

The lifecycle of a pod is short. In practice, you are advised to use the Deployment to run applications for high availability.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

POST /apis/cci/v2/namespaces/{namespace}/pods

Table 5-149 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-150 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-151 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Mandatory	Type	Description
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	Yes	io.cci.api.pkg.apis.versioned.cci.v2.BasePodMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	No	io.cci.api.pkg.apis.versioned.cci.v2.PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-152 io.cci.api.pkg.apis.versioned.cci.v2.BasePodMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Pod Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations

Parameter	Mandatory	Type	Description
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Mandatory	Type	Description
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces

Table 5-153 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Mandatory	Type	Description
activeDeadlineSeconds	No	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	No	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Yes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.

Parameter	Mandatory	Type	Description
dnsConfig	No	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	No	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	No	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.
hostAliases	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.

Parameter	Mandatory	Type	Description
hostname	No	String	Specifies the hostname of the Pod. If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Mandatory	Type	Description
initContainers	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	No	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • "Always" • "Never" • "OnFailure"

Parameter	Mandatory	Type	Description
setHostname AsFQDN	No	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	No	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.

Parameter	Mandatory	Type	Description
terminationGracePeriodSeconds	No	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.
volumes	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-154 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Mandatory	Type	Description
nodeAffinity	No	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	No	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-155 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Mandatory	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	No	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-156 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Mandatory	Type	Description
nodeSelectorTerms	Yes	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-157 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Mandatory	Type	Description
matchExpressions	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-158 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Mandatory	Type	Description
key	Yes	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	Yes	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	No	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-159 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Mandatory	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.

Parameter	Mandatory	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-160 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Mandatory	Type	Description
podAffinityTerm	Yes	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Yes	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-161 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Mandatory	Type	Description
labelSelector	No	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	No	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	Yes	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-162 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Mandatory	Type	Description
matchExpressions	No	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Parameter	Mandatory	Type	Description
matchLabels	No	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-163 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Mandatory	Type	Description
key	Yes	String	key is the label key that the selector applies to.
operator	Yes	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	No	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-164 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Mandatory	Type	Description
nameservers	No	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	No	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-165 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Mandatory	Type	Description
name	Yes	String	Name is this DNS resolver option's name. Required.

Parameter	Mandatory	Type	Description
value	No	String	Value is this DNS resolver option's value.

Table 5-166 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Mandatory	Type	Description
sizeInGiB	No	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-167 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Mandatory	Type	Description
hostnames	No	Array of strings	Hostnames for the above IP address.
ip	Yes	String	IP address of the host file entry.

Table 5-168 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Mandatory	Type	Description
name	No	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-169 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Mandatory	Type	Description
args	No	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Mandatory	Type	Description
command	No	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.

Parameter	Mandatory	Type	Description
envFrom	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.
image	No	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	No	io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	No	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	No	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
resources	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Mandatory	Type	Description
startupProbe	No	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	No	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	No	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Mandatory	Type	Description
terminationMessagePolicy	No	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	No	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.

Parameter	Mandatory	Type	Description
workingDir	No	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-170 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	No	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".

Parameter	Mandatory	Type	Description
valueFrom	No	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-171 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Mandatory	Type	Description
configMapKeyRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.
fieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-172 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Mandatory	Type	Description
key	Yes	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	No	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-173 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Mandatory	Type	Description
key	Yes	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	No	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the Secret or its key must be defined

Table 5-174 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Mandatory	Type	Description
configMapRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	No	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-175 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the ConfigMap must be defined

Table 5-176 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the Secret must be defined

Table 5-177 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Mandatory	Type	Description
postStart	No	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Parameter	Mandatory	Type	Description
preStop	No	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-178 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Mandatory	Type	Description
exec	No	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	No	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-179 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Mandatory	Type	Description
containerPort	Yes	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	No	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	No	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-180 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Mandatory	Type	Description
limits	No	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Mandatory	Type	Description
requests	No	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-181 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Mandatory	Type	Description
exec	No	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	No	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	No	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	No	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	No	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.

Parameter	Mandatory	Type	Description
successThreshold	No	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	No	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.
timeoutSeconds	No	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-182 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Mandatory	Type	Description
command	No	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-183 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Mandatory	Type	Description
host	No	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	No	String	Path to access on the HTTP server.
port	Yes	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	No	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-184 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Mandatory	Type	Description
name	Yes	String	The header field name
value	No	String	The header field value

Table 5-185 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Mandatory	Type	Description
host	No	String	Optional: Host name to connect to, defaults to the pod IP.
port	Yes	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-186 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Mandatory	Type	Description
extendPathMode	No	String	Extend the volume path by appending the pod metadata to the path according to specified pattern, which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	Yes	String	Path within the container at which the volume should be mounted.
name	Yes	String	This must match the Name of a Volume.
readOnly	No	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	No	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.

Parameter	Mandatory	Type	Description
subPathExpr	No	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-187 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Mandatory	Type	Description
configMap	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	No	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	No	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	Yes	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Mandatory	Type	Description
persistentVolumeClaim	No	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	No	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-188 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-189 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-190 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Mandatory	Type	Description
medium	No	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

Parameter	Mandatory	Type	Description
sizeLimit	No	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-191 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolume-Source

Parameter	Mandatory	Type	Description
claimName	Yes	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
readOnly	No	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-192 io.cci.api.pkg.apis.versioned.cci.v2.ProjectVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-193 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Mandatory	Type	Description
configMap	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	No	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Mandatory	Type	Description
secret	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-194 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-195 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-196 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Mandatory	Type	Description
fieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	No	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	Yes	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-197 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Mandatory	Type	Description
apiVersion	No	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	Yes	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-198 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Mandatory	Type	Description
containerName	No	String	Container name: required for volumes, optional for env vars
divisor	No	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	Yes	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-199 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-200 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	No	Boolean	optional field specify whether the Secret or its keys must be defined

Parameter	Mandatory	Type	Description
secretName	Yes	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-201 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Mandatory	Type	Description
key	Yes	String	key is the key to project.
mode	No	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	Yes	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Response Parameters

Status code: 200

Table 5-202 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis.versioned.cci.v2.PodMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.PodStatus object	Most recently observed status of the pod. This data may not be up to date. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-203 io.cci.api.pkg.apis.versioned.cci.v2.PodMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Pod Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-204 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-205 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-206 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-207 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-208 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-209 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-210 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-211 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-212 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-213 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-214 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-215 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-216 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-217 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-218 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-219 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-220 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-221 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-222 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-223 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-224 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-225 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-226 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-227 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-228 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-229 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-230 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-231 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-232 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-233 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-234 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-235 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-236 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-237 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-238 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-239 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-240 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-241 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-242 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-243 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-244 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-245 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-246 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-247 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-248 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-249 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-250 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-251 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-252 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-253 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-254 io.cci.api.pkg.apis.versioned.cci.v2.PodStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodCondition objects	Current service state of pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions
containerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per container in the manifest. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
initContainerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per init container in the manifest. The most recent successful init container will have ready = true, the most recently started container will have startTime set. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
message	String	A human readable message indicating details about why the pod is in this condition.

Parameter	Type	Description
phase	String	The phase of a Pod is a simple, high-level summary of where the Pod is in its lifecycle. The conditions array, the reason and message fields, and the individual container status arrays contain more detail about the pod's status. There are five possible phase values: Pending: The pod has been accepted by the Kubernetes system, but one or more of the container images has not been created. This includes time before being scheduled as well as time spent downloading images over the network, which could take a while. Running: The pod has been bound to a node, and all of the containers have been created. At least one container is still running, or is in the process of starting or restarting. Succeeded: All containers in the pod have terminated in success, and will not be restarted. Failed: All containers in the pod have terminated, and at least one container has terminated in failure. The container either exited with non-zero status or was terminated by the system. Unknown: For some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-phase Possible enum values: • <i>"Failed"</i> means that all containers in the pod have terminated, and at least one container has terminated in a failure (exited with a non-zero exit code or was stopped by the system). • <i>"Pending"</i> means the pod has been accepted by the system, but one or more of the containers has not been started. This includes time before being bound to a node, as well as time spent pulling images onto the host.

Parameter	Type	Description
		• <i>"Running"</i> means the pod has been bound to a node and all of the containers have been started. At least one container is still running or is in the process of being restarted. • <i>"Stopped"</i> means that the pod has been stopped • <i>"Succeeded"</i> means that all containers in the pod have voluntarily terminated with a container exit code of 0, and the system is not going to restart any of these containers. • <i>"Unknown"</i> means that for some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. Deprecated: It isn't being set since 2015 (74da3b14b0c0f658b3bb8d2def5094686d0e9095)
podIP	String	IP address allocated to the pod. Routable at least within the cluster. Empty if not yet allocated.
podIPs	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodIP objects	podIPs holds the IP addresses allocated to the pod. If this field is specified, the 0th entry must match the podIP field. Pods may be allocated at most 1 value for each of IPv4 and IPv6. This list is empty if no IPs have been allocated yet.

Parameter	Type	Description
qosClass	String	The Quality of Service (QOS) classification assigned to the pod based on resource requirements See PodQOSClass type for available QOS classes More info: https://git.k8s.io/community/contributors/design-proposals/node/resource-qos.md Possible enum values: • <i>"BestEffort"</i> is the BestEffort qos class. • <i>"Burstable"</i> is the Burstable qos class. • <i>"Guaranteed"</i> is the Guaranteed qos class.
reason	String	A brief CamelCase message indicating details about why the pod is in this state. e.g. 'Evicted'
startTime	String	RFC 3339 date and time at which the object was acknowledged by the Kubelet. This is before the Kubelet pulled the container image(s) for the pod.

Table 5-255 io.cci.api.pkg.apis.versioned.cci.v2.PodCondition

Parameter	Type	Description
lastProbeTime	String	Last time we probed the condition.
lastTransitionTime	String	Last time the condition transitioned from one status to another.
message	String	Human-readable message indicating details about last transition.
reason	String	Unique, one-word, CamelCase reason for the condition's last transition.
status	String	Status is the status of the condition. Can be True, False, Unknown. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Parameter	Type	Description
type	String	Type is the type of the condition. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Table 5-256 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br:)<container_id>'.
image	String	The image the container is running. More info: https://kubernetes.io/docs/concepts/containers/images .
imageID	String	ImageID of the container's image.
lastState	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's last termination condition.
name	String	This must be a DNS_LABEL. Each container in a pod must have a unique name. Cannot be updated.
ready	Boolean	Specifies whether the container has passed its readiness probe.
restartCount	Integer	The number of times the container has been restarted.
started	Boolean	Specifies whether the container has passed its startup probe. Initialized as false, becomes true after startupProbe is considered successful. Resets to false when the container is restarted, or if kubelet loses state temporarily. Is always true when no startupProbe is defined.
state	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's current condition.

Table 5-257 io.cci.api.pkg.apis.versioned.cci.v2.ContainerState

Parameter	Type	Description
running	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning object	Details about a running container
terminated	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated object	Details about a terminated container
waiting	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting object	Details about a waiting container

Table 5-258 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning

Parameter	Type	Description
startedAt	String	Time at which the container was last (re-)started

Table 5-259 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br)://<container_id>'
exitCode	Integer	Exit status from the last termination of the container
finishedAt	String	Time at which the container last terminated
message	String	Message regarding the last termination of the container
reason	String	(brief) reason from the last termination of the container
signal	Integer	Signal from the last termination of the container
startedAt	String	Time at which previous execution of the container started

Table 5-260 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting

Parameter	Type	Description
message	String	Message regarding why the container is not yet running.
reason	String	(brief) reason the container is not yet running.

Table 5-261 io.cci.api.pkg.apis.versioned.cci.v2.PodIP

Parameter	Type	Description
ip	String	ip is an IP address (IPv4 or IPv6) assigned to the pod

Status code: 201**Table 5-262** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis.versioned.cci.v2.PodMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
spec	io.cci.api.pkg.apis.versioned.cci.v2.PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.PodStatus object	Most recently observed status of the pod. This data may not be up to date. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-263 io.cci.api.pkg.apis.versioned.cci.v2.PodMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Pod Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-264 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-265 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-266 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-267 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-268 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-269 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-270 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-271 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-272 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-273 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-274 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-275 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-276 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-277 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-278 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-279 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-280 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-281 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis .versioned.cci.v2. Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis .versioned.cci.v2. ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-282 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-283 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-284 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-285 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-286 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-287 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-288 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-289 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-290 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-291 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-292 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-293 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-294 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-295 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-296 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-297 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-298 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-299 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-300 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-301 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-302 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-303 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-304 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-305 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-306 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-307 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-308 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-309 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-310 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-311 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-312 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-313 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-314 io.cci.api.pkg.apis.versioned.cci.v2.PodStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodCondition objects	Current service state of pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions
containerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per container in the manifest. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
initContainerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per init container in the manifest. The most recent successful init container will have ready = true, the most recently started container will have startTime set. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
message	String	A human readable message indicating details about why the pod is in this condition.

Parameter	Type	Description
phase	String	The phase of a Pod is a simple, high-level summary of where the Pod is in its lifecycle. The conditions array, the reason and message fields, and the individual container status arrays contain more detail about the pod's status. There are five possible phase values: Pending: The pod has been accepted by the Kubernetes system, but one or more of the container images has not been created. This includes time before being scheduled as well as time spent downloading images over the network, which could take a while. Running: The pod has been bound to a node, and all of the containers have been created. At least one container is still running, or is in the process of starting or restarting. Succeeded: All containers in the pod have terminated in success, and will not be restarted. Failed: All containers in the pod have terminated, and at least one container has terminated in failure. The container either exited with non-zero status or was terminated by the system. Unknown: For some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-phase Possible enum values: • <i>"Failed"</i> means that all containers in the pod have terminated, and at least one container has terminated in a failure (exited with a non-zero exit code or was stopped by the system). • <i>"Pending"</i> means the pod has been accepted by the system, but one or more of the containers has not been started. This includes time before being bound to a node, as well as time spent pulling images onto the host.

Parameter	Type	Description
		• <i>"Running"</i> means the pod has been bound to a node and all of the containers have been started. At least one container is still running or is in the process of being restarted. • <i>"Stopped"</i> means that the pod has been stopped • <i>"Succeeded"</i> means that all containers in the pod have voluntarily terminated with a container exit code of 0, and the system is not going to restart any of these containers. • <i>"Unknown"</i> means that for some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. Deprecated: It isn't being set since 2015 (74da3b14b0c0f658b3bb8d2def5094686d0e9095)
podIP	String	IP address allocated to the pod. Routable at least within the cluster. Empty if not yet allocated.
podIPs	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodIP objects	podIPs holds the IP addresses allocated to the pod. If this field is specified, the 0th entry must match the podIP field. Pods may be allocated at most 1 value for each of IPv4 and IPv6. This list is empty if no IPs have been allocated yet.

Parameter	Type	Description
qosClass	String	The Quality of Service (QOS) classification assigned to the pod based on resource requirements See PodQOSClass type for available QOS classes More info: https://git.k8s.io/community/contributors/design-proposals/node/resource-qos.md Possible enum values: • <i>"BestEffort"</i> is the BestEffort qos class. • <i>"Burstable"</i> is the Burstable qos class. • <i>"Guaranteed"</i> is the Guaranteed qos class.
reason	String	A brief CamelCase message indicating details about why the pod is in this state. e.g. 'Evicted'
startTime	String	RFC 3339 date and time at which the object was acknowledged by the Kubelet. This is before the Kubelet pulled the container image(s) for the pod.

Table 5-315 io.cci.api.pkg.apis.versioned.cci.v2.PodCondition

Parameter	Type	Description
lastProbeTime	String	Last time we probed the condition.
lastTransitionTime	String	Last time the condition transitioned from one status to another.
message	String	Human-readable message indicating details about last transition.
reason	String	Unique, one-word, CamelCase reason for the condition's last transition.
status	String	Status is the status of the condition. Can be True, False, Unknown. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Parameter	Type	Description
type	String	Type is the type of the condition. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Table 5-316 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br:)//<container_id>'
image	String	The image the container is running. More info: https://kubernetes.io/docs/concepts/containers/images .
imageID	String	ImageID of the container's image.
lastState	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's last termination condition.
name	String	This must be a DNS_LABEL. Each container in a pod must have a unique name. Cannot be updated.
ready	Boolean	Specifies whether the container has passed its readiness probe.
restartCount	Integer	The number of times the container has been restarted.
started	Boolean	Specifies whether the container has passed its startup probe. Initialized as false, becomes true after startupProbe is considered successful. Resets to false when the container is restarted, or if kubelet loses state temporarily. Is always true when no startupProbe is defined.
state	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's current condition.

Table 5-317 io.cci.api.pkg.apis.versioned.cci.v2.ContainerState

Parameter	Type	Description
running	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning object	Details about a running container
terminated	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated object	Details about a terminated container
waiting	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting object	Details about a waiting container

Table 5-318 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning

Parameter	Type	Description
startedAt	String	Time at which the container was last (re-)started

Table 5-319 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br)://<container_id>'
exitCode	Integer	Exit status from the last termination of the container
finishedAt	String	Time at which the container last terminated
message	String	Message regarding the last termination of the container
reason	String	(brief) reason from the last termination of the container
signal	Integer	Signal from the last termination of the container
startedAt	String	Time at which previous execution of the container started

Table 5-320 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting

Parameter	Type	Description
message	String	Message regarding why the container is not yet running.
reason	String	(brief) reason the container is not yet running.

Table 5-321 io.cci.api.pkg.apis.versioned.cci.v2.PodIP

Parameter	Type	Description
ip	String	ip is an IP address (IPv4 or IPv6) assigned to the pod

Status code: 202**Table 5-322** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis.versioned.cci.v2.PodMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
spec	io.cci.api.pkg.apis.versioned.cci.v2.PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.PodStatus object	Most recently observed status of the pod. This data may not be up to date. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-323 io.cci.api.pkg.apis.versioned.cci.v2.PodMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Pod Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-324 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-325 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-326 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-327 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-328 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-329 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-330 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-331 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-332 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-333 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-334 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-335 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-336 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-337 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-338 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-339 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-340 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-341 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-342 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-343 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-344 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-345 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-346 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-347 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-348 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-349 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-350 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-351 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-352 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-353 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-354 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-355 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-356 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-357 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-358 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-359 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-360 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-361 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-362 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-363 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-364 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-365 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-366 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-367 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-368 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-369 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-370 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-371 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-372 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-373 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-374 io.cci.api.pkg.apis.versioned.cci.v2.PodStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodCondition objects	Current service state of pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions
containerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per container in the manifest. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
initContainerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per init container in the manifest. The most recent successful init container will have ready = true, the most recently started container will have startTime set. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
message	String	A human readable message indicating details about why the pod is in this condition.

Parameter	Type	Description
phase	String	The phase of a Pod is a simple, high-level summary of where the Pod is in its lifecycle. The conditions array, the reason and message fields, and the individual container status arrays contain more detail about the pod's status. There are five possible phase values: Pending: The pod has been accepted by the Kubernetes system, but one or more of the container images has not been created. This includes time before being scheduled as well as time spent downloading images over the network, which could take a while. Running: The pod has been bound to a node, and all of the containers have been created. At least one container is still running, or is in the process of starting or restarting. Succeeded: All containers in the pod have terminated in success, and will not be restarted. Failed: All containers in the pod have terminated, and at least one container has terminated in failure. The container either exited with non-zero status or was terminated by the system. Unknown: For some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-phase Possible enum values: • <i>"Failed"</i> means that all containers in the pod have terminated, and at least one container has terminated in a failure (exited with a non-zero exit code or was stopped by the system). • <i>"Pending"</i> means the pod has been accepted by the system, but one or more of the containers has not been started. This includes time before being bound to a node, as well as time spent pulling images onto the host.

Parameter	Type	Description
		• <i>"Running"</i> means the pod has been bound to a node and all of the containers have been started. At least one container is still running or is in the process of being restarted. • <i>"Stopped"</i> means that the pod has been stopped • <i>"Succeeded"</i> means that all containers in the pod have voluntarily terminated with a container exit code of 0, and the system is not going to restart any of these containers. • <i>"Unknown"</i> means that for some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. Deprecated: It isn't being set since 2015 (74da3b14b0c0f658b3bb8d2def5094686d0e9095)
podIP	String	IP address allocated to the pod. Routable at least within the cluster. Empty if not yet allocated.
podIPs	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodIP objects	podIPs holds the IP addresses allocated to the pod. If this field is specified, the 0th entry must match the podIP field. Pods may be allocated at most 1 value for each of IPv4 and IPv6. This list is empty if no IPs have been allocated yet.

Parameter	Type	Description
qosClass	String	The Quality of Service (QOS) classification assigned to the pod based on resource requirements See PodQOSClass type for available QOS classes More info: https://git.k8s.io/community/contributors/design-proposals/node/resource-qos.md Possible enum values: • <i>"BestEffort"</i> is the BestEffort qos class. • <i>"Burstable"</i> is the Burstable qos class. • <i>"Guaranteed"</i> is the Guaranteed qos class.
reason	String	A brief CamelCase message indicating details about why the pod is in this state. e.g. 'Evicted'
startTime	String	RFC 3339 date and time at which the object was acknowledged by the Kubelet. This is before the Kubelet pulled the container image(s) for the pod.

Table 5-375 io.cci.api.pkg.apis.versioned.cci.v2.PodCondition

Parameter	Type	Description
lastProbeTime	String	Last time we probed the condition.
lastTransitionTime	String	Last time the condition transitioned from one status to another.
message	String	Human-readable message indicating details about last transition.
reason	String	Unique, one-word, CamelCase reason for the condition's last transition.
status	String	Status is the status of the condition. Can be True, False, Unknown. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Parameter	Type	Description
type	String	Type is the type of the condition. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Table 5-376 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br:)//<container_id>'.
image	String	The image the container is running. More info: https://kubernetes.io/docs/concepts/containers/images .
imageID	String	ImageID of the container's image.
lastState	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's last termination condition.
name	String	This must be a DNS_LABEL. Each container in a pod must have a unique name. Cannot be updated.
ready	Boolean	Specifies whether the container has passed its readiness probe.
restartCount	Integer	The number of times the container has been restarted.
started	Boolean	Specifies whether the container has passed its startup probe. Initialized as false, becomes true after startupProbe is considered successful. Resets to false when the container is restarted, or if kubelet loses state temporarily. Is always true when no startupProbe is defined.
state	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's current condition.

Table 5-377 io.cci.api.pkg.apis.versioned.cci.v2.ContainerState

Parameter	Type	Description
running	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning object	Details about a running container
terminated	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated object	Details about a terminated container
waiting	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting object	Details about a waiting container

Table 5-378 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning

Parameter	Type	Description
startedAt	String	Time at which the container was last (re-)started

Table 5-379 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br)://<container_id>'
exitCode	Integer	Exit status from the last termination of the container
finishedAt	String	Time at which the container last terminated
message	String	Message regarding the last termination of the container
reason	String	(brief) reason from the last termination of the container
signal	Integer	Signal from the last termination of the container
startedAt	String	Time at which previous execution of the container started

Table 5-380 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting

Parameter	Type	Description
message	String	Message regarding why the container is not yet running.
reason	String	(brief) reason the container is not yet running.

Table 5-381 io.cci.api.pkg.apis.versioned.cci.v2.PodIP

Parameter	Type	Description
ip	String	ip is an IP address (IPv4 or IPv6) assigned to the pod

Example Requests

```
{
  "apiVersion": "v1",
  "kind": "Pod",
  "metadata": {
    "annotations": {
      "resource.cci.io/pod-size-specs": "2.00_4.0"
    },
    "name": "test"
  },
  "spec": {
    "containers": [ {
      "env": [ {
        "name": "ENV1",
        "value": "false"
      }, {
        "name": "ENV2",
        "value": "xxx"
      } ],
      "image": "nginx:latest",
      "imagePullPolicy": "IfNotPresent",
      "name": "deploy-example",
      "resources": {
        "limits": {
          "cpu": "500m",
          "memory": "1Gi"
        },
        "requests": {
          "cpu": "500m",
          "memory": "1Gi"
        }
      },
      "terminationMessagePath": "/dev/termination-log",
      "terminationMessagePolicy": "File"
    } ],
    "dnsPolicy": "Default",
    "enableServiceLinks": false,
    "imagePullSecrets": [ {
      "name": "imagepull-secret"
    } ],
    "restartPolicy": "Always",
    "securityContext": { },
    "terminationGracePeriodSeconds": 30
  }
}
```

```
}  
}
```

Example Responses

Status code: 201

Created

```
{  
  "apiVersion": "cci/v2",  
  "kind": "Pod",  
  "metadata": {  
    "annotations": {  
      "openvessel.io/monitoring-aominfo": "08a2*****c03:4257ecf3-7c47-43a3-86d2-d2b4d4aa3a20",  
      "resource.cci.io/pod-size-specs": "2.00_4.0",  
      "resource.cci.io/size": "2.00_4.0",  
      "tenant.cci.io/tenant-id": "08a2*****c03"  
    },  
    "creationTimestamp": "2024-10-09T16:11:23Z",  
    "finalizers": [ "billing.kubernetes.io/podbilling-finalizer" ],  
    "labels": {  
      "sys_enterprise_project_id": "0",  
      "tenant.cci.io/tenant-id": "08a2*****c03",  
      "tenant.kubernetes.io/domain-id": "08a*****ee60",  
      "tenant.kubernetes.io/project-id": "08a2*****c03"  
    },  
    "name": "test",  
    "namespace": "test-api",  
    "resourceVersion": "391095523",  
    "uid": "ade5799e-9371-4c9f-ab77-0472e97211f8"  
  },  
  "spec": {  
    "containers": [ {  
      "env": [ {  
        "name": "ENV1",  
        "value": "false"  
      } ],  
      "name": "ENV2",  
      "value": "xxx"  
    } ],  
    "image": "nginx:latest",  
    "name": "deploy-example",  
    "resources": {  
      "limits": {  
        "cpu": "500m",  
        "memory": "1Gi"  
      },  
      "requests": {  
        "cpu": "500m",  
        "memory": "1Gi"  
      }  
    },  
    "terminationMessagePath": "/dev/termination-log",  
    "terminationMessagePolicy": "File"  
  },  
  "dnsPolicy": "Default",  
  "imagePullSecrets": [ {  
    "name": "imagepull-secret"  
  } ],  
  "restartPolicy": "Always",  
  "schedulerName": "volcano",  
  "securityContext": { },  
  "terminationGracePeriodSeconds": 30  
},  
"status": {  
  "phase": "Pending",  
  "qosClass": "Guaranteed"
```

```
}  
}
```

Status Codes

Status Code	Description
200	OK
201	Created
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	AlreadyExists
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.3.3 Deleting a Pod

Function

This API is used to delete a pod in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

DELETE /apis/ccl/v2/namespaces/{namespace}/pods/{name}

Table 5-382 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Pod
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-383 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Response Parameters

Status code: 200

Table 5-384 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis.versioned.cci.v2.PodMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.PodStatus object	Most recently observed status of the pod. This data may not be up to date. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-385 io.cci.api.pkg.apis.versioned.cci.v2.PodMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Pod Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-386 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-387 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extraEphemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-388 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-389 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-390 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-391 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-392 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-393 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-394 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-395 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-396 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-397 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-398 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-399 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-400 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-401 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-402 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-403 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis .versioned.cci.v2. Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis .versioned.cci.v2. ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-404 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-405 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-406 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-407 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-408 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-409 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-410 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-411 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-412 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-413 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-414 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-415 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-416 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-417 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-418 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-419 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-420 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-421 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-422 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-423 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-424 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-425 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-426 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-427 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-428 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-429 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-430 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-431 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-432 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-433 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-434 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-435 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-436 io.cci.api.pkg.apis.versioned.cci.v2.PodStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodCondition objects	Current service state of pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions
containerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per container in the manifest. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
initContainerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per init container in the manifest. The most recent successful init container will have ready = true, the most recently started container will have startTime set. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
message	String	A human readable message indicating details about why the pod is in this condition.

Parameter	Type	Description
phase	String	The phase of a Pod is a simple, high-level summary of where the Pod is in its lifecycle. The conditions array, the reason and message fields, and the individual container status arrays contain more detail about the pod's status. There are five possible phase values: Pending: The pod has been accepted by the Kubernetes system, but one or more of the container images has not been created. This includes time before being scheduled as well as time spent downloading images over the network, which could take a while. Running: The pod has been bound to a node, and all of the containers have been created. At least one container is still running, or is in the process of starting or restarting. Succeeded: All containers in the pod have terminated in success, and will not be restarted. Failed: All containers in the pod have terminated, and at least one container has terminated in failure. The container either exited with non-zero status or was terminated by the system. Unknown: For some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-phase Possible enum values: • <i>"Failed"</i> means that all containers in the pod have terminated, and at least one container has terminated in a failure (exited with a non-zero exit code or was stopped by the system). • <i>"Pending"</i> means the pod has been accepted by the system, but one or more of the containers has not been started. This includes time before being bound to a node, as well as time spent pulling images onto the host.

Parameter	Type	Description
		• <i>"Running"</i> means the pod has been bound to a node and all of the containers have been started. At least one container is still running or is in the process of being restarted. • <i>"Stopped"</i> means that the pod has been stopped • <i>"Succeeded"</i> means that all containers in the pod have voluntarily terminated with a container exit code of 0, and the system is not going to restart any of these containers. • <i>"Unknown"</i> means that for some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. Deprecated: It isn't being set since 2015 (74da3b14b0c0f658b3bb8d2def5094686d0e9095)
podIP	String	IP address allocated to the pod. Routable at least within the cluster. Empty if not yet allocated.
podIPs	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodIP objects	podIPs holds the IP addresses allocated to the pod. If this field is specified, the 0th entry must match the podIP field. Pods may be allocated at most 1 value for each of IPv4 and IPv6. This list is empty if no IPs have been allocated yet.

Parameter	Type	Description
qosClass	String	The Quality of Service (QOS) classification assigned to the pod based on resource requirements See PodQOSClass type for available QOS classes More info: https://git.k8s.io/community/contributors/design-proposals/node/resource-qos.md Possible enum values: • <i>"BestEffort"</i> is the BestEffort qos class. • <i>"Burstable"</i> is the Burstable qos class. • <i>"Guaranteed"</i> is the Guaranteed qos class.
reason	String	A brief CamelCase message indicating details about why the pod is in this state. e.g. 'Evicted'
startTime	String	RFC 3339 date and time at which the object was acknowledged by the Kubelet. This is before the Kubelet pulled the container image(s) for the pod.

Table 5-437 io.cci.api.pkg.apis.versioned.cci.v2.PodCondition

Parameter	Type	Description
lastProbeTime	String	Last time we probed the condition.
lastTransitionTime	String	Last time the condition transitioned from one status to another.
message	String	Human-readable message indicating details about last transition.
reason	String	Unique, one-word, CamelCase reason for the condition's last transition.
status	String	Status is the status of the condition. Can be True, False, Unknown. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Parameter	Type	Description
type	String	Type is the type of the condition. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Table 5-438 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br:)//<container_id>'
image	String	The image the container is running. More info: https://kubernetes.io/docs/concepts/containers/images .
imageID	String	ImageID of the container's image.
lastState	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's last termination condition.
name	String	This must be a DNS_LABEL. Each container in a pod must have a unique name. Cannot be updated.
ready	Boolean	Specifies whether the container has passed its readiness probe.
restartCount	Integer	The number of times the container has been restarted.
started	Boolean	Specifies whether the container has passed its startup probe. Initialized as false, becomes true after startupProbe is considered successful. Resets to false when the container is restarted, or if kubelet loses state temporarily. Is always true when no startupProbe is defined.
state	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's current condition.

Table 5-439 io.cci.api.pkg.apis.versioned.cci.v2.ContainerState

Parameter	Type	Description
running	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning object	Details about a running container
terminated	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated object	Details about a terminated container
waiting	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting object	Details about a waiting container

Table 5-440 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning

Parameter	Type	Description
startedAt	String	Time at which the container was last (re-)started

Table 5-441 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br)://<container_id>'
exitCode	Integer	Exit status from the last termination of the container
finishedAt	String	Time at which the container last terminated
message	String	Message regarding the last termination of the container
reason	String	(brief) reason from the last termination of the container
signal	Integer	Signal from the last termination of the container
startedAt	String	Time at which previous execution of the container started

Table 5-442 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting

Parameter	Type	Description
message	String	Message regarding why the container is not yet running.
reason	String	(brief) reason the container is not yet running.

Table 5-443 io.cci.api.pkg.apis.versioned.cci.v2.PodIP

Parameter	Type	Description
ip	String	ip is an IP address (IPv4 or IPv6) assigned to the pod

Status code: 202**Table 5-444** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis.versioned.cci.v2.PodMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
spec	io.cci.api.pkg.apis.versioned.cci.v2.PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.PodStatus object	Most recently observed status of the pod. This data may not be up to date. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-445 io.cci.api.pkg.apis.versioned.cci.v2.PodMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Pod Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-446 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-447 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-448 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-449 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-450 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-451 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-452 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-453 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-454 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-455 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-456 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-457 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-458 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-459 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-460 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-461 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-462 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-463 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-464 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-465 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-466 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-467 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-468 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-469 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-470 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-471 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-472 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-473 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-474 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String >	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-475 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-476 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-477 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-478 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-479 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-480 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-481 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-482 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-483 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-484 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-485 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-486 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-487 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-488 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-489 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-490 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-491 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-492 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-493 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-494 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-495 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-496 io.cci.api.pkg.apis.versioned.cci.v2.PodStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodCondition objects	Current service state of pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions
containerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per container in the manifest. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
initContainerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per init container in the manifest. The most recent successful init container will have ready = true, the most recently started container will have startTime set. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
message	String	A human readable message indicating details about why the pod is in this condition.

Parameter	Type	Description
phase	String	The phase of a Pod is a simple, high-level summary of where the Pod is in its lifecycle. The conditions array, the reason and message fields, and the individual container status arrays contain more detail about the pod's status. There are five possible phase values: Pending: The pod has been accepted by the Kubernetes system, but one or more of the container images has not been created. This includes time before being scheduled as well as time spent downloading images over the network, which could take a while. Running: The pod has been bound to a node, and all of the containers have been created. At least one container is still running, or is in the process of starting or restarting. Succeeded: All containers in the pod have terminated in success, and will not be restarted. Failed: All containers in the pod have terminated, and at least one container has terminated in failure. The container either exited with non-zero status or was terminated by the system. Unknown: For some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-phase Possible enum values: • <i>"Failed"</i> means that all containers in the pod have terminated, and at least one container has terminated in a failure (exited with a non-zero exit code or was stopped by the system). • <i>"Pending"</i> means the pod has been accepted by the system, but one or more of the containers has not been started. This includes time before being bound to a node, as well as time spent pulling images onto the host.

Parameter	Type	Description
		• <i>"Running"</i> means the pod has been bound to a node and all of the containers have been started. At least one container is still running or is in the process of being restarted. • <i>"Stopped"</i> means that the pod has been stopped • <i>"Succeeded"</i> means that all containers in the pod have voluntarily terminated with a container exit code of 0, and the system is not going to restart any of these containers. • <i>"Unknown"</i> means that for some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. Deprecated: It isn't being set since 2015 (74da3b14b0c0f658b3bb8d2def5094686d0e9095)
podIP	String	IP address allocated to the pod. Routable at least within the cluster. Empty if not yet allocated.
podIPs	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodIP objects	podIPs holds the IP addresses allocated to the pod. If this field is specified, the 0th entry must match the podIP field. Pods may be allocated at most 1 value for each of IPv4 and IPv6. This list is empty if no IPs have been allocated yet.

Parameter	Type	Description
qosClass	String	The Quality of Service (QOS) classification assigned to the pod based on resource requirements See PodQOSClass type for available QOS classes More info: https://git.k8s.io/community/contributors/design-proposals/node/resource-qos.md Possible enum values: • <i>"BestEffort"</i> is the BestEffort qos class. • <i>"Burstable"</i> is the Burstable qos class. • <i>"Guaranteed"</i> is the Guaranteed qos class.
reason	String	A brief CamelCase message indicating details about why the pod is in this state. e.g. 'Evicted'
startTime	String	RFC 3339 date and time at which the object was acknowledged by the Kubelet. This is before the Kubelet pulled the container image(s) for the pod.

Table 5-497 io.cci.api.pkg.apis.versioned.cci.v2.PodCondition

Parameter	Type	Description
lastProbeTime	String	Last time we probed the condition.
lastTransitionTime	String	Last time the condition transitioned from one status to another.
message	String	Human-readable message indicating details about last transition.
reason	String	Unique, one-word, CamelCase reason for the condition's last transition.
status	String	Status is the status of the condition. Can be True, False, Unknown. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Parameter	Type	Description
type	String	Type is the type of the condition. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Table 5-498 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br:]<container_id>'.
image	String	The image the container is running. More info: https://kubernetes.io/docs/concepts/containers/images .
imageID	String	ImageID of the container's image.
lastState	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's last termination condition.
name	String	This must be a DNS_LABEL. Each container in a pod must have a unique name. Cannot be updated.
ready	Boolean	Specifies whether the container has passed its readiness probe.
restartCount	Integer	The number of times the container has been restarted.
started	Boolean	Specifies whether the container has passed its startup probe. Initialized as false, becomes true after startupProbe is considered successful. Resets to false when the container is restarted, or if kubelet loses state temporarily. Is always true when no startupProbe is defined.
state	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's current condition.

Table 5-499 io.cci.api.pkg.apis.versioned.cci.v2.ContainerState

Parameter	Type	Description
running	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning object	Details about a running container
terminated	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated object	Details about a terminated container
waiting	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting object	Details about a waiting container

Table 5-500 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning

Parameter	Type	Description
startedAt	String	Time at which the container was last (re-)started

Table 5-501 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br)://<container_id>'
exitCode	Integer	Exit status from the last termination of the container
finishedAt	String	Time at which the container last terminated
message	String	Message regarding the last termination of the container
reason	String	(brief) reason from the last termination of the container
signal	Integer	Signal from the last termination of the container
startedAt	String	Time at which previous execution of the container started

Table 5-502 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting

Parameter	Type	Description
message	String	Message regarding why the container is not yet running.
reason	String	(brief) reason the container is not yet running.

Table 5-503 io.cci.api.pkg.apis.versioned.cci.v2.PodIP

Parameter	Type	Description
ip	String	ip is an IP address (IPv4 or IPv6) assigned to the pod

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion" : "cci/v2",
  "kind" : "Pod",
  "metadata" : {
    "annotations" : {
      "cni.yangtse.io/network-status" : "[{\"macAddress\":\"fa:16:3e:1d:75:3a\",\"ipv4Info\":{\"subnet\":\"192.168.0.0/24\",\"ipAddress\":\"192.168.0.197\",\"gateway\":\"192.168.0.1\"},\"name\":\"test-api\",\"portID\":\"b471658c-caac-4377-94f4-2eeff1192d2b\",\"ips\":[\"192.168.0.197\"],\"vlanID\":\"3687\"}],\"networking.cci.io/vm-network-info\" : \"{\\\"vmID\\\":\\\"fda21659-a816-4449-abcf-193ac5a47b4a\\\",\\\"eniID\\\":\\\"ec9f8fae-ae74-445b-b8bb-b533e5342dbd\\\",\\\"maxEniNum\\\":2,\\\"maxSubEniNum\\\":16}\",\"openvessel.io/monitoring-aominfo\" : \"08a2*****c03:4257ecf3-7c47-43a3-86d2-d2b4d4aa3a20\",
      "resource.cci.io/pod-size-specs" : "2.00_4.0",
      "resource.cci.io/size" : "2.00_4.0",
      "scheduling.k8s.io/group-name" : "podgroup-ade5799e-9371-4c9f-ab77-0472e97211f8",
      "tenant.cci.io/tenant-id" : "08a2*****c03",
      "topology.kubernetes.io/region" : "region1",
      "topology.kubernetes.io/zone" : "region1c"
    },
    "creationTimestamp" : "2024-10-09T16:11:23Z",
    "deletionGracePeriodSeconds" : 30,
    "deletionTimestamp" : "2024-10-09T17:07:39Z",
    "finalizers" : [ "billing.kubernetes.io/podbilling-finalizer" ],
    "labels" : {
      "scheduling.cci.io/vmid" : "fda21659-a816-4449-abcf-193ac5a47b4a",
      "sys_enterprise_project_id" : "0",
      "tenant.cci.io/tenant-id" : "08a2*****c03",
      "tenant.kubernetes.io/domain-id" : "08a*****ee60",
      "tenant.kubernetes.io/project-id" : "08a2*****c03",
      "test-label-key" : "test-label-value"
    }
  },
  "name" : "test",
```

```
"namespace" : "test-api",
"resourceVersion" : "391112739",
"uid" : "ade5799e-9371-4c9f-ab77-0472e97211f8"
},
"spec" : {
  "containers" : [ {
    "env" : [ {
      "name" : "ENV1",
      "value" : "false"
    }, {
      "name" : "ENV2",
      "value" : "xxx"
    } ],
    "image" : "nginx:latest",
    "name" : "deploy-example",
    "resources" : {
      "limits" : {
        "cpu" : "500m",
        "memory" : "1Gi"
      },
      "requests" : {
        "cpu" : "500m",
        "memory" : "1Gi"
      }
    },
    "terminationMessagePath" : "/dev/termination-log",
    "terminationMessagePolicy" : "File"
  } ],
  "dnsPolicy" : "Default",
  "imagePullSecrets" : [ {
    "name" : "imagepull-secret"
  } ],
  "nodeName" : "compute-cell-001",
  "restartPolicy" : "Always",
  "schedulerName" : "volcano",
  "securityContext" : { },
  "terminationGracePeriodSeconds" : 30
},
"status" : {
  "conditions" : [ {
    "lastProbeTime" : null,
    "lastTransitionTime" : "2024-10-09T16:11:24Z",
    "status" : "True",
    "type" : "Initialized"
  }, {
    "lastProbeTime" : null,
    "lastTransitionTime" : "2024-10-09T16:11:28Z",
    "status" : "True",
    "type" : "Ready"
  }, {
    "lastProbeTime" : null,
    "lastTransitionTime" : "2024-10-09T16:11:28Z",
    "status" : "True",
    "type" : "ContainersReady"
  }, {
    "lastProbeTime" : null,
    "lastTransitionTime" : "2024-10-09T16:11:23Z",
    "status" : "True",
    "type" : "PodScheduled"
  } ],
  "containerStatuses" : [ {
    "containerID" : "containerd://a44eef6b753babaff802d212e78afef2422959e90bd79ab5b385adb302aa3d1e",
    "image" : "nginx:latest",
    "imageID" : "docker.io/library/nginx@sha256:416d511ffa63777489af47f250b70d1570e428b67666567085f2bece3571ad83",
    "lastState" : { },
    "name" : "deploy-example",
    "ready" : true,
```



```
"restartCount" : 0,
"started" : true,
"state" : {
  "running" : {
    "startedAt" : "2024-10-09T16:11:27Z"
  }
},
"phase" : "Running",
"podIP" : "192.168.0.197",
"podIPs" : [ {
  "ip" : "192.168.0.197"
} ],
"qosClass" : "Guaranteed",
"startTime" : "2024-10-09T16:11:24Z"
}
```

Status Codes

Status Code	Description
200	OK
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.3.4 Querying a Pod

Function

This API is used to query the details about a pod in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces/{namespace}/pods/{name}

Table 5-504 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Pod
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-505 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-506 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis . versioned.cci.v2 . PodMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis . versioned.cci.v2 . PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis . versioned.cci.v2 . PodStatus object	Most recently observed status of the pod. This data may not be up to date. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-507 io.cci.api.pkg.apis.versioned.cci.v2.PodMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Pod Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-508 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-509 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-510 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-511 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-512 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-513 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-514 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-515 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-516 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-517 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-518 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-519 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-520 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-521 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-522 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-523 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-524 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-525 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis .versioned.cci.v2. Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis .versioned.cci.v2. ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-526 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-527 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-528 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-529 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-530 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-531 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-532 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-533 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-534 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-535 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-536 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-537 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-538 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-539 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-540 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-541 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-542 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-543 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-544 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-545 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-546 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-547 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-548 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-549 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-550 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-551 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-552 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-553 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-554 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-555 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-556 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-557 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-558 io.cci.api.pkg.apis.versioned.cci.v2.PodStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodCondition objects	Current service state of pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions
containerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per container in the manifest. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
initContainerStatuses	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus objects	The list has one entry per init container in the manifest. The most recent successful init container will have ready = true, the most recently started container will have startTime set. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-and-container-status
message	String	A human readable message indicating details about why the pod is in this condition.

Parameter	Type	Description
phase	String	The phase of a Pod is a simple, high-level summary of where the Pod is in its lifecycle. The conditions array, the reason and message fields, and the individual container status arrays contain more detail about the pod's status. There are five possible phase values: Pending: The pod has been accepted by the Kubernetes system, but one or more of the container images has not been created. This includes time before being scheduled as well as time spent downloading images over the network, which could take a while. Running: The pod has been bound to a node, and all of the containers have been created. At least one container is still running, or is in the process of starting or restarting. Succeeded: All containers in the pod have terminated in success, and will not be restarted. Failed: All containers in the pod have terminated, and at least one container has terminated in failure. The container either exited with non-zero status or was terminated by the system. Unknown: For some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-phase Possible enum values: • <i>"Failed"</i> means that all containers in the pod have terminated, and at least one container has terminated in a failure (exited with a non-zero exit code or was stopped by the system). • <i>"Pending"</i> means the pod has been accepted by the system, but one or more of the containers has not been started. This includes time before being bound to a node, as well as time spent pulling images onto the host.

Parameter	Type	Description
		• <i>"Running"</i> means the pod has been bound to a node and all of the containers have been started. At least one container is still running or is in the process of being restarted. • <i>"Stopped"</i> means that the pod has been stopped • <i>"Succeeded"</i> means that all containers in the pod have voluntarily terminated with a container exit code of 0, and the system is not going to restart any of these containers. • <i>"Unknown"</i> means that for some reason the state of the pod could not be obtained, typically due to an error in communicating with the host of the pod. Deprecated: It isn't being set since 2015 (74da3b14b0c0f658b3bb8d2def5094686d0e9095)
podIP	String	IP address allocated to the pod. Routable at least within the cluster. Empty if not yet allocated.
podIPs	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodIP objects	podIPs holds the IP addresses allocated to the pod. If this field is specified, the 0th entry must match the podIP field. Pods may be allocated at most 1 value for each of IPv4 and IPv6. This list is empty if no IPs have been allocated yet.

Parameter	Type	Description
qosClass	String	The Quality of Service (QOS) classification assigned to the pod based on resource requirements See PodQOSClass type for available QOS classes More info: https://git.k8s.io/community/contributors/design-proposals/node/resource-qos.md Possible enum values: • <i>"BestEffort"</i> is the BestEffort qos class. • <i>"Burstable"</i> is the Burstable qos class. • <i>"Guaranteed"</i> is the Guaranteed qos class.
reason	String	A brief CamelCase message indicating details about why the pod is in this state. e.g. 'Evicted'
startTime	String	RFC 3339 date and time at which the object was acknowledged by the Kubelet. This is before the Kubelet pulled the container image(s) for the pod.

Table 5-559 io.cci.api.pkg.apis.versioned.cci.v2.PodCondition

Parameter	Type	Description
lastProbeTime	String	Last time we probed the condition.
lastTransitionTime	String	Last time the condition transitioned from one status to another.
message	String	Human-readable message indicating details about last transition.
reason	String	Unique, one-word, CamelCase reason for the condition's last transition.
status	String	Status is the status of the condition. Can be True, False, Unknown. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Parameter	Type	Description
type	String	Type is the type of the condition. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#pod-conditions

Table 5-560 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStatus

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br:)//<container_id>'
image	String	The image the container is running. More info: https://kubernetes.io/docs/concepts/containers/images .
imageID	String	ImageID of the container's image.
lastState	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's last termination condition.
name	String	This must be a DNS_LABEL. Each container in a pod must have a unique name. Cannot be updated.
ready	Boolean	Specifies whether the container has passed its readiness probe.
restartCount	Integer	The number of times the container has been restarted.
started	Boolean	Specifies whether the container has passed its startup probe. Initialized as false, becomes true after startupProbe is considered successful. Resets to false when the container is restarted, or if kubelet loses state temporarily. Is always true when no startupProbe is defined.
state	io.cci.api.pkg.apis.versioned.cci.v2.ContainerState object	Details about the container's current condition.

Table 5-561 io.cci.api.pkg.apis.versioned.cci.v2.ContainerState

Parameter	Type	Description
running	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning object	Details about a running container
terminated	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated object	Details about a terminated container
waiting	io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting object	Details about a waiting container

Table 5-562 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateRunning

Parameter	Type	Description
startedAt	String	Time at which the container was last (re-)started

Table 5-563 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateTerminated

Parameter	Type	Description
containerID	String	Container's ID in the format '[/topic/body/section/table/tgroup/tbody/row/entry/p/br {""}](br)://<container_id>'
exitCode	Integer	Exit status from the last termination of the container
finishedAt	String	Time at which the container last terminated
message	String	Message regarding the last termination of the container
reason	String	(brief) reason from the last termination of the container
signal	Integer	Signal from the last termination of the container
startedAt	String	Time at which previous execution of the container started

Table 5-564 io.cci.api.pkg.apis.versioned.cci.v2.ContainerStateWaiting

Parameter	Type	Description
message	String	Message regarding why the container is not yet running.
reason	String	(brief) reason the container is not yet running.

Table 5-565 io.cci.api.pkg.apis.versioned.cci.v2.PodIP

Parameter	Type	Description
ip	String	ip is an IP address (IPv4 or IPv6) assigned to the pod

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion" : "cci/v2",
  "kind" : "Pod",
  "metadata" : {
    "annotations" : {
      "cni.yangtse.io/network-status" : "[{\"macAddress\":\"fa:16:3e:1d:75:3a\",\"ipv4Info\":{\"subnet\":\"192.168.0.0/24\",\"ipAddress\":\"192.168.0.197\",\"gateway\":\"192.168.0.1\"},\"name\":\"test-api\",\"portID\":\"b471658c-caac-4377-94f4-2eeff1192d2b\",\"ips\":[\"192.168.0.197\"],\"vlanID\":\"3687\"}],\"networking.cci.io/vm-network-info\" : \"{\\\"vmID\\\":\\\"fda21659-a816-4449-abcf-193ac5a47b4a\\\",\\\"eniID\\\":\\\"ec9f8fae-ae74-445b-b8bb-b533e5342dbd\\\",\\\"maxEniNum\\\":2,\\\"maxSubEniNum\\\":16}\",\"openvessel.io/monitoring-aominfo\" : \"08a2*****c03:4257ecf3-7c47-43a3-86d2-d2b4d4aa3a20\",
      "resource.cci.io/pod-size-specs" : "2.00_4.0",
      "resource.cci.io/size" : "2.00_4.0",
      "scheduling.k8s.io/group-name" : "podgroup-ade5799e-9371-4c9f-ab77-0472e97211f8",
      "tenant.cci.io/tenant-id" : "08a2*****c03",
      "topology.kubernetes.io/region" : "region1",
      "topology.kubernetes.io/zone" : "region1c"
    },
    "creationTimestamp" : "2024-10-09T16:11:23Z",
    "finalizers" : [ "billing.kubernetes.io/podbilling-finalizer" ],
    "labels" : {
      "scheduling.cci.io/vmid" : "fda21659-a816-4449-abcf-193ac5a47b4a",
      "sys_enterprise_project_id" : "0",
      "tenant.cci.io/tenant-id" : "08a2*****c03",
      "tenant.kubernetes.io/domain-id" : "08a*****ee60",
      "tenant.kubernetes.io/project-id" : "08a2*****c03"
    },
    "name" : "test",
    "namespace" : "test-api",
    "resourceVersion" : "391095556",
    "uid" : "ade5799e-9371-4c9f-ab77-0472e97211f8"
  }
}
```



```
},
"spec": {
  "containers": [ {
    "env": [ {
      "name": "ENV1",
      "value": "false"
    }, {
      "name": "ENV2",
      "value": "xxx"
    } ],
    "image": "nginx:latest",
    "name": "deploy-example",
    "resources": {
      "limits": {
        "cpu": "500m",
        "memory": "1Gi"
      },
      "requests": {
        "cpu": "500m",
        "memory": "1Gi"
      }
    },
    "terminationMessagePath": "/dev/termination-log",
    "terminationMessagePolicy": "File"
  } ],
  "dnsPolicy": "Default",
  "imagePullSecrets": [ {
    "name": "imagepull-secret"
  } ],
  "nodeName": "compute-cell-001",
  "restartPolicy": "Always",
  "schedulerName": "volcano",
  "securityContext": { },
  "terminationGracePeriodSeconds": 30
},
"status": {
  "conditions": [ {
    "lastProbeTime": null,
    "lastTransitionTime": "2024-10-09T16:11:24Z",
    "status": "True",
    "type": "Initialized"
  }, {
    "lastProbeTime": null,
    "lastTransitionTime": "2024-10-09T16:11:28Z",
    "status": "True",
    "type": "Ready"
  }, {
    "lastProbeTime": null,
    "lastTransitionTime": "2024-10-09T16:11:28Z",
    "status": "True",
    "type": "ContainersReady"
  }, {
    "lastProbeTime": null,
    "lastTransitionTime": "2024-10-09T16:11:23Z",
    "status": "True",
    "type": "PodScheduled"
  } ],
  "containerStatuses": [ {
    "containerID": "containerd://a44eef6b753babaff802d212e78afef2422959e90bd79ab5b385adb302aa3d1e",
    "image": "nginx:latest",
    "imageID": "docker.io/library/nginx@sha256:416d511ffa63777489af47f250b70d1570e428b67666567085f2bece3571ad83",
    "lastState": { },
    "name": "deploy-example",
    "ready": true,
    "restartCount": 0,
    "started": true,
    "state": {
```

```
    "running" : {  
      "startedAt" : "2024-10-09T16:11:27Z"  
    }  
  },  
  },  
  "phase" : "Running",  
  "podIP" : "192.168.0.197",  
  "podIPs" : [ {  
    "ip" : "192.168.0.197"  
  } ],  
  "qosClass" : "Guaranteed",  
  "startTime" : "2024-10-09T16:11:24Z"  
}  
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.3.5 Running Commands in a Container (GET)

Function

This API is used to run commands in a container of a pod in a namespace.

This API cannot be debugged using curl or Postman. You are advised to use ccictl for debugging.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces/{namespace}/pods/{name}/exec

Table 5-566 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the PodExecOptions
namespace	Yes	String	object name and auth scope, such as for teams and projects

Table 5-567 Query Parameters

Parameter	Mandatory	Type	Description
command	No	String	Command to be run in the container. The first element is the command, and the subsequent elements are the arguments.
container	No	String	Name of the container in which to execute the command. If the Pod has only one container, this can be omitted.
stderr	No	Boolean	Whether to pass the standard error stream from the container to the client.

Parameter	Mandatory	Type	Description
stdin	No	Boolean	Whether to pass the standard input stream from the client to the container.
stdout	No	Boolean	Whether to pass the standard output stream from the container to the client.
tty	No	Boolean	Whether to allocate a pseudo-TTY.

Request Parameters

Table 5-568 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-569 Response body parameters

Parameter	Type	Description
-	String	

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.4 Network

5.4.1 Querying Networks in a Namespace

Function

This API is used to query the details about all networks in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/yangtse/v2/namespaces/{namespace}/networks

Table 5-570 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-571 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-572 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
items	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.Network objects	Network is a logical network defined in yangtse

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	ListMeta describes metadata that synthetic resources must have, including lists and various status objects. A resource may have only one of {ObjectMeta, ListMeta}.

Table 5-573 com.paas-core.yangtse.pkg.apis.yangtse.v2.Network

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2 object	ObjectMeta is metadata that all persisted resources must have, which includes all objects users must create.

Parameter	Type	Description
spec	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec object	Specification of the desired behavior of network.
status	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkStatus object	Most recently observed status of the network.

Table 5-574 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2 objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-575 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Type	Description
uid	String	UID of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-576 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec

Parameter	Type	Description
defaultNetwork	Boolean	Identifies whether the network is the default network
ipFamilies	Array of strings	IPFamilies of Network, can be "IPv4" or "IPv6"
networkType	String	Type of network, only support "underlay-neutron"
securityGroups	Array of strings	SecurityGroups of the network NOTE: 1. nil means not enable security group; 2. [""] means enable security group but deny all; 3. ["xxx,yyy"] means enable security group and allow with security group ids;
subnets	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf objects	Describes the subnets of the network

Table 5-577 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf

Parameter	Type	Description
subnetID	String	SubnetID subnetV4ID of the subnet

Table 5-578 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Conditions describe the current conditions of the Network.

Parameter	Type	Description
status	String	Status of network, can be "Ready" or "Failed" or "IPInsufficient"
subnetAttrs	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetAttr objects	SubnetAttrs describe the current subnet information of the Network

Table 5-579 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.

Parameter	Type	Description
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-580 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetAttr

Parameter	Type	Description
networkID	String	
subnetV4ID	String	
subnetV6ID	String	

Table 5-581 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.

Parameter	Type	Description
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "v1",
  "items": [ {
    "apiVersion": "yangtse/v2",
    "kind": "Network",
    "metadata": {
      "annotations": {
        "yangtse.io/domain-id": "08a*****ee60",
        "yangtse.io/project-id": "08a2*****c03",
        "yangtse.io/warm-pool-recycle-interval": "1",
        "yangtse.io/warm-pool-size": "10"
      },
      "creationTimestamp": "2024-03-25T09:27:52Z",
      "finalizers": [ "yangtse.io/network-cleanup" ],
      "name": "test-api",
      "namespace": "test-api",
      "resourceVersion": "17365331",
      "uid": "70c20697-a233-4405-b512-ebec1d3c58d0"
    },
    "spec": {
      "networkType": "underlay_neutron",
      "securityGroups": [ "4120c2f9-3a1d-453e-9b64-f51b92861e26" ],
      "subnets": [ {
        "subnetID": "2eb62e19-cf1a-4741-90cc-90fb127b20ab"
      } ]
    },
    "status": {
      "conditions": [ {
        "lastTransitionTime": "2024-03-25T09:27:53Z",
        "message": "",
        "reason": ""
      } ]
    }
  } ]
}
```

```
    "status" : "True",
    "type" : "NetworkSynced"
  }, {
    "lastTransitionTime" : "2024-08-12T15:40:03Z",
    "message" : "",
    "reason" : "",
    "status" : "True",
    "type" : "NetworkExternalDependenciesSynced"
  } ],
  "status" : "Ready",
  "subnetAttrs" : [ {
    "networkID" : "377b6228-d2a7-47ab-bdb0-f7fc59802198",
    "subnetV4ID" : "2eb62e19-cf1a-4741-90cc-90fb127b20ab"
  } ]
} ],
"kind" : "List",
"metadata" : {
  "resourceVersion" : ""
}
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.4.2 Creating a Network

Function

This API is used to create a network.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

POST /apis/yangtse/v2/namespaces/{namespace}/networks

Table 5-582 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-583 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-584 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	No	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2 object	ObjectMeta is metadata that all persisted resources must have, which includes all objects users must create.
spec	No	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec object	Specification of the desired behavior of network.

Table 5-585 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	No	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	No	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Mandatory	Type	Description
deletionTimestamp	No	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
finalizers	No	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Mandatory	Type	Description
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	No	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels

Parameter	Mandatory	Type	Description
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces
ownerReferences	No	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2 objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.

Parameter	Mandatory	Type	Description
resourceVersion	No	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	No	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.
uid	No	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-586 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2

Parameter	Mandatory	Type	Description
apiVersion	Yes	String	API version of the referent.

Parameter	Mandatory	Type	Description
blockOwnerDeletion	No	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	No	Boolean	If true, this reference points to the managing controller.
kind	Yes	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names
uid	Yes	String	UID of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-587 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec

Parameter	Mandatory	Type	Description
defaultNetwork	No	Boolean	Identifies whether the network is the default network

Parameter	Mandatory	Type	Description
ipFamilies	No	Array of strings	IPFamilies of Network, can be "IPv4" or "IPv6"
networkType	No	String	Type of network, only support "underlay-neutron"
securityGroups	No	Array of strings	SecurityGroups of the network NOTE: 1. nil means not enable security group; 2. [""] means enable security group but deny all; 3. ["xxx,yyy"] means enable security group and allow with security group ids;
subnets	No	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf objects	Describes the subnets of the network

Table 5-588 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf

Parameter	Mandatory	Type	Description
subnetID	No	String	SubnetID subnetV4ID of the subnet

Response Parameters

Status code: 200

Table 5-589 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2 object	ObjectMeta is metadata that all persisted resources must have, which includes all objects users must create.
spec	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec object	Specification of the desired behavior of network.
status	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkStatus object	Most recently observed status of the network.

Table 5-590 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations

Parameter	Type	Description
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2 objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-591 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Type	Description
uid	String	UID of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-592 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec

Parameter	Type	Description
defaultNetwork	Boolean	Identifies whether the network is the default network
ipFamilies	Array of strings	IPFamilies of Network, can be "IPv4" or "IPv6"
networkType	String	Type of network, only support "underlay-neutron"
securityGroups	Array of strings	SecurityGroups of the network NOTE: 1. nil means not enable security group; 2. [""] means enable security group but deny all; 3. ["xxx,yyy"] means enable security group and allow with security group ids;
subnets	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf objects	Describes the subnets of the network

Table 5-593 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf

Parameter	Type	Description
subnetID	String	SubnetID subnetV4ID of the subnet

Table 5-594 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Conditions describe the current conditions of the Network.

Parameter	Type	Description
status	String	Status of network, can be "Ready" or "Failed" or "IPInsufficient"
subnetAttrs	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetAttr objects	SubnetAttrs describe the current subnet information of the Network

Table 5-595 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.

Parameter	Type	Description
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-596 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetAttr

Parameter	Type	Description
networkID	String	
subnetV4ID	String	
subnetV6ID	String	

Status code: 201**Table 5-597** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2 object	ObjectMeta is metadata that all persisted resources must have, which includes all objects users must create.
spec	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec object	Specification of the desired behavior of network.
status	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkStatus object	Most recently observed status of the network.

Table 5-598 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations

Parameter	Type	Description
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2 objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-599 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Type	Description
uid	String	UID of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-600 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec

Parameter	Type	Description
defaultNetwork	Boolean	Identifies whether the network is the default network
ipFamilies	Array of strings	IPFamilies of Network, can be "IPv4" or "IPv6"
networkType	String	Type of network, only support "underlay-neutron"
securityGroups	Array of strings	SecurityGroups of the network NOTE: 1. nil means not enable security group; 2. [""] means enable security group but deny all; 3. ["xxx,yyy"] means enable security group and allow with security group ids;
subnets	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf objects	Describes the subnets of the network

Table 5-601 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf

Parameter	Type	Description
subnetID	String	SubnetID subnetV4ID of the subnet

Table 5-602 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Conditions describe the current conditions of the Network.

Parameter	Type	Description
status	String	Status of network, can be "Ready" or "Failed" or "IPInsufficient"
subnetAttrs	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetAttr objects	SubnetAttrs describe the current subnet information of the Network

Table 5-603 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.

Parameter	Type	Description
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-604 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetAttr

Parameter	Type	Description
networkID	String	
subnetV4ID	String	
subnetV6ID	String	

Status code: 202**Table 5-605** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2 object	ObjectMeta is metadata that all persisted resources must have, which includes all objects users must create.
spec	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec object	Specification of the desired behavior of network.
status	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkStatus object	Most recently observed status of the network.

Table 5-606 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations

Parameter	Type	Description
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2 objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-607 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Type	Description
uid	String	UID of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-608 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec

Parameter	Type	Description
defaultNetwork	Boolean	Identifies whether the network is the default network
ipFamilies	Array of strings	IPFamilies of Network, can be "IPv4" or "IPv6"
networkType	String	Type of network, only support "underlay-neutron"
securityGroups	Array of strings	SecurityGroups of the network NOTE: 1. nil means not enable security group; 2. [""] means enable security group but deny all; 3. ["xxx,yyy"] means enable security group and allow with security group ids;
subnets	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf objects	Describes the subnets of the network

Table 5-609 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf

Parameter	Type	Description
subnetID	String	SubnetID subnetV4ID of the subnet

Table 5-610 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Conditions describe the current conditions of the Network.

Parameter	Type	Description
status	String	Status of network, can be "Ready" or "Failed" or "IPInsufficient"
subnetAttrs	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetAttr objects	SubnetAttrs describe the current subnet information of the Network

Table 5-611 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.

Parameter	Type	Description
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-612 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetAttr

Parameter	Type	Description
networkID	String	
subnetV4ID	String	
subnetV6ID	String	

Example Requests

```
{
  "apiVersion": "yangtse/v2",
  "kind": "Network",
  "metadata": {
    "annotations": {
      "yangtse.io/domain-id": "08a*****ee60",
      "yangtse.io/project-id": "08a2*****c03",
      "yangtse.io/warm-pool-recycle-interval": "1",
      "yangtse.io/warm-pool-size": "10"
    },
    "name": "test-api"
  },
  "spec": {
    "networkType": "underlay_neutron",
    "securityGroups": [ "4120c2f9-3a1d-453e-9b64-f51b92861e26" ],
    "subnets": [ {
      "subnetID": "2eb62e19-cf1a-4741-90cc-90fb127b20ab"
    } ]
  }
}
```

Example Responses

Status code: 201

Created

```
{
  "apiVersion": "yangtse/v2",
  "kind": "Network",
  "metadata": {
    "annotations": {
      "yangtse.io/domain-id": "08a*****ee60",
      "yangtse.io/project-id": "08a2*****c03",
      "yangtse.io/warm-pool-recycle-interval": "1",
      "yangtse.io/warm-pool-size": "10"
    },
    "creationTimestamp": "2024-03-25T09:27:52Z",
    "finalizers": [ "yangtse.io/network-cleanup" ],
    "name": "test-api",
    "namespace": "test-api",
    "resourceVersion": "17365331",
    "uid": "70c20697-a233-4405-b512-ebec1d3c58d0"
  },
  "spec": {
    "networkType": "underlay_neutron",
    "securityGroups": [ "4120c2f9-3a1d-453e-9b64-f51b92861e26" ],
    "subnets": [ {
      "subnetID": "2eb62e19-cf1a-4741-90cc-90fb127b20ab"
    } ]
  },
  "status": {
    "conditions": [ {
      "lastTransitionTime": "2024-03-25T09:27:53Z",
      "message": "",
      "reason": "",
      "status": "True",
      "type": "NetworkSynced"
    }, {
      "lastTransitionTime": "2024-08-12T15:40:03Z",
      "message": "",
      "reason": "",
      "status": "True",
      "type": "NetworkExternalDependenciesSynced"
    } ],
    "status": "Ready",
    "subnetAttrs": [ {
      "networkID": "377b6228-d2a7-47ab-bdb0-f7fc59802198",
      "subnetV4ID": "2eb62e19-cf1a-4741-90cc-90fb127b20ab"
    } ]
  }
}
```

Status Codes

Status Code	Description
200	OK
201	Created
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound

Status Code	Description
405	MethodNotAllowed
406	NotAcceptable
409	AlreadyExists
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.4.3 Replacing a Network

Function

This API is used to replace a network in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

PUT /apis/yangtse/v2/namespaces/{namespace}/networks/{name}

Table 5-613 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Network
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-614 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-615 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Parameter	Mandatory	Type	Description
metadata	No	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2 object	ObjectMeta is metadata that all persisted resources must have, which includes all objects users must create.
spec	No	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec object	Specification of the desired behavior of network.

Table 5-616 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	No	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
deletionGracePeriodSeconds	No	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Mandatory	Type	Description
deletionTimestamp	No	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
finalizers	No	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Mandatory	Type	Description
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	No	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels

Parameter	Mandatory	Type	Description
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces
ownerReferences	No	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2 objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.

Parameter	Mandatory	Type	Description
resourceVersion	No	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	No	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.
uid	No	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-617 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2

Parameter	Mandatory	Type	Description
apiVersion	Yes	String	API version of the referent.

Parameter	Mandatory	Type	Description
blockOwnerDeletion	No	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	No	Boolean	If true, this reference points to the managing controller.
kind	Yes	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names
uid	Yes	String	UID of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-618 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec

Parameter	Mandatory	Type	Description
defaultNetwork	No	Boolean	Identifies whether the network is the default network

Parameter	Mandatory	Type	Description
ipFamilies	No	Array of strings	IPFamilies of Network, can be "IPv4" or "IPv6"
networkType	No	String	Type of network, only support "underlay-neutron"
securityGroups	No	Array of strings	SecurityGroups of the network NOTE: 1. nil means not enable security group; 2. [""] means enable security group but deny all; 3. ["xxx,yyy"] means enable security group and allow with security group ids;
subnets	No	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf objects	Describes the subnets of the network

Table 5-619 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf

Parameter	Mandatory	Type	Description
subnetID	No	String	SubnetID subnetV4ID of the subnet

Response Parameters

Status code: 200

Table 5-620 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2 object	ObjectMeta is metadata that all persisted resources must have, which includes all objects users must create.
spec	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec object	Specification of the desired behavior of network.
status	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkStatus object	Most recently observed status of the network.

Table 5-621 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations

Parameter	Type	Description
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2 objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-622 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Type	Description
uid	String	UID of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-623 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec

Parameter	Type	Description
defaultNetwork	Boolean	Identifies whether the network is the default network
ipFamilies	Array of strings	IPFamilies of Network, can be "IPv4" or "IPv6"
networkType	String	Type of network, only support "underlay-neutron"
securityGroups	Array of strings	SecurityGroups of the network NOTE: 1. nil means not enable security group; 2. [""] means enable security group but deny all; 3. ["xxx,yyy"] means enable security group and allow with security group ids;
subnets	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf objects	Describes the subnets of the network

Table 5-624 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf

Parameter	Type	Description
subnetID	String	SubnetID subnetV4ID of the subnet

Table 5-625 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Conditions describe the current conditions of the Network.

Parameter	Type	Description
status	String	Status of network, can be "Ready" or "Failed" or "IPInsufficient"
subnetAttrs	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetAttr objects	SubnetAttrs describe the current subnet information of the Network

Table 5-626 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.

Parameter	Type	Description
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-627 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetAttr

Parameter	Type	Description
networkID	String	
subnetV4ID	String	
subnetV6ID	String	

Status code: 201**Table 5-628** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2 object	ObjectMeta is metadata that all persisted resources must have, which includes all objects users must create.
spec	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec object	Specification of the desired behavior of network.
status	com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkStatus object	Most recently observed status of the network.

Table 5-629 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta_v2

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations

Parameter	Type	Description
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2 objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-630 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference_v2

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Type	Description
uid	String	UID of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#uids

Table 5-631 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkSpec

Parameter	Type	Description
defaultNetwork	Boolean	Identifies whether the network is the default network
ipFamilies	Array of strings	IPFamilies of Network, can be "IPv4" or "IPv6"
networkType	String	Type of network, only support "underlay-neutron"
securityGroups	Array of strings	SecurityGroups of the network NOTE: 1. nil means not enable security group; 2. [""] means enable security group but deny all; 3. ["xxx,yyy"] means enable security group and allow with security group ids;
subnets	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf objects	Describes the subnets of the network

Table 5-632 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetConf

Parameter	Type	Description
subnetID	String	SubnetID subnetV4ID of the subnet

Table 5-633 com.paas-core.yangtse.pkg.apis.yangtse.v2.NetworkStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Conditions describe the current conditions of the Network.

Parameter	Type	Description
status	String	Status of network, can be "Ready" or "Failed" or "IPInsufficient"
subnetAttrs	Array of com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetAttr objects	SubnetAttrs describe the current subnet information of the Network

Table 5-634 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.

Parameter	Type	Description
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-635 com.paas-core.yangtse.pkg.apis.yangtse.v2.SubnetAttr

Parameter	Type	Description
networkID	String	
subnetV4ID	String	
subnetV6ID	String	

Example Requests

```
{
  "apiVersion" : "yangtse/v2",
  "kind" : "Network",
  "metadata" : {
    "annotations" : {
      "yangtse.io/domain-id" : "08a*****ee60",
      "yangtse.io/project-id" : "08a2*****c03",
      "yangtse.io/warm-pool-recycle-interval" : "1",
      "yangtse.io/warm-pool-size" : "10"
    },
    "creationTimestamp" : "2024-03-25T09:27:52Z",
    "finalizers" : [ "yangtse.io/network-cleanup" ],
    "name" : "test-api",
    "namespace" : "test-api",
    "resourceVersion" : "17365331",
    "uid" : "70c20697-a233-4405-b512-ebec1d3c58d0"
  },
  "spec" : {
    "networkType" : "underlay_neutron",
    "securityGroups" : [ "4120c2f9-3a1d-453e-9b64-f51b92861e26" ],
    "subnets" : [ {
      "subnetID" : "2eb62e19-cf1a-4741-90cc-90fb127b20ab"
    } ]
  },
  "status" : {
```

```
"conditions" : [ {
  "lastTransitionTime" : "2024-03-25T09:27:53Z",
  "message" : "",
  "reason" : "",
  "status" : "True",
  "type" : "NetworkSynced"
}, {
  "lastTransitionTime" : "2024-08-12T15:40:03Z",
  "message" : "",
  "reason" : "",
  "status" : "True",
  "type" : "NetworkExternalDependenciesSynced"
} ],
"status" : "Ready",
"subnetAttrs" : [ {
  "networkID" : "377b6228-d2a7-47ab-bdb0-f7fc59802198",
  "subnetV4ID" : "2eb62e19-cf1a-4741-90cc-90fb127b20ab"
} ]
}
```

Example Responses

Status code: 200

OK

```
{
  "apiVersion" : "yangtse/v2",
  "kind" : "Network",
  "metadata" : {
    "annotations" : {
      "yangtse.io/domain-id" : "08a*****ee60",
      "yangtse.io/project-id" : "08a2*****c03",
      "yangtse.io/warm-pool-recycle-interval" : "1",
      "yangtse.io/warm-pool-size" : "10"
    },
    "creationTimestamp" : "2024-03-25T09:27:52Z",
    "finalizers" : [ "yangtse.io/network-cleanup" ],
    "name" : "test-api",
    "namespace" : "test-api",
    "resourceVersion" : "17365331",
    "uid" : "70c20697-a233-4405-b512-ebec1d3c58d0"
  },
  "spec" : {
    "networkType" : "underlay_neutron",
    "securityGroups" : [ "4120c2f9-3a1d-453e-9b64-f51b92861e26" ],
    "subnets" : [ {
      "subnetID" : "2eb62e19-cf1a-4741-90cc-90fb127b20ab"
    } ]
  },
  "status" : {
    "conditions" : [ {
      "lastTransitionTime" : "2024-03-25T09:27:53Z",
      "message" : "",
      "reason" : "",
      "status" : "True",
      "type" : "NetworkSynced"
    }, {
      "lastTransitionTime" : "2024-08-12T15:40:03Z",
      "message" : "",
      "reason" : "",
      "status" : "True",
      "type" : "NetworkExternalDependenciesSynced"
    } ],
    "status" : "Ready",
    "subnetAttrs" : [ {
      "networkID" : "377b6228-d2a7-47ab-bdb0-f7fc59802198",
      "subnetV4ID" : "2eb62e19-cf1a-4741-90cc-90fb127b20ab"
    } ]
  }
}
```

```
    }  
  }  
}
```

Status Codes

Status Code	Description
200	OK
201	Created
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.5 HorizontalPodAutoscaler

5.5.1 Querying HorizontalPodAutoscalers in a Namespace

Function

This API is used to query the details about all HorizontalPodAutoscalers in a namespace.

Constraints

Currently, the HPA feature is not available globally. This API is only available in TR-Istanbul, AF-Johannesburg, AP-Singapore, and ME-Riyadh. It will be available in more regions soon.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cce/v2/namespaces/{namespace}/horizontalpodautoscalers

Table 5-636 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-637 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-638 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscaler objects	items is the list of horizontal pod autoscaler objects.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	metadata is the standard list metadata.

Table 5-639 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscaler

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	metadata is the standard object metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec object	spec is the specification for the behaviour of the autoscaler. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status .
status	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus object	status is the current information about the autoscaler.

Table 5-640 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations

Parameter	Type	Description
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-641 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-642 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec

Parameter	Type	Description
behavior	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior object	behavior configures the scaling behavior of the target in both Up and Down directions (scaleUp and scaleDown fields respectively). If not set, the default HPAScalingRules for scale up and scale down are used.
maxReplicas	Integer	maxReplicas is the upper limit for the number of replicas to which the autoscaler can scale up. It cannot be less than minReplicas.
metrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec objects	metrics contains the specifications for which to use to calculate the desired replica count (the maximum replica count across all metrics will be used). The desired replica count is calculated multiplying the ratio between the target value and the current value by the current number of pods. Ergo, metrics used must decrease as the pod count is increased, and vice-versa. See the individual metric source types for more information about how each type of metric must respond. If not set, the default metric will be set to 80% average CPU utilization.
minReplicas	Integer	minReplicas is the lower limit for the number of replicas to which the autoscaler can scale down. It defaults to 1 pod. minReplicas is allowed to be 0 if the alpha feature gate HPAScaleToZero is enabled and at least one Object or External metric is configured. Scaling is active as long as at least one metric value is available.

Parameter	Type	Description
scaleTargetRef	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	scaleTargetRef points to the target resource to scale, and is used to the pods for which metrics should be collected, as well as to actually change the replica count.

Table 5-643 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior

Parameter	Type	Description
scaleDown	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleDown is scaling policy for scaling Down. If not set, the default value is to allow to scale down to minReplicas pods, with a 300 second stabilization window (i.e., the highest recommendation for the last 300sec is used).
scaleUp	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleUp is scaling policy for scaling Up. If not set, the default value is the higher of: • increase no more than 4 pods per 60 seconds • double the number of pods per 60 seconds No stabilization is used.

Table 5-644 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules

Parameter	Type	Description
policies	Array of io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy objects	policies is a list of potential scaling polices which can be used during scaling. At least one policy must be specified, otherwise the HPAScalingRules will be discarded as invalid
selectPolicy	String	selectPolicy is used to specify which policy should be used. If not set, the default value Max is used.

Parameter	Type	Description
stabilizationWindowSeconds	Integer	StabilizationWindowSeconds is the number of seconds for which past recommendations should be considered while scaling up or scaling down. StabilizationWindowSeconds must be greater than or equal to zero and less than or equal to 3600 (one hour). If not set, use the default values: - For scale up: 0 (i.e. no stabilization is done). - For scale down: 300 (i.e. the stabilization window is 300 seconds long).

Table 5-645 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy

Parameter	Type	Description
periodSeconds	Integer	PeriodSeconds specifies the window of time for which the policy should hold true. PeriodSeconds must be greater than zero and less than or equal to 1800 (30 min).
type	String	Type is used to specify the scaling policy.
value	Integer	Value contains the amount of change which is permitted by the policy. It must be greater than zero

Table 5-646 io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.

Parameter	Type	Description
type	String	type is the type of metric source. CCI only support type "Resource" now.

Table 5-647 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource

Parameter	Type	Description
name	String	name is the name of the resource in question.
target	io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget object	target specifies the target value for the given metric

Table 5-648 io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget

Parameter	Type	Description
averageUtilization	Integer	averageUtilization is the target value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods. Currently only valid for Resource metric source type
averageValue	String	averageValue is the target value of the average of the metric across all relevant pods (as a quantity)
type	String	type represents whether the metric type is Utilization, Value, or AverageValue
value	String	value is the target value of the metric (as a quantity).

Table 5-649 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition objects	conditions is the set of conditions required for this autoscaler to scale its target, and indicates whether or not those conditions are met.
currentMetrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus objects	currentMetrics is the last read state of the metrics used by this autoscaler.
currentReplicas	Integer	currentReplicas is current number of replicas of pods managed by this autoscaler, as last seen by the autoscaler.
desiredReplicas	Integer	desiredReplicas is the desired number of replicas of pods managed by this autoscaler, as last calculated by the autoscaler.
lastScaleTime	String	lastScaleTime is the last time the HorizontalPodAutoscaler scaled the number of pods, used by the autoscaler to control how often the number of pods is changed.
observedGeneration	Long	observedGeneration is the most recent generation observed by this autoscaler.

Table 5-650 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another
message	String	message is a human-readable explanation containing details about the transition

Parameter	Type	Description
reason	String	reason is the reason for the condition's last transition.
status	String	status is the status of the condition (True, False, Unknown)
type	String	type describes the current condition

Table 5-651 io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus

Parameter	Type	Description
containerResource	io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus object	container resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing a single container in each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
external	io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus object	external refers to a global metric that is not associated with any Kubernetes object. It allows autoscaling based on information coming from components running outside of cluster (for example length of queue in cloud messaging service, or QPS from loadbalancer running outside of cluster).
object	io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus object	object refers to a metric describing a single kubernetes object (for example, hits-per-second on an Ingress object).
pods	io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus object	pods refers to a metric describing each pod in the current scale target (for example, transactions-processed-per-second). The values will be averaged together before being compared to the target value.

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
type	String	type is the type of metric source. It will be one of "ContainerResource", "External", "Object", "Pods" or "Resource", each corresponds to a matching field in the object. Note: "ContainerResource" type is available on when the feature-gate HPAContainerMetrics is enabled

Table 5-652 io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus

Parameter	Type	Description
container	String	Container is the name of the container in the pods of the scaling target
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-653 io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric

Parameter	Type	Description
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-654 io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
describedObject	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	DescribedObject specifies the descriptions of a object,such as kind,name apiVersion
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-655 io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference

Parameter	Type	Description
apiVersion	String	API version of the referent
kind	String	Kind of the referent; More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent; More info: http://kubernetes.io/docs/user-guide/identifiers#names

Table 5-656 io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-657 io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier

Parameter	Type	Description
name	String	name is the name of the given metric
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	selector is the string-encoded form of a standard kubernetes label selector for the given metric When set, it is passed as an additional parameter to the metrics server for more specific metrics scoping. When unset, just the metricName will be used to gather metrics.

Table 5-658 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-659 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-660 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-661 io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus

Parameter	Type	Description
averageUtilization	Integer	currentAverageUtilization is the current value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods.
averageValue	String	averageValue is the current value of the average of the metric across all relevant pods (as a quantity)

Parameter	Type	Description
value	String	value is the current value of the metric (as a quantity).

Table 5-662 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.

Parameter	Type	Description
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "v1",
  "items": [ {
    "apiVersion": "cci/v2",
    "kind": "HorizontalPodAutoscaler",
    "metadata": {
      "annotations": {
        "tenant.cci.io/tenant-id": "08a2c8ef8d80d4152ff8c001d0281c03"
      },
      "creationTimestamp": "2025-03-15T04:59:47Z",
      "name": "test-hpa",
      "namespace": "auto-test-converged-namespace",
      "resourceVersion": "35689448",
      "uid": "53a01c80-e967-4353-aa4b-7d616da394cf"
    },
    "spec": {
      "maxReplicas": 5,
      "metrics": [ {
        "resource": {
          "name": "memory",
          "target": {
            "averageUtilization": 50,
            "type": "Utilization"
          }
        }
      } ],
      "type": "Resource"
    },
    "minReplicas": 1,
    "scaleTargetRef": {
      "apiVersion": "cci/v2",
      "kind": "Deployment",
      "name": "test"
    }
  },
  "status": {
    "conditions": [ {
      "lastTransitionTime": "2025-03-15T05:00:02Z",
      "message": "recent recommendations were higher than current one,\rapplying the highest recent recommendation",
      "reason": "ScaleDownStabilized",
      "status": "True",
      "type": "AbleToScale"
    }, {
      "lastTransitionTime": "2025-03-15T05:00:02Z",
      "message": "the HPA was able to successfully calculate a replica\rcount from memory resource utilization (percentage of request)",
      "reason": "ValidMetricFound",
      "status": "True",
      "type": "ScalingActive"
    }, {
      "lastTransitionTime": "2025-03-15T05:00:02Z",
      "message": "the desired count is within the acceptable range",
      "reason": "DesiredWithinRange",
      "status": "False",
      "type": "ScalingLimited"
    } ],
    "currentMetrics": [ {
      "resource": {
        "current": {
          "averageUtilization": 0,
          "averageValue": "1482752"
        },
        "name": "memory"
      },
      "type": "Resource"
    } ],
    "currentReplicas": 1,
    "desiredReplicas": 1
  }
}
```

```
    }],  
    "kind" : "List",  
    "metadata" : {  
      "resourceVersion" : ""  
    }  
  }  
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.5.2 Creating a HorizontalPodAutoscaler

Function

This API is used to create a HorizontalPodAutoscaler.

Constraints

Currently, the HPA feature is not available globally. This API is only available in TR-Istanbul, AF-Johannesburg, AP-Singapore, and ME-Riyadh. It will be available in more regions soon.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

POST /apis/cci/v2/namespaces/{namespace}/horizontalpodautoscalers

Table 5-663 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-664 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-665 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	No	io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMetadata object	metadata is the standard object metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	No	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec object	spec is the specification for the behaviour of the autoscaler. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status .

Table 5-666 io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels

Parameter	Mandatory	Type	Description
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces

Table 5-667 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec

Parameter	Mandatory	Type	Description
behavior	No	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior object	behavior configures the scaling behavior of the target in both Up and Down directions (scaleUp and scaleDown fields respectively). If not set, the default HPAScalingRules for scale up and scale down are used.

Parameter	Mandatory	Type	Description
maxReplicas	Yes	Integer	maxReplicas is the upper limit for the number of replicas to which the autoscaler can scale up. It cannot be less than minReplicas.
metrics	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec objects	metrics contains the specifications for which to use to calculate the desired replica count (the maximum replica count across all metrics will be used). The desired replica count is calculated multiplying the ratio between the target value and the current value by the current number of pods. Ergo, metrics used must decrease as the pod count is increased, and vice-versa. See the individual metric source types for more information about how each type of metric must respond. If not set, the default metric will be set to 80% average CPU utilization.
minReplicas	No	Integer	minReplicas is the lower limit for the number of replicas to which the autoscaler can scale down. It defaults to 1 pod. minReplicas is allowed to be 0 if the alpha feature gate HPAScaleToZero is enabled and at least one Object or External metric is configured. Scaling is active as long as at least one metric value is available.

Parameter	Mandatory	Type	Description
scaleTargetRef	Yes	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	scaleTargetRef points to the target resource to scale, and is used to the pods for which metrics should be collected, as well as to actually change the replica count.

Table 5-668 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior

Parameter	Mandatory	Type	Description
scaleDown	No	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleDown is scaling policy for scaling Down. If not set, the default value is to allow to scale down to minReplicas pods, with a 300 second stabilization window (i.e., the highest recommendation for the last 300sec is used).
scaleUp	No	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleUp is scaling policy for scaling Up. If not set, the default value is the higher of: • increase no more than 4 pods per 60 seconds • double the number of pods per 60 seconds No stabilization is used.

Table 5-669 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules

Parameter	Mandatory	Type	Description
policies	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy objects	policies is a list of potential scaling polices which can be used during scaling. At least one policy must be specified, otherwise the HPAScalingRules will be discarded as invalid

Parameter	Mandatory	Type	Description
selectPolicy	No	String	selectPolicy is used to specify which policy should be used. If not set, the default value Max is used.
stabilizationWindowSeconds	No	Integer	StabilizationWindowSeconds is the number of seconds for which past recommendations should be considered while scaling up or scaling down. StabilizationWindowSeconds must be greater than or equal to zero and less than or equal to 3600 (one hour). If not set, use the default values: - For scale up: 0 (i.e. no stabilization is done). - For scale down: 300 (i.e. the stabilization window is 300 seconds long).

Table 5-670 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy

Parameter	Mandatory	Type	Description
periodSeconds	Yes	Integer	PeriodSeconds specifies the window of time for which the policy should hold true. PeriodSeconds must be greater than zero and less than or equal to 1800 (30 min).
type	Yes	String	Type is used to specify the scaling policy.
value	Yes	Integer	Value contains the amount of change which is permitted by the policy. It must be greater than zero

Table 5-671 io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec

Parameter	Mandatory	Type	Description
resource	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
type	Yes	String	type is the type of metric source. CCI only support type "Resource" now.

Table 5-672 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource

Parameter	Mandatory	Type	Description
name	Yes	String	name is the name of the resource in question.
target	Yes	io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget object	target specifies the target value for the given metric

Table 5-673 io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget

Parameter	Mandatory	Type	Description
averageUtilization	No	Integer	averageUtilization is the target value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods. Currently only valid for Resource metric source type
averageValue	No	String	averageValue is the target value of the average of the metric across all relevant pods (as a quantity)
type	Yes	String	type represents whether the metric type is Utilization, Value, or AverageValue
value	No	String	value is the target value of the metric (as a quantity).

Table 5-674 io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference

Parameter	Mandatory	Type	Description
apiVersion	No	String	API version of the referent
kind	Yes	String	Kind of the referent; More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	Yes	String	Name of the referent; More info: http://kubernetes.io/docs/user-guide/identifiers#names

Response Parameters

Status code: 200

Table 5-675 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	metadata is the standard object metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec object	spec is the specification for the behaviour of the autoscaler. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status .
status	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus object	status is the current information about the autoscaler.

Table 5-676 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-677 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-678 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec

Parameter	Type	Description
behavior	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior object	behavior configures the scaling behavior of the target in both Up and Down directions (scaleUp and scaleDown fields respectively). If not set, the default HPAScalingRules for scale up and scale down are used.
maxReplicas	Integer	maxReplicas is the upper limit for the number of replicas to which the autoscaler can scale up. It cannot be less than minReplicas.
metrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec objects	metrics contains the specifications for which to use to calculate the desired replica count (the maximum replica count across all metrics will be used). The desired replica count is calculated multiplying the ratio between the target value and the current value by the current number of pods. Ergo, metrics used must decrease as the pod count is increased, and vice-versa. See the individual metric source types for more information about how each type of metric must respond. If not set, the default metric will be set to 80% average CPU utilization.
minReplicas	Integer	minReplicas is the lower limit for the number of replicas to which the autoscaler can scale down. It defaults to 1 pod. minReplicas is allowed to be 0 if the alpha feature gate HPAScaleToZero is enabled and at least one Object or External metric is configured. Scaling is active as long as at least one metric value is available.

Parameter	Type	Description
scaleTargetRef	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	scaleTargetRef points to the target resource to scale, and is used to the pods for which metrics should be collected, as well as to actually change the replica count.

Table 5-679 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior

Parameter	Type	Description
scaleDown	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleDown is scaling policy for scaling Down. If not set, the default value is to allow to scale down to minReplicas pods, with a 300 second stabilization window (i.e., the highest recommendation for the last 300sec is used).
scaleUp	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleUp is scaling policy for scaling Up. If not set, the default value is the higher of: • increase no more than 4 pods per 60 seconds • double the number of pods per 60 seconds No stabilization is used.

Table 5-680 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules

Parameter	Type	Description
policies	Array of io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy objects	policies is a list of potential scaling policies which can be used during scaling. At least one policy must be specified, otherwise the HPAScalingRules will be discarded as invalid
selectPolicy	String	selectPolicy is used to specify which policy should be used. If not set, the default value Max is used.

Parameter	Type	Description
stabilizationWindowSeconds	Integer	StabilizationWindowSeconds is the number of seconds for which past recommendations should be considered while scaling up or scaling down. StabilizationWindowSeconds must be greater than or equal to zero and less than or equal to 3600 (one hour). If not set, use the default values: - For scale up: 0 (i.e. no stabilization is done). - For scale down: 300 (i.e. the stabilization window is 300 seconds long).

Table 5-681 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy

Parameter	Type	Description
periodSeconds	Integer	PeriodSeconds specifies the window of time for which the policy should hold true. PeriodSeconds must be greater than zero and less than or equal to 1800 (30 min).
type	String	Type is used to specify the scaling policy.
value	Integer	Value contains the amount of change which is permitted by the policy. It must be greater than zero

Table 5-682 io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.

Parameter	Type	Description
type	String	type is the type of metric source. CCI only support type "Resource" now.

Table 5-683 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource

Parameter	Type	Description
name	String	name is the name of the resource in question.
target	io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget object	target specifies the target value for the given metric

Table 5-684 io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget

Parameter	Type	Description
averageUtilization	Integer	averageUtilization is the target value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods. Currently only valid for Resource metric source type
averageValue	String	averageValue is the target value of the average of the metric across all relevant pods (as a quantity)
type	String	type represents whether the metric type is Utilization, Value, or AverageValue
value	String	value is the target value of the metric (as a quantity).

Table 5-685 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition objects	conditions is the set of conditions required for this autoscaler to scale its target, and indicates whether or not those conditions are met.
currentMetrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus objects	currentMetrics is the last read state of the metrics used by this autoscaler.
currentReplicas	Integer	currentReplicas is current number of replicas of pods managed by this autoscaler, as last seen by the autoscaler.
desiredReplicas	Integer	desiredReplicas is the desired number of replicas of pods managed by this autoscaler, as last calculated by the autoscaler.
lastScaleTime	String	lastScaleTime is the last time the HorizontalPodAutoscaler scaled the number of pods, used by the autoscaler to control how often the number of pods is changed.
observedGeneration	Long	observedGeneration is the most recent generation observed by this autoscaler.

Table 5-686 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another
message	String	message is a human-readable explanation containing details about the transition

Parameter	Type	Description
reason	String	reason is the reason for the condition's last transition.
status	String	status is the status of the condition (True, False, Unknown)
type	String	type describes the current condition

Table 5-687 io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus

Parameter	Type	Description
containerResource	io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus object	container resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing a single container in each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
external	io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus object	external refers to a global metric that is not associated with any Kubernetes object. It allows autoscaling based on information coming from components running outside of cluster (for example length of queue in cloud messaging service, or QPS from loadbalancer running outside of cluster).
object	io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus object	object refers to a metric describing a single kubernetes object (for example, hits-per-second on an Ingress object).
pods	io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus object	pods refers to a metric describing each pod in the current scale target (for example, transactions-processed-per-second). The values will be averaged together before being compared to the target value.

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
type	String	type is the type of metric source. It will be one of "ContainerResource", "External", "Object", "Pods" or "Resource", each corresponds to a matching field in the object. Note: "ContainerResource" type is available on when the feature-gate HPAContainerMetrics is enabled

Table 5-688 io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus

Parameter	Type	Description
container	String	Container is the name of the container in the pods of the scaling target
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-689 io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric

Parameter	Type	Description
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-690 io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
describedObject	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	DescribedObject specifies the descriptions of a object,such as kind,name apiVersion
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-691 io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference

Parameter	Type	Description
apiVersion	String	API version of the referent
kind	String	Kind of the referent; More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent; More info: http://kubernetes.io/docs/user-guide/identifiers#names

Table 5-692 io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-693 io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier

Parameter	Type	Description
name	String	name is the name of the given metric
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	selector is the string-encoded form of a standard kubernetes label selector for the given metric When set, it is passed as an additional parameter to the metrics server for more specific metrics scoping. When unset, just the metricName will be used to gather metrics.

Table 5-694 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-695 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-696 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-697 io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus

Parameter	Type	Description
averageUtilization	Integer	currentAverageUtilization is the current value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods.
averageValue	String	averageValue is the current value of the average of the metric across all relevant pods (as a quantity)

Parameter	Type	Description
value	String	value is the current value of the metric (as a quantity).

Status code: 201

Table 5-698 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	metadata is the standard object metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec object	spec is the specification for the behaviour of the autoscaler. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status .
status	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus object	status is the current information about the autoscaler.

Table 5-699 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-700 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-701 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec

Parameter	Type	Description
behavior	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior object	behavior configures the scaling behavior of the target in both Up and Down directions (scaleUp and scaleDown fields respectively). If not set, the default HPAScalingRules for scale up and scale down are used.
maxReplicas	Integer	maxReplicas is the upper limit for the number of replicas to which the autoscaler can scale up. It cannot be less than minReplicas.
metrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec objects	metrics contains the specifications for which to use to calculate the desired replica count (the maximum replica count across all metrics will be used). The desired replica count is calculated multiplying the ratio between the target value and the current value by the current number of pods. Ergo, metrics used must decrease as the pod count is increased, and vice-versa. See the individual metric source types for more information about how each type of metric must respond. If not set, the default metric will be set to 80% average CPU utilization.
minReplicas	Integer	minReplicas is the lower limit for the number of replicas to which the autoscaler can scale down. It defaults to 1 pod. minReplicas is allowed to be 0 if the alpha feature gate HPAScaleToZero is enabled and at least one Object or External metric is configured. Scaling is active as long as at least one metric value is available.

Parameter	Type	Description
scaleTargetRef	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	scaleTargetRef points to the target resource to scale, and is used to the pods for which metrics should be collected, as well as to actually change the replica count.

Table 5-702 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior

Parameter	Type	Description
scaleDown	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleDown is scaling policy for scaling Down. If not set, the default value is to allow to scale down to minReplicas pods, with a 300 second stabilization window (i.e., the highest recommendation for the last 300sec is used).
scaleUp	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleUp is scaling policy for scaling Up. If not set, the default value is the higher of: • increase no more than 4 pods per 60 seconds • double the number of pods per 60 seconds No stabilization is used.

Table 5-703 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules

Parameter	Type	Description
policies	Array of io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy objects	policies is a list of potential scaling policies which can be used during scaling. At least one policy must be specified, otherwise the HPAScalingRules will be discarded as invalid
selectPolicy	String	selectPolicy is used to specify which policy should be used. If not set, the default value Max is used.

Parameter	Type	Description
stabilizationWindowSeconds	Integer	StabilizationWindowSeconds is the number of seconds for which past recommendations should be considered while scaling up or scaling down. StabilizationWindowSeconds must be greater than or equal to zero and less than or equal to 3600 (one hour). If not set, use the default values: - For scale up: 0 (i.e. no stabilization is done). - For scale down: 300 (i.e. the stabilization window is 300 seconds long).

Table 5-704 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy

Parameter	Type	Description
periodSeconds	Integer	PeriodSeconds specifies the window of time for which the policy should hold true. PeriodSeconds must be greater than zero and less than or equal to 1800 (30 min).
type	String	Type is used to specify the scaling policy.
value	Integer	Value contains the amount of change which is permitted by the policy. It must be greater than zero

Table 5-705 io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.

Parameter	Type	Description
type	String	type is the type of metric source. CCI only support type "Resource" now.

Table 5-706 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource

Parameter	Type	Description
name	String	name is the name of the resource in question.
target	io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget object	target specifies the target value for the given metric

Table 5-707 io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget

Parameter	Type	Description
averageUtilization	Integer	averageUtilization is the target value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods. Currently only valid for Resource metric source type
averageValue	String	averageValue is the target value of the average of the metric across all relevant pods (as a quantity)
type	String	type represents whether the metric type is Utilization, Value, or AverageValue
value	String	value is the target value of the metric (as a quantity).

Table 5-708 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition objects	conditions is the set of conditions required for this autoscaler to scale its target, and indicates whether or not those conditions are met.
currentMetrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus objects	currentMetrics is the last read state of the metrics used by this autoscaler.
currentReplicas	Integer	currentReplicas is current number of replicas of pods managed by this autoscaler, as last seen by the autoscaler.
desiredReplicas	Integer	desiredReplicas is the desired number of replicas of pods managed by this autoscaler, as last calculated by the autoscaler.
lastScaleTime	String	lastScaleTime is the last time the HorizontalPodAutoscaler scaled the number of pods, used by the autoscaler to control how often the number of pods is changed.
observedGeneration	Long	observedGeneration is the most recent generation observed by this autoscaler.

Table 5-709 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another
message	String	message is a human-readable explanation containing details about the transition

Parameter	Type	Description
reason	String	reason is the reason for the condition's last transition.
status	String	status is the status of the condition (True, False, Unknown)
type	String	type describes the current condition

Table 5-710 io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus

Parameter	Type	Description
containerResource	io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus object	container resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing a single container in each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
external	io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus object	external refers to a global metric that is not associated with any Kubernetes object. It allows autoscaling based on information coming from components running outside of cluster (for example length of queue in cloud messaging service, or QPS from loadbalancer running outside of cluster).
object	io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus object	object refers to a metric describing a single kubernetes object (for example, hits-per-second on an Ingress object).
pods	io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus object	pods refers to a metric describing each pod in the current scale target (for example, transactions-processed-per-second). The values will be averaged together before being compared to the target value.

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
type	String	type is the type of metric source. It will be one of "ContainerResource", "External", "Object", "Pods" or "Resource", each corresponds to a matching field in the object. Note: "ContainerResource" type is available on when the feature-gate HPAContainerMetrics is enabled

Table 5-711 io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus

Parameter	Type	Description
container	String	Container is the name of the container in the pods of the scaling target
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-712 io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric

Parameter	Type	Description
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-713 io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
describedObject	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	DescribedObject specifies the descriptions of a object,such as kind,name apiVersion
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-714 io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference

Parameter	Type	Description
apiVersion	String	API version of the referent
kind	String	Kind of the referent; More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent; More info: http://kubernetes.io/docs/user-guide/identifiers#names

Table 5-715 io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-716 io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier

Parameter	Type	Description
name	String	name is the name of the given metric
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	selector is the string-encoded form of a standard kubernetes label selector for the given metric When set, it is passed as an additional parameter to the metrics server for more specific metrics scoping. When unset, just the metricName will be used to gather metrics.

Table 5-717 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-718 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-719 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-720 io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus

Parameter	Type	Description
averageUtilization	Integer	currentAverageUtilization is the current value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods.
averageValue	String	averageValue is the current value of the average of the metric across all relevant pods (as a quantity)

Parameter	Type	Description
value	String	value is the current value of the metric (as a quantity).

Status code: 202

Table 5-721 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	metadata is the standard object metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec object	spec is the specification for the behaviour of the autoscaler. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status .
status	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus object	status is the current information about the autoscaler.

Table 5-722 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-723 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-724 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec

Parameter	Type	Description
behavior	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior object	behavior configures the scaling behavior of the target in both Up and Down directions (scaleUp and scaleDown fields respectively). If not set, the default HPAScalingRules for scale up and scale down are used.
maxReplicas	Integer	maxReplicas is the upper limit for the number of replicas to which the autoscaler can scale up. It cannot be less than minReplicas.
metrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec objects	metrics contains the specifications for which to use to calculate the desired replica count (the maximum replica count across all metrics will be used). The desired replica count is calculated multiplying the ratio between the target value and the current value by the current number of pods. Ergo, metrics used must decrease as the pod count is increased, and vice-versa. See the individual metric source types for more information about how each type of metric must respond. If not set, the default metric will be set to 80% average CPU utilization.
minReplicas	Integer	minReplicas is the lower limit for the number of replicas to which the autoscaler can scale down. It defaults to 1 pod. minReplicas is allowed to be 0 if the alpha feature gate HPAScaleToZero is enabled and at least one Object or External metric is configured. Scaling is active as long as at least one metric value is available.

Parameter	Type	Description
scaleTargetRef	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	scaleTargetRef points to the target resource to scale, and is used to the pods for which metrics should be collected, as well as to actually change the replica count.

Table 5-725 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior

Parameter	Type	Description
scaleDown	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleDown is scaling policy for scaling Down. If not set, the default value is to allow to scale down to minReplicas pods, with a 300 second stabilization window (i.e., the highest recommendation for the last 300sec is used).
scaleUp	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleUp is scaling policy for scaling Up. If not set, the default value is the higher of: • increase no more than 4 pods per 60 seconds • double the number of pods per 60 seconds No stabilization is used.

Table 5-726 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules

Parameter	Type	Description
policies	Array of io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy objects	policies is a list of potential scaling policies which can be used during scaling. At least one policy must be specified, otherwise the HPAScalingRules will be discarded as invalid
selectPolicy	String	selectPolicy is used to specify which policy should be used. If not set, the default value Max is used.

Parameter	Type	Description
stabilizationWindowSeconds	Integer	StabilizationWindowSeconds is the number of seconds for which past recommendations should be considered while scaling up or scaling down. StabilizationWindowSeconds must be greater than or equal to zero and less than or equal to 3600 (one hour). If not set, use the default values: - For scale up: 0 (i.e. no stabilization is done). - For scale down: 300 (i.e. the stabilization window is 300 seconds long).

Table 5-727 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy

Parameter	Type	Description
periodSeconds	Integer	PeriodSeconds specifies the window of time for which the policy should hold true. PeriodSeconds must be greater than zero and less than or equal to 1800 (30 min).
type	String	Type is used to specify the scaling policy.
value	Integer	Value contains the amount of change which is permitted by the policy. It must be greater than zero

Table 5-728 io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.

Parameter	Type	Description
type	String	type is the type of metric source. CCI only support type "Resource" now.

Table 5-729 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource

Parameter	Type	Description
name	String	name is the name of the resource in question.
target	io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget object	target specifies the target value for the given metric

Table 5-730 io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget

Parameter	Type	Description
averageUtilization	Integer	averageUtilization is the target value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods. Currently only valid for Resource metric source type
averageValue	String	averageValue is the target value of the average of the metric across all relevant pods (as a quantity)
type	String	type represents whether the metric type is Utilization, Value, or AverageValue
value	String	value is the target value of the metric (as a quantity).

Table 5-731 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition objects	conditions is the set of conditions required for this autoscaler to scale its target, and indicates whether or not those conditions are met.
currentMetrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus objects	currentMetrics is the last read state of the metrics used by this autoscaler.
currentReplicas	Integer	currentReplicas is current number of replicas of pods managed by this autoscaler, as last seen by the autoscaler.
desiredReplicas	Integer	desiredReplicas is the desired number of replicas of pods managed by this autoscaler, as last calculated by the autoscaler.
lastScaleTime	String	lastScaleTime is the last time the HorizontalPodAutoscaler scaled the number of pods, used by the autoscaler to control how often the number of pods is changed.
observedGeneration	Long	observedGeneration is the most recent generation observed by this autoscaler.

Table 5-732 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another
message	String	message is a human-readable explanation containing details about the transition

Parameter	Type	Description
reason	String	reason is the reason for the condition's last transition.
status	String	status is the status of the condition (True, False, Unknown)
type	String	type describes the current condition

Table 5-733 io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus

Parameter	Type	Description
containerResource	io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus object	container resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing a single container in each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
external	io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus object	external refers to a global metric that is not associated with any Kubernetes object. It allows autoscaling based on information coming from components running outside of cluster (for example length of queue in cloud messaging service, or QPS from loadbalancer running outside of cluster).
object	io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus object	object refers to a metric describing a single kubernetes object (for example, hits-per-second on an Ingress object).
pods	io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus object	pods refers to a metric describing each pod in the current scale target (for example, transactions-processed-per-second). The values will be averaged together before being compared to the target value.

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
type	String	type is the type of metric source. It will be one of "ContainerResource", "External", "Object", "Pods" or "Resource", each corresponds to a matching field in the object. Note: "ContainerResource" type is available on when the feature-gate HPAContainerMetrics is enabled

Table 5-734 io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus

Parameter	Type	Description
container	String	Container is the name of the container in the pods of the scaling target
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-735 io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric

Parameter	Type	Description
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-736 io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
describedObject	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	DescribedObject specifies the descriptions of a object,such as kind,name apiVersion
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-737 io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference

Parameter	Type	Description
apiVersion	String	API version of the referent
kind	String	Kind of the referent; More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent; More info: http://kubernetes.io/docs/user-guide/identifiers#names

Table 5-738 io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-739 io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier

Parameter	Type	Description
name	String	name is the name of the given metric
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	selector is the string-encoded form of a standard kubernetes label selector for the given metric When set, it is passed as an additional parameter to the metrics server for more specific metrics scoping. When unset, just the metricName will be used to gather metrics.

Table 5-740 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-741 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-742 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-743 io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus

Parameter	Type	Description
averageUtilization	Integer	currentAverageUtilization is the current value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods.
averageValue	String	averageValue is the current value of the average of the metric across all relevant pods (as a quantity)

Parameter	Type	Description
value	String	value is the current value of the metric (as a quantity).

Example Requests

```
{
  "apiVersion": "cci/v2",
  "kind": "HorizontalPodAutoscaler",
  "metadata": {
    "name": "test-hpa"
  },
  "spec": {
    "maxReplicas": 5,
    "metrics": [ {
      "resource": {
        "name": "memory",
        "target": {
          "averageUtilization": 50,
          "type": "Utilization"
        }
      }
    }
  ],
  "type": "Resource"
},
  "minReplicas": 1,
  "scaleTargetRef": {
    "apiVersion": "cci/v2",
    "kind": "Deployment",
    "name": "test"
  }
}
```

Example Responses

Status code: 201

Created

```
{
  "apiVersion": "cci/v2",
  "kind": "HorizontalPodAutoscaler",
  "metadata": {
    "annotations": {
      "tenant.cci.io/tenant-id": "08a2c8ef8d80d4152ff8c001d0281c03"
    },
    "creationTimestamp": "2025-03-15T04:59:47Z",
    "name": "test-hpa",
    "namespace": "auto-test-converged-namespaces",
    "resourceVersion": "35689433",
    "uid": "53a01c80-e967-4353-aa4b-7d616da394cf"
  },
  "spec": {
    "maxReplicas": 5,
    "metrics": [ {
      "resource": {
        "name": "memory",
        "target": {
          "averageUtilization": 50,
          "type": "Utilization"
        }
      }
    }
  ],
  "type": "Resource"
}
```

```
    } ],  
    "minReplicas" : 1,  
    "scaleTargetRef" : {  
      "apiVersion" : "cci/v2",  
      "kind" : "Deployment",  
      "name" : "test"  
    }  
  },  
  "status" : {  
    "currentMetrics" : null,  
    "desiredReplicas" : 0  
  }  
}
```

Status Codes

Status Code	Description
200	OK
201	Created
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	AlreadyExists
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.5.3 Deleting a HorizontalPodAutoscaler

Function

This API is used to delete a HorizontalPodAutoscaler in a namespace.

Constraints

Currently, the HPA feature is not available globally. This API is only available in TR-Istanbul, AF-Johannesburg, AP-Singapore, and ME-Riyadh. It will be available in more regions soon.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

DELETE /apis/ccl/v2/namespaces/{namespace}/horizontalpodautoscalers/{name}

Table 5-744 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the HorizontalPodAutoscaler
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-745 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Response Parameters

Status code: 200

Table 5-746 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
code	Integer	Suggested HTTP return code for this status, 0 if not set.
details	io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails object	Extended data associated with the reason. Each reason may define its own extended details. This field is optional and the data returned is not guaranteed to conform to any schema except that defined by the reason type.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
message	String	A human-readable description of the status of this operation.

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
reason	String	A machine-readable description of why this operation is in the "Failure" status. If this value is empty there is no information available. A Reason clarifies an HTTP status code but does not override it.
status	String	Status of the operation. One of: "Success" or "Failure". More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-747 io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails

Parameter	Type	Description
causes	Array of io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause objects	The Causes array includes more details associated with the StatusReason failure. Not all StatusReasons may provide detailed causes.
group	String	The group attribute of the resource associated with the status StatusReason.
kind	String	The kind attribute of the resource associated with the status StatusReason. On some operations may differ from the requested resource Kind. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	The name attribute of the resource associated with the status StatusReason (when there is a single name which can be described).

Parameter	Type	Description
retryAfterSeconds	Integer	If specified, the time in seconds before the operation should be retried. Some errors may indicate the client must take an alternate action for those errors this field may indicate how long to wait before taking the alternate action.
uid	String	UID of the resource. (when there is a single resource which can be described). More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-748 io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause

Parameter	Type	Description
field	String	The field of the resource that has caused this error, as named by its JSON serialization. May include dot and postfix notation for nested attributes. Arrays are zero-indexed. Fields may appear more than once in an array of causes due to fields having multiple errors. Optional. Examples: "name" - the field "name" on the current resource "items[0].name" - the field "name" on the first array entry in "items"
message	String	A human-readable description of the cause of the error. This field may be presented as-is to a reader.
reason	String	A machine-readable description of the cause of the error. If this value is empty there is no information available.

Table 5-749 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.

Parameter	Type	Description
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Status code: 202**Table 5-750** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
code	Integer	Suggested HTTP return code for this status, 0 if not set.
details	io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails object	Extended data associated with the reason. Each reason may define its own extended details. This field is optional and the data returned is not guaranteed to conform to any schema except that defined by the reason type.

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
message	String	A human-readable description of the status of this operation.
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
reason	String	A machine-readable description of why this operation is in the "Failure" status. If this value is empty there is no information available. A Reason clarifies an HTTP status code but does not override it.
status	String	Status of the operation. One of: "Success" or "Failure". More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-751 io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails

Parameter	Type	Description
causes	Array of io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause objects	The Causes array includes more details associated with the StatusReason failure. Not all StatusReasons may provide detailed causes.
group	String	The group attribute of the resource associated with the status StatusReason.

Parameter	Type	Description
kind	String	The kind attribute of the resource associated with the status Reason. On some operations may differ from the requested resource Kind. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	The name attribute of the resource associated with the status Reason (when there is a single name which can be described).
retryAfterSeconds	Integer	If specified, the time in seconds before the operation should be retried. Some errors may indicate the client must take an alternate action for those errors this field may indicate how long to wait before taking the alternate action.
uid	String	UID of the resource. (when there is a single resource which can be described). More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-752 io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause

Parameter	Type	Description
field	String	The field of the resource that has caused this error, as named by its JSON serialization. May include dot and postfix notation for nested attributes. Arrays are zero-indexed. Fields may appear more than once in an array of causes due to fields having multiple errors. Optional. Examples: "name" - the field "name" on the current resource "items[0].name" - the field "name" on the first array entry in "items"

Parameter	Type	Description
message	String	A human-readable description of the cause of the error. This field may be presented as-is to a reader.
reason	String	A machine-readable description of the cause of the error. If this value is empty there is no information available.

Table 5-753 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.

Parameter	Type	Description
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion" : "cci/v2",
  "details" : {
    "group" : "cci",
    "kind" : "horizontalpodautoscalers",
    "name" : "test-hpa",
    "uid" : "53a01c80-e967-4353-aa4b-7d616da394cf"
  },
  "kind" : "Status",
  "metadata" : { },
  "status" : "Success"
}
```

Status Codes

Status Code	Description
200	OK
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.5.4 Querying a HorizontalPodAutoscaler

Function

This API is used to query the details about a HorizontalPodAutoscaler in a namespace.

Constraints

Currently, the HPA feature is not available globally. This API is only available in TR-Istanbul, AF-Johannesburg, AP-Singapore, and ME-Riyadh. It will be available in more regions soon.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces/{namespace}/horizontalpodautoscalers/{name}

Table 5-754 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the HorizontalPodAutoscaler
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-755 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-756 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	metadata is the standard object metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec object	spec is the specification for the behaviour of the autoscaler. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status .
status	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus object	status is the current information about the autoscaler.

Table 5-757 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-758 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-759 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec

Parameter	Type	Description
behavior	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior object	behavior configures the scaling behavior of the target in both Up and Down directions (scaleUp and scaleDown fields respectively). If not set, the default HPAScalingRules for scale up and scale down are used.
maxReplicas	Integer	maxReplicas is the upper limit for the number of replicas to which the autoscaler can scale up. It cannot be less than minReplicas.
metrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec objects	metrics contains the specifications for which to use to calculate the desired replica count (the maximum replica count across all metrics will be used). The desired replica count is calculated multiplying the ratio between the target value and the current value by the current number of pods. Ergo, metrics used must decrease as the pod count is increased, and vice-versa. See the individual metric source types for more information about how each type of metric must respond. If not set, the default metric will be set to 80% average CPU utilization.
minReplicas	Integer	minReplicas is the lower limit for the number of replicas to which the autoscaler can scale down. It defaults to 1 pod. minReplicas is allowed to be 0 if the alpha feature gate HPAScaleToZero is enabled and at least one Object or External metric is configured. Scaling is active as long as at least one metric value is available.

Parameter	Type	Description
scaleTargetRef	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	scaleTargetRef points to the target resource to scale, and is used to the pods for which metrics should be collected, as well as to actually change the replica count.

Table 5-760 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior

Parameter	Type	Description
scaleDown	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleDown is scaling policy for scaling Down. If not set, the default value is to allow to scale down to minReplicas pods, with a 300 second stabilization window (i.e., the highest recommendation for the last 300sec is used).
scaleUp	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleUp is scaling policy for scaling Up. If not set, the default value is the higher of: • increase no more than 4 pods per 60 seconds • double the number of pods per 60 seconds No stabilization is used.

Table 5-761 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules

Parameter	Type	Description
policies	Array of io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy objects	policies is a list of potential scaling policies which can be used during scaling. At least one policy must be specified, otherwise the HPAScalingRules will be discarded as invalid
selectPolicy	String	selectPolicy is used to specify which policy should be used. If not set, the default value Max is used.

Parameter	Type	Description
stabilizationWindowSeconds	Integer	StabilizationWindowSeconds is the number of seconds for which past recommendations should be considered while scaling up or scaling down. StabilizationWindowSeconds must be greater than or equal to zero and less than or equal to 3600 (one hour). If not set, use the default values: - For scale up: 0 (i.e. no stabilization is done). - For scale down: 300 (i.e. the stabilization window is 300 seconds long).

Table 5-762 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy

Parameter	Type	Description
periodSeconds	Integer	PeriodSeconds specifies the window of time for which the policy should hold true. PeriodSeconds must be greater than zero and less than or equal to 1800 (30 min).
type	String	Type is used to specify the scaling policy.
value	Integer	Value contains the amount of change which is permitted by the policy. It must be greater than zero

Table 5-763 io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.

Parameter	Type	Description
type	String	type is the type of metric source. CCI only support type "Resource" now.

Table 5-764 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource

Parameter	Type	Description
name	String	name is the name of the resource in question.
target	io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget object	target specifies the target value for the given metric

Table 5-765 io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget

Parameter	Type	Description
averageUtilization	Integer	averageUtilization is the target value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods. Currently only valid for Resource metric source type
averageValue	String	averageValue is the target value of the average of the metric across all relevant pods (as a quantity)
type	String	type represents whether the metric type is Utilization, Value, or AverageValue
value	String	value is the target value of the metric (as a quantity).

Table 5-766 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition objects	conditions is the set of conditions required for this autoscaler to scale its target, and indicates whether or not those conditions are met.
currentMetrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus objects	currentMetrics is the last read state of the metrics used by this autoscaler.
currentReplicas	Integer	currentReplicas is current number of replicas of pods managed by this autoscaler, as last seen by the autoscaler.
desiredReplicas	Integer	desiredReplicas is the desired number of replicas of pods managed by this autoscaler, as last calculated by the autoscaler.
lastScaleTime	String	lastScaleTime is the last time the HorizontalPodAutoscaler scaled the number of pods, used by the autoscaler to control how often the number of pods is changed.
observedGeneration	Long	observedGeneration is the most recent generation observed by this autoscaler.

Table 5-767 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another
message	String	message is a human-readable explanation containing details about the transition

Parameter	Type	Description
reason	String	reason is the reason for the condition's last transition.
status	String	status is the status of the condition (True, False, Unknown)
type	String	type describes the current condition

Table 5-768 io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus

Parameter	Type	Description
containerResource	io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus object	container resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing a single container in each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
external	io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus object	external refers to a global metric that is not associated with any Kubernetes object. It allows autoscaling based on information coming from components running outside of cluster (for example length of queue in cloud messaging service, or QPS from loadbalancer running outside of cluster).
object	io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus object	object refers to a metric describing a single kubernetes object (for example, hits-per-second on an Ingress object).
pods	io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus object	pods refers to a metric describing each pod in the current scale target (for example, transactions-processed-per-second). The values will be averaged together before being compared to the target value.

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
type	String	type is the type of metric source. It will be one of "ContainerResource", "External", "Object", "Pods" or "Resource", each corresponds to a matching field in the object. Note: "ContainerResource" type is available on when the feature-gate HPAContainerMetrics is enabled

Table 5-769 io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus

Parameter	Type	Description
container	String	Container is the name of the container in the pods of the scaling target
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-770 io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric

Parameter	Type	Description
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-771 io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
describedObject	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	DescribedObject specifies the descriptions of a object,such as kind,name apiVersion
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-772 io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference

Parameter	Type	Description
apiVersion	String	API version of the referent
kind	String	Kind of the referent; More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent; More info: http://kubernetes.io/docs/user-guide/identifiers#names

Table 5-773 io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-774 io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier

Parameter	Type	Description
name	String	name is the name of the given metric
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	selector is the string-encoded form of a standard kubernetes label selector for the given metric When set, it is passed as an additional parameter to the metrics server for more specific metrics scoping. When unset, just the metricName will be used to gather metrics.

Table 5-775 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-776 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-777 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-778 io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus

Parameter	Type	Description
averageUtilization	Integer	currentAverageUtilization is the current value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods.
averageValue	String	averageValue is the current value of the average of the metric across all relevant pods (as a quantity)

Parameter	Type	Description
value	String	value is the current value of the metric (as a quantity).

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "cci/v2",
  "kind": "HorizontalPodAutoscaler",
  "metadata": {
    "annotations": {
      "tenant.cci.io/tenant-id": "08a2c8ef8d80d4152ff8c001d0281c03"
    },
    "creationTimestamp": "2025-03-15T04:59:47Z",
    "name": "test-hpa",
    "namespace": "auto-test-converged-namespaces",
    "resourceVersion": "35689448",
    "uid": "53a01c80-e967-4353-aa4b-7d616da394cf"
  },
  "spec": {
    "maxReplicas": 5,
    "metrics": [ {
      "resource": {
        "name": "memory",
        "target": {
          "averageUtilization": 50,
          "type": "Utilization"
        }
      }
    } ],
    "type": "Resource"
  },
  "minReplicas": 1,
  "scaleTargetRef": {
    "apiVersion": "cci/v2",
    "kind": "Deployment",
    "name": "test"
  },
  "status": {
    "conditions": [ {
      "lastTransitionTime": "2025-03-15T05:00:02Z",
      "message": "recent recommendations were higher than current one, applying\rthe highest recent recommendation",
      "reason": "ScaleDownStabilized",
      "status": "True",
      "type": "AbleToScale"
    }, {
      "lastTransitionTime": "2025-03-15T05:00:02Z",
      "message": "the HPA was able to successfully calculate a replica count\rfrom memory resource utilization (percentage of request)",
      "reason": "ValidMetricFound",
      "status": "True",
      "type": "ScalingActive"
    }, {
      "lastTransitionTime": "2025-03-15T05:00:02Z",
```



```
{
  "message": "the desired count is within the acceptable range",
  "reason": "DesiredWithinRange",
  "status": "False",
  "type": "ScalingLimited"
},
{
  "currentMetrics": [ {
    "resource": {
      "current": {
        "averageUtilization": 0,
        "averageValue": "1482752"
      },
      "name": "memory"
    },
    "type": "Resource"
  } ],
  "currentReplicas": 1,
  "desiredReplicas": 1
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.5.5 Updating a HorizontalPodAutoscaler

Function

This API is used to update a HorizontalPodAutoscaler in a namespace.

The following fields can be updated:

- spec.maxReplicas
- spec.minReplicas
- spec.metrics

Constraints

Currently, the HPA feature is not available globally. This API is only available in TR-Istanbul, AF-Johannesburg, AP-Singapore, and ME-Riyadh. It will be available in more regions soon.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

PATCH /apis/cci/v2/namespaces/{namespace}/horizontalpodautoscalers/{name}

Table 5-779 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the HorizontalPodAutoscaler
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-780 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Currently, three types of patch request methods are supported. For details, see "Use a JSON merge patch to update a Deployment" (https://kubernetes.io/docs/tasks/manage-kubernetes-objects/update-api-object-kubectl-patch/). • JSON Patch. Content-Type: application/json-patch+json. • Merge Patch, Content-Type: application/merge-patch+json • Strategic Merge Patch. Content-Type: application/strategic-merge-patch+json As defined in RFC6902, JSON Patch contains a series of operations on the target JSON object. JSON Patch is also a JSON object. After receiving JSON Patch, the server applies the represented operations to the target JSON object. As defined in RFC 7386, Merge Patch contains some description of a JSON object. The JSON object is submitted to the server and merges with the current object of the server. This means to replace the list of the current resource object to form a new object. Strategic Merge Patch is used to add legal metadata to API objects and uses new metadata to determine which lists should be merged and which ones should not. The current metadata is used as the structure label.

Table 5-781 Request body parameters

Parameter	Mandatory	Type	Description
spec	No	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec object	spec is the specification for the behaviour of the autoscaler. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status .

Table 5-782 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec

Parameter	Mandatory	Type	Description
behavior	No	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior object	behavior configures the scaling behavior of the target in both Up and Down directions (scaleUp and scaleDown fields respectively). If not set, the default HPAScalingRules for scale up and scale down are used.
maxReplicas	Yes	Integer	maxReplicas is the upper limit for the number of replicas to which the autoscaler can scale up. It cannot be less than minReplicas.

Parameter	Mandatory	Type	Description
metrics	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec objects	metrics contains the specifications for which to use to calculate the desired replica count (the maximum replica count across all metrics will be used). The desired replica count is calculated multiplying the ratio between the target value and the current value by the current number of pods. Ergo, metrics used must decrease as the pod count is increased, and vice-versa. See the individual metric source types for more information about how each type of metric must respond. If not set, the default metric will be set to 80% average CPU utilization.
minReplicas	No	Integer	minReplicas is the lower limit for the number of replicas to which the autoscaler can scale down. It defaults to 1 pod. minReplicas is allowed to be 0 if the alpha feature gate HPAScaleToZero is enabled and at least one Object or External metric is configured. Scaling is active as long as at least one metric value is available.
scaleTargetRef	Yes	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	scaleTargetRef points to the target resource to scale, and is used to the pods for which metrics should be collected, as well as to actually change the replica count.

Table 5-783 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior

Parameter	Mandatory	Type	Description
scaleDown	No	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleDown is scaling policy for scaling Down. If not set, the default value is to allow to scale down to minReplicas pods, with a 300 second stabilization window (i.e., the highest recommendation for the last 300sec is used).
scaleUp	No	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleUp is scaling policy for scaling Up. If not set, the default value is the higher of: • increase no more than 4 pods per 60 seconds • double the number of pods per 60 seconds No stabilization is used.

Table 5-784 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules

Parameter	Mandatory	Type	Description
policies	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy objects	policies is a list of potential scaling polices which can be used during scaling. At least one policy must be specified, otherwise the HPAScalingRules will be discarded as invalid
selectPolicy	No	String	selectPolicy is used to specify which policy should be used. If not set, the default value Max is used.

Parameter	Mandatory	Type	Description
stabilizationWindowSeconds	No	Integer	StabilizationWindowSeconds is the number of seconds for which past recommendations should be considered while scaling up or scaling down. StabilizationWindowSeconds must be greater than or equal to zero and less than or equal to 3600 (one hour). If not set, use the default values: - For scale up: 0 (i.e. no stabilization is done). - For scale down: 300 (i.e. the stabilization window is 300 seconds long).

Table 5-785 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy

Parameter	Mandatory	Type	Description
periodSeconds	Yes	Integer	PeriodSeconds specifies the window of time for which the policy should hold true. PeriodSeconds must be greater than zero and less than or equal to 1800 (30 min).
type	Yes	String	Type is used to specify the scaling policy.
value	Yes	Integer	Value contains the amount of change which is permitted by the policy. It must be greater than zero

Table 5-786 io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec

Parameter	Mandatory	Type	Description
resource	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
type	Yes	String	type is the type of metric source. CCI only support type "Resource" now.

Table 5-787 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource

Parameter	Mandatory	Type	Description
name	Yes	String	name is the name of the resource in question.
target	Yes	io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget object	target specifies the target value for the given metric

Table 5-788 io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget

Parameter	Mandatory	Type	Description
averageUtilization	No	Integer	averageUtilization is the target value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods. Currently only valid for Resource metric source type
averageValue	No	String	averageValue is the target value of the average of the metric across all relevant pods (as a quantity)
type	Yes	String	type represents whether the metric type is Utilization, Value, or AverageValue
value	No	String	value is the target value of the metric (as a quantity).

Table 5-789 io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference

Parameter	Mandatory	Type	Description
apiVersion	No	String	API version of the referent
kind	Yes	String	Kind of the referent; More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	Yes	String	Name of the referent; More info: http://kubernetes.io/docs/user-guide/identifiers#names

Response Parameters

Status code: 200

Table 5-790 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	metadata is the standard object metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec object	spec is the specification for the behaviour of the autoscaler. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status .
status	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus object	status is the current information about the autoscaler.

Table 5-791 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-792 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-793 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec

Parameter	Type	Description
behavior	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior object	behavior configures the scaling behavior of the target in both Up and Down directions (scaleUp and scaleDown fields respectively). If not set, the default HPAScalingRules for scale up and scale down are used.
maxReplicas	Integer	maxReplicas is the upper limit for the number of replicas to which the autoscaler can scale up. It cannot be less than minReplicas.
metrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec objects	metrics contains the specifications for which to use to calculate the desired replica count (the maximum replica count across all metrics will be used). The desired replica count is calculated multiplying the ratio between the target value and the current value by the current number of pods. Ergo, metrics used must decrease as the pod count is increased, and vice-versa. See the individual metric source types for more information about how each type of metric must respond. If not set, the default metric will be set to 80% average CPU utilization.
minReplicas	Integer	minReplicas is the lower limit for the number of replicas to which the autoscaler can scale down. It defaults to 1 pod. minReplicas is allowed to be 0 if the alpha feature gate HPAScaleToZero is enabled and at least one Object or External metric is configured. Scaling is active as long as at least one metric value is available.

Parameter	Type	Description
scaleTargetRef	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	scaleTargetRef points to the target resource to scale, and is used to the pods for which metrics should be collected, as well as to actually change the replica count.

Table 5-794 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior

Parameter	Type	Description
scaleDown	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleDown is scaling policy for scaling Down. If not set, the default value is to allow to scale down to minReplicas pods, with a 300 second stabilization window (i.e., the highest recommendation for the last 300sec is used).
scaleUp	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleUp is scaling policy for scaling Up. If not set, the default value is the higher of: • increase no more than 4 pods per 60 seconds • double the number of pods per 60 seconds No stabilization is used.

Table 5-795 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules

Parameter	Type	Description
policies	Array of io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy objects	policies is a list of potential scaling policies which can be used during scaling. At least one policy must be specified, otherwise the HPAScalingRules will be discarded as invalid
selectPolicy	String	selectPolicy is used to specify which policy should be used. If not set, the default value Max is used.

Parameter	Type	Description
stabilizationWindowSeconds	Integer	StabilizationWindowSeconds is the number of seconds for which past recommendations should be considered while scaling up or scaling down. StabilizationWindowSeconds must be greater than or equal to zero and less than or equal to 3600 (one hour). If not set, use the default values: - For scale up: 0 (i.e. no stabilization is done). - For scale down: 300 (i.e. the stabilization window is 300 seconds long).

Table 5-796 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy

Parameter	Type	Description
periodSeconds	Integer	PeriodSeconds specifies the window of time for which the policy should hold true. PeriodSeconds must be greater than zero and less than or equal to 1800 (30 min).
type	String	Type is used to specify the scaling policy.
value	Integer	Value contains the amount of change which is permitted by the policy. It must be greater than zero

Table 5-797 io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.

Parameter	Type	Description
type	String	type is the type of metric source. CCI only support type "Resource" now.

Table 5-798 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource

Parameter	Type	Description
name	String	name is the name of the resource in question.
target	io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget object	target specifies the target value for the given metric

Table 5-799 io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget

Parameter	Type	Description
averageUtilization	Integer	averageUtilization is the target value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods. Currently only valid for Resource metric source type
averageValue	String	averageValue is the target value of the average of the metric across all relevant pods (as a quantity)
type	String	type represents whether the metric type is Utilization, Value, or AverageValue
value	String	value is the target value of the metric (as a quantity).

Table 5-800 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition objects	conditions is the set of conditions required for this autoscaler to scale its target, and indicates whether or not those conditions are met.
currentMetrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus objects	currentMetrics is the last read state of the metrics used by this autoscaler.
currentReplicas	Integer	currentReplicas is current number of replicas of pods managed by this autoscaler, as last seen by the autoscaler.
desiredReplicas	Integer	desiredReplicas is the desired number of replicas of pods managed by this autoscaler, as last calculated by the autoscaler.
lastScaleTime	String	lastScaleTime is the last time the HorizontalPodAutoscaler scaled the number of pods, used by the autoscaler to control how often the number of pods is changed.
observedGeneration	Long	observedGeneration is the most recent generation observed by this autoscaler.

Table 5-801 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another
message	String	message is a human-readable explanation containing details about the transition

Parameter	Type	Description
reason	String	reason is the reason for the condition's last transition.
status	String	status is the status of the condition (True, False, Unknown)
type	String	type describes the current condition

Table 5-802 io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus

Parameter	Type	Description
containerResource	io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus object	container resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing a single container in each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
external	io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus object	external refers to a global metric that is not associated with any Kubernetes object. It allows autoscaling based on information coming from components running outside of cluster (for example length of queue in cloud messaging service, or QPS from loadbalancer running outside of cluster).
object	io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus object	object refers to a metric describing a single kubernetes object (for example, hits-per-second on an Ingress object).
pods	io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus object	pods refers to a metric describing each pod in the current scale target (for example, transactions-processed-per-second). The values will be averaged together before being compared to the target value.

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
type	String	type is the type of metric source. It will be one of "ContainerResource", "External", "Object", "Pods" or "Resource", each corresponds to a matching field in the object. Note: "ContainerResource" type is available on when the feature-gate HPAContainerMetrics is enabled

Table 5-803 io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus

Parameter	Type	Description
container	String	Container is the name of the container in the pods of the scaling target
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-804 io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric

Parameter	Type	Description
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-805 io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
describedObject	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	DescribedObject specifies the descriptions of a object,such as kind,name apiVersion
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-806 io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference

Parameter	Type	Description
apiVersion	String	API version of the referent
kind	String	Kind of the referent; More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent; More info: http://kubernetes.io/docs/user-guide/identifiers#names

Table 5-807 io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-808 io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier

Parameter	Type	Description
name	String	name is the name of the given metric
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	selector is the string-encoded form of a standard kubernetes label selector for the given metric When set, it is passed as an additional parameter to the metrics server for more specific metrics scoping. When unset, just the metricName will be used to gather metrics.

Table 5-809 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-810 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-811 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-812 io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus

Parameter	Type	Description
averageUtilization	Integer	currentAverageUtilization is the current value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods.
averageValue	String	averageValue is the current value of the average of the metric across all relevant pods (as a quantity)

Parameter	Type	Description
value	String	value is the current value of the metric (as a quantity).

Status code: 201

Table 5-813 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	metadata is the standard object metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec object	spec is the specification for the behaviour of the autoscaler. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status .
status	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus object	status is the current information about the autoscaler.

Table 5-814 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-815 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-816 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec

Parameter	Type	Description
behavior	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior object	behavior configures the scaling behavior of the target in both Up and Down directions (scaleUp and scaleDown fields respectively). If not set, the default HPAScalingRules for scale up and scale down are used.
maxReplicas	Integer	maxReplicas is the upper limit for the number of replicas to which the autoscaler can scale up. It cannot be less than minReplicas.
metrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec objects	metrics contains the specifications for which to use to calculate the desired replica count (the maximum replica count across all metrics will be used). The desired replica count is calculated multiplying the ratio between the target value and the current value by the current number of pods. Ergo, metrics used must decrease as the pod count is increased, and vice-versa. See the individual metric source types for more information about how each type of metric must respond. If not set, the default metric will be set to 80% average CPU utilization.
minReplicas	Integer	minReplicas is the lower limit for the number of replicas to which the autoscaler can scale down. It defaults to 1 pod. minReplicas is allowed to be 0 if the alpha feature gate HPAScaleToZero is enabled and at least one Object or External metric is configured. Scaling is active as long as at least one metric value is available.

Parameter	Type	Description
scaleTargetRef	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	scaleTargetRef points to the target resource to scale, and is used to the pods for which metrics should be collected, as well as to actually change the replica count.

Table 5-817 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior

Parameter	Type	Description
scaleDown	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleDown is scaling policy for scaling Down. If not set, the default value is to allow to scale down to minReplicas pods, with a 300 second stabilization window (i.e., the highest recommendation for the last 300sec is used).
scaleUp	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleUp is scaling policy for scaling Up. If not set, the default value is the higher of: • increase no more than 4 pods per 60 seconds • double the number of pods per 60 seconds No stabilization is used.

Table 5-818 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules

Parameter	Type	Description
policies	Array of io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy objects	policies is a list of potential scaling policies which can be used during scaling. At least one policy must be specified, otherwise the HPAScalingRules will be discarded as invalid
selectPolicy	String	selectPolicy is used to specify which policy should be used. If not set, the default value Max is used.

Parameter	Type	Description
stabilizationWindowSeconds	Integer	StabilizationWindowSeconds is the number of seconds for which past recommendations should be considered while scaling up or scaling down. StabilizationWindowSeconds must be greater than or equal to zero and less than or equal to 3600 (one hour). If not set, use the default values: - For scale up: 0 (i.e. no stabilization is done). - For scale down: 300 (i.e. the stabilization window is 300 seconds long).

Table 5-819 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy

Parameter	Type	Description
periodSeconds	Integer	PeriodSeconds specifies the window of time for which the policy should hold true. PeriodSeconds must be greater than zero and less than or equal to 1800 (30 min).
type	String	Type is used to specify the scaling policy.
value	Integer	Value contains the amount of change which is permitted by the policy. It must be greater than zero

Table 5-820 io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.

Parameter	Type	Description
type	String	type is the type of metric source. CCI only support type "Resource" now.

Table 5-821 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource

Parameter	Type	Description
name	String	name is the name of the resource in question.
target	io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget object	target specifies the target value for the given metric

Table 5-822 io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget

Parameter	Type	Description
averageUtilization	Integer	averageUtilization is the target value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods. Currently only valid for Resource metric source type
averageValue	String	averageValue is the target value of the average of the metric across all relevant pods (as a quantity)
type	String	type represents whether the metric type is Utilization, Value, or AverageValue
value	String	value is the target value of the metric (as a quantity).

Table 5-823 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition objects	conditions is the set of conditions required for this autoscaler to scale its target, and indicates whether or not those conditions are met.
currentMetrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus objects	currentMetrics is the last read state of the metrics used by this autoscaler.
currentReplicas	Integer	currentReplicas is current number of replicas of pods managed by this autoscaler, as last seen by the autoscaler.
desiredReplicas	Integer	desiredReplicas is the desired number of replicas of pods managed by this autoscaler, as last calculated by the autoscaler.
lastScaleTime	String	lastScaleTime is the last time the HorizontalPodAutoscaler scaled the number of pods, used by the autoscaler to control how often the number of pods is changed.
observedGeneration	Long	observedGeneration is the most recent generation observed by this autoscaler.

Table 5-824 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another
message	String	message is a human-readable explanation containing details about the transition

Parameter	Type	Description
reason	String	reason is the reason for the condition's last transition.
status	String	status is the status of the condition (True, False, Unknown)
type	String	type describes the current condition

Table 5-825 io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus

Parameter	Type	Description
containerResource	io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus object	container resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing a single container in each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
external	io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus object	external refers to a global metric that is not associated with any Kubernetes object. It allows autoscaling based on information coming from components running outside of cluster (for example length of queue in cloud messaging service, or QPS from loadbalancer running outside of cluster).
object	io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus object	object refers to a metric describing a single kubernetes object (for example, hits-per-second on an Ingress object).
pods	io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus object	pods refers to a metric describing each pod in the current scale target (for example, transactions-processed-per-second). The values will be averaged together before being compared to the target value.

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
type	String	type is the type of metric source. It will be one of "ContainerResource", "External", "Object", "Pods" or "Resource", each corresponds to a matching field in the object. Note: "ContainerResource" type is available on when the feature-gate HPAContainerMetrics is enabled

Table 5-826 io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus

Parameter	Type	Description
container	String	Container is the name of the container in the pods of the scaling target
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-827 io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric

Parameter	Type	Description
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-828 io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
describedObject	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	DescribedObject specifies the descriptions of a object,such as kind,name apiVersion
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-829 io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference

Parameter	Type	Description
apiVersion	String	API version of the referent
kind	String	Kind of the referent; More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent; More info: http://kubernetes.io/docs/user-guide/identifiers#names

Table 5-830 io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-831 io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier

Parameter	Type	Description
name	String	name is the name of the given metric
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	selector is the string-encoded form of a standard kubernetes label selector for the given metric When set, it is passed as an additional parameter to the metrics server for more specific metrics scoping. When unset, just the metricName will be used to gather metrics.

Table 5-832 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-833 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-834 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-835 io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus

Parameter	Type	Description
averageUtilization	Integer	currentAverageUtilization is the current value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods.
averageValue	String	averageValue is the current value of the average of the metric across all relevant pods (as a quantity)

Parameter	Type	Description
value	String	value is the current value of the metric (as a quantity).

Example Requests

Merge Patch, Content-Type: application/merge-patch+json

```
{
  "spec": {
    "maxReplicas": 10
  }
}
```

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "cci/v2",
  "kind": "HorizontalPodAutoscaler",
  "metadata": {
    "annotations": {
      "tenant.cci.io/tenant-id": "08a2c8ef8d80d4152ff8c001d0281c03"
    },
    "creationTimestamp": "2025-03-15T04:59:47Z",
    "name": "test-hpa",
    "namespace": "auto-test-converged-namespace",
    "resourceVersion": "35689696",
    "uid": "53a01c80-e967-4353-aa4b-7d616da394cf"
  },
  "spec": {
    "maxReplicas": 10,
    "metrics": [ {
      "resource": {
        "name": "memory",
        "target": {
          "averageUtilization": 50,
          "type": "Utilization"
        }
      }
    },
    "type": "Resource"
  ],
  "minReplicas": 1,
  "scaleTargetRef": {
    "apiVersion": "cci/v2",
    "kind": "Deployment",
    "name": "test"
  }
},
  "status": {
    "conditions": [ {
      "lastTransitionTime": "2025-03-15T05:00:02Z",
      "message": "recent recommendations were higher than current one, applying\rthe highest recent recommendation",
      "reason": "ScaleDownStabilized",
      "status": "True",
      "type": "AbleToScale"
    }, {
      "lastTransitionTime": "2025-03-15T05:00:02Z",
      "message": "the HPA was able to successfully calculate a replica count\rfrom memory resource"
    }
  ]
}
```

```
utilization (percentage of request)",
  "reason" : "ValidMetricFound",
  "status" : "True",
  "type" : "ScalingActive"
}, {
  "lastTransitionTime" : "2025-03-15T05:00:02Z",
  "message" : "the desired count is within the acceptable range",
  "reason" : "DesiredWithinRange",
  "status" : "False",
  "type" : "ScalingLimited"
}],
"currentMetrics" : [ {
  "resource" : {
    "current" : {
      "averageUtilization" : 0,
      "averageValue" : "1482752"
    },
    "name" : "memory"
  },
  "type" : "Resource"
}],
"currentReplicas" : 1,
"desiredReplicas" : 1
}
```

Status Codes

Status Code	Description
200	OK
201	Created
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.5.6 Replacing a HorizontalPodAutoscaler

Function

This API is used to replace a HorizontalPodAutoscaler in a namespace.

The following fields can be updated:

- spec.maxReplicas
- spec.minReplicas
- spec.metrics

Constraints

Currently, the HPA feature is not available globally. This API is only available in TR-Istanbul, AF-Johannesburg, AP-Singapore, and ME-Riyadh. It will be available in more regions soon.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

PUT /apis/cci/v2/namespaces/{namespace}/horizontalpodautoscalers/{name}

Table 5-836 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the HorizontalPodAutoscaler
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-837 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-838 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Parameter	Mandatory	Type	Description
metadata	No	io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMeta object	metadata is the standard object metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	No	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec object	spec is the specification for the behaviour of the autoscaler. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status .

Table 5-839 io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations

Parameter	Mandatory	Type	Description
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Mandatory	Type	Description
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces

Table 5-840 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec

Parameter	Mandatory	Type	Description
behavior	No	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior object	behavior configures the scaling behavior of the target in both Up and Down directions (scaleUp and scaleDown fields respectively). If not set, the default HPAScalingRules for scale up and scale down are used.
maxReplicas	Yes	Integer	maxReplicas is the upper limit for the number of replicas to which the autoscaler can scale up. It cannot be less than minReplicas.

Parameter	Mandatory	Type	Description
metrics	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec objects	metrics contains the specifications for which to use to calculate the desired replica count (the maximum replica count across all metrics will be used). The desired replica count is calculated multiplying the ratio between the target value and the current value by the current number of pods. Ergo, metrics used must decrease as the pod count is increased, and vice-versa. See the individual metric source types for more information about how each type of metric must respond. If not set, the default metric will be set to 80% average CPU utilization.
minReplicas	No	Integer	minReplicas is the lower limit for the number of replicas to which the autoscaler can scale down. It defaults to 1 pod. minReplicas is allowed to be 0 if the alpha feature gate HPAScaleToZero is enabled and at least one Object or External metric is configured. Scaling is active as long as at least one metric value is available.
scaleTargetRef	Yes	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	scaleTargetRef points to the target resource to scale, and is used to the pods for which metrics should be collected, as well as to actually change the replica count.

Table 5-841 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior

Parameter	Mandatory	Type	Description
scaleDown	No	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleDown is scaling policy for scaling Down. If not set, the default value is to allow to scale down to minReplicas pods, with a 300 second stabilization window (i.e., the highest recommendation for the last 300sec is used).
scaleUp	No	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleUp is scaling policy for scaling Up. If not set, the default value is the higher of: • increase no more than 4 pods per 60 seconds • double the number of pods per 60 seconds No stabilization is used.

Table 5-842 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules

Parameter	Mandatory	Type	Description
policies	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy objects	policies is a list of potential scaling polices which can be used during scaling. At least one policy must be specified, otherwise the HPAScalingRules will be discarded as invalid
selectPolicy	No	String	selectPolicy is used to specify which policy should be used. If not set, the default value Max is used.

Parameter	Mandatory	Type	Description
stabilizationWindowSeconds	No	Integer	StabilizationWindowSeconds is the number of seconds for which past recommendations should be considered while scaling up or scaling down. StabilizationWindowSeconds must be greater than or equal to zero and less than or equal to 3600 (one hour). If not set, use the default values: - For scale up: 0 (i.e. no stabilization is done). - For scale down: 300 (i.e. the stabilization window is 300 seconds long).

Table 5-843 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy

Parameter	Mandatory	Type	Description
periodSeconds	Yes	Integer	PeriodSeconds specifies the window of time for which the policy should hold true. PeriodSeconds must be greater than zero and less than or equal to 1800 (30 min).
type	Yes	String	Type is used to specify the scaling policy.
value	Yes	Integer	Value contains the amount of change which is permitted by the policy. It must be greater than zero

Table 5-844 io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec

Parameter	Mandatory	Type	Description
resource	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
type	Yes	String	type is the type of metric source. CCI only support type "Resource" now.

Table 5-845 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource

Parameter	Mandatory	Type	Description
name	Yes	String	name is the name of the resource in question.
target	Yes	io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget object	target specifies the target value for the given metric

Table 5-846 io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget

Parameter	Mandatory	Type	Description
averageUtilization	No	Integer	averageUtilization is the target value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods. Currently only valid for Resource metric source type
averageValue	No	String	averageValue is the target value of the average of the metric across all relevant pods (as a quantity)
type	Yes	String	type represents whether the metric type is Utilization, Value, or AverageValue
value	No	String	value is the target value of the metric (as a quantity).

Table 5-847 io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference

Parameter	Mandatory	Type	Description
apiVersion	No	String	API version of the referent
kind	Yes	String	Kind of the referent; More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	Yes	String	Name of the referent; More info: http://kubernetes.io/docs/user-guide/identifiers#names

Response Parameters

Status code: 200

Table 5-848 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	metadata is the standard object metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec object	spec is the specification for the behaviour of the autoscaler. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status .
status	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus object	status is the current information about the autoscaler.

Table 5-849 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-850 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-851 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec

Parameter	Type	Description
behavior	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior object	behavior configures the scaling behavior of the target in both Up and Down directions (scaleUp and scaleDown fields respectively). If not set, the default HPAScalingRules for scale up and scale down are used.
maxReplicas	Integer	maxReplicas is the upper limit for the number of replicas to which the autoscaler can scale up. It cannot be less than minReplicas.
metrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec objects	metrics contains the specifications for which to use to calculate the desired replica count (the maximum replica count across all metrics will be used). The desired replica count is calculated multiplying the ratio between the target value and the current value by the current number of pods. Ergo, metrics used must decrease as the pod count is increased, and vice-versa. See the individual metric source types for more information about how each type of metric must respond. If not set, the default metric will be set to 80% average CPU utilization.
minReplicas	Integer	minReplicas is the lower limit for the number of replicas to which the autoscaler can scale down. It defaults to 1 pod. minReplicas is allowed to be 0 if the alpha feature gate HPAScaleToZero is enabled and at least one Object or External metric is configured. Scaling is active as long as at least one metric value is available.

Parameter	Type	Description
scaleTargetRef	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	scaleTargetRef points to the target resource to scale, and is used to the pods for which metrics should be collected, as well as to actually change the replica count.

Table 5-852 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior

Parameter	Type	Description
scaleDown	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleDown is scaling policy for scaling Down. If not set, the default value is to allow to scale down to minReplicas pods, with a 300 second stabilization window (i.e., the highest recommendation for the last 300sec is used).
scaleUp	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleUp is scaling policy for scaling Up. If not set, the default value is the higher of: • increase no more than 4 pods per 60 seconds • double the number of pods per 60 seconds No stabilization is used.

Table 5-853 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules

Parameter	Type	Description
policies	Array of io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy objects	policies is a list of potential scaling policies which can be used during scaling. At least one policy must be specified, otherwise the HPAScalingRules will be discarded as invalid
selectPolicy	String	selectPolicy is used to specify which policy should be used. If not set, the default value Max is used.

Parameter	Type	Description
stabilizationWindowSeconds	Integer	StabilizationWindowSeconds is the number of seconds for which past recommendations should be considered while scaling up or scaling down. StabilizationWindowSeconds must be greater than or equal to zero and less than or equal to 3600 (one hour). If not set, use the default values: - For scale up: 0 (i.e. no stabilization is done). - For scale down: 300 (i.e. the stabilization window is 300 seconds long).

Table 5-854 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy

Parameter	Type	Description
periodSeconds	Integer	PeriodSeconds specifies the window of time for which the policy should hold true. PeriodSeconds must be greater than zero and less than or equal to 1800 (30 min).
type	String	Type is used to specify the scaling policy.
value	Integer	Value contains the amount of change which is permitted by the policy. It must be greater than zero

Table 5-855 io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.

Parameter	Type	Description
type	String	type is the type of metric source. CCI only support type "Resource" now.

Table 5-856 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource

Parameter	Type	Description
name	String	name is the name of the resource in question.
target	io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget object	target specifies the target value for the given metric

Table 5-857 io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget

Parameter	Type	Description
averageUtilization	Integer	averageUtilization is the target value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods. Currently only valid for Resource metric source type
averageValue	String	averageValue is the target value of the average of the metric across all relevant pods (as a quantity)
type	String	type represents whether the metric type is Utilization, Value, or AverageValue
value	String	value is the target value of the metric (as a quantity).

Table 5-858 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition objects	conditions is the set of conditions required for this autoscaler to scale its target, and indicates whether or not those conditions are met.
currentMetrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus objects	currentMetrics is the last read state of the metrics used by this autoscaler.
currentReplicas	Integer	currentReplicas is current number of replicas of pods managed by this autoscaler, as last seen by the autoscaler.
desiredReplicas	Integer	desiredReplicas is the desired number of replicas of pods managed by this autoscaler, as last calculated by the autoscaler.
lastScaleTime	String	lastScaleTime is the last time the HorizontalPodAutoscaler scaled the number of pods, used by the autoscaler to control how often the number of pods is changed.
observedGeneration	Long	observedGeneration is the most recent generation observed by this autoscaler.

Table 5-859 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another
message	String	message is a human-readable explanation containing details about the transition

Parameter	Type	Description
reason	String	reason is the reason for the condition's last transition.
status	String	status is the status of the condition (True, False, Unknown)
type	String	type describes the current condition

Table 5-860 io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus

Parameter	Type	Description
containerResource	io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus object	container resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing a single container in each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
external	io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus object	external refers to a global metric that is not associated with any Kubernetes object. It allows autoscaling based on information coming from components running outside of cluster (for example length of queue in cloud messaging service, or QPS from loadbalancer running outside of cluster).
object	io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus object	object refers to a metric describing a single kubernetes object (for example, hits-per-second on an Ingress object).
pods	io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus object	pods refers to a metric describing each pod in the current scale target (for example, transactions-processed-per-second). The values will be averaged together before being compared to the target value.

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
type	String	type is the type of metric source. It will be one of "ContainerResource", "External", "Object", "Pods" or "Resource", each corresponds to a matching field in the object. Note: "ContainerResource" type is available on when the feature-gate HPAContainerMetrics is enabled

Table 5-861 io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus

Parameter	Type	Description
container	String	Container is the name of the container in the pods of the scaling target
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-862 io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric

Parameter	Type	Description
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-863 io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
describedObject	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	DescribedObject specifies the descriptions of a object,such as kind,name apiVersion
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-864 io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference

Parameter	Type	Description
apiVersion	String	API version of the referent
kind	String	Kind of the referent; More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent; More info: http://kubernetes.io/docs/user-guide/identifiers#names

Table 5-865 io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-866 io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier

Parameter	Type	Description
name	String	name is the name of the given metric
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	selector is the string-encoded form of a standard kubernetes label selector for the given metric When set, it is passed as an additional parameter to the metrics server for more specific metrics scoping. When unset, just the metricName will be used to gather metrics.

Table 5-867 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-868 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-869 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-870 io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus

Parameter	Type	Description
averageUtilization	Integer	currentAverageUtilization is the current value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods.
averageValue	String	averageValue is the current value of the average of the metric across all relevant pods (as a quantity)

Parameter	Type	Description
value	String	value is the current value of the metric (as a quantity).

Status code: 201

Table 5-871 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	metadata is the standard object metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec object	spec is the specification for the behaviour of the autoscaler. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status .
status	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus object	status is the current information about the autoscaler.

Table 5-872 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-873 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-874 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerSpec

Parameter	Type	Description
behavior	io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior object	behavior configures the scaling behavior of the target in both Up and Down directions (scaleUp and scaleDown fields respectively). If not set, the default HPAScalingRules for scale up and scale down are used.
maxReplicas	Integer	maxReplicas is the upper limit for the number of replicas to which the autoscaler can scale up. It cannot be less than minReplicas.
metrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec objects	metrics contains the specifications for which to use to calculate the desired replica count (the maximum replica count across all metrics will be used). The desired replica count is calculated multiplying the ratio between the target value and the current value by the current number of pods. Ergo, metrics used must decrease as the pod count is increased, and vice-versa. See the individual metric source types for more information about how each type of metric must respond. If not set, the default metric will be set to 80% average CPU utilization.
minReplicas	Integer	minReplicas is the lower limit for the number of replicas to which the autoscaler can scale down. It defaults to 1 pod. minReplicas is allowed to be 0 if the alpha feature gate HPAScaleToZero is enabled and at least one Object or External metric is configured. Scaling is active as long as at least one metric value is available.

Parameter	Type	Description
scaleTargetRef	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	scaleTargetRef points to the target resource to scale, and is used to the pods for which metrics should be collected, as well as to actually change the replica count.

Table 5-875 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerBehavior

Parameter	Type	Description
scaleDown	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleDown is scaling policy for scaling Down. If not set, the default value is to allow to scale down to minReplicas pods, with a 300 second stabilization window (i.e., the highest recommendation for the last 300sec is used).
scaleUp	io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules object	scaleUp is scaling policy for scaling Up. If not set, the default value is the higher of: • increase no more than 4 pods per 60 seconds • double the number of pods per 60 seconds No stabilization is used.

Table 5-876 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingRules

Parameter	Type	Description
policies	Array of io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy objects	policies is a list of potential scaling policies which can be used during scaling. At least one policy must be specified, otherwise the HPAScalingRules will be discarded as invalid
selectPolicy	String	selectPolicy is used to specify which policy should be used. If not set, the default value Max is used.

Parameter	Type	Description
stabilizationWindowSeconds	Integer	StabilizationWindowSeconds is the number of seconds for which past recommendations should be considered while scaling up or scaling down. StabilizationWindowSeconds must be greater than or equal to zero and less than or equal to 3600 (one hour). If not set, use the default values: - For scale up: 0 (i.e. no stabilization is done). - For scale down: 300 (i.e. the stabilization window is 300 seconds long).

Table 5-877 io.cci.api.pkg.apis.versioned.cci.v2.HPAScalingPolicy

Parameter	Type	Description
periodSeconds	Integer	PeriodSeconds specifies the window of time for which the policy should hold true. PeriodSeconds must be greater than zero and less than or equal to 1800 (30 min).
type	String	Type is used to specify the scaling policy.
value	Integer	Value contains the amount of change which is permitted by the policy. It must be greater than zero

Table 5-878 io.cci.api.pkg.apis.versioned.cci.v2.MetricSpec

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.

Parameter	Type	Description
type	String	type is the type of metric source. CCI only support type "Resource" now.

Table 5-879 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricSource

Parameter	Type	Description
name	String	name is the name of the resource in question.
target	io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget object	target specifies the target value for the given metric

Table 5-880 io.cci.api.pkg.apis.versioned.cci.v2.MetricTarget

Parameter	Type	Description
averageUtilization	Integer	averageUtilization is the target value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods. Currently only valid for Resource metric source type
averageValue	String	averageValue is the target value of the average of the metric across all relevant pods (as a quantity)
type	String	type represents whether the metric type is Utilization, Value, or AverageValue
value	String	value is the target value of the metric (as a quantity).

Table 5-881 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition objects	conditions is the set of conditions required for this autoscaler to scale its target, and indicates whether or not those conditions are met.
currentMetrics	Array of io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus objects	currentMetrics is the last read state of the metrics used by this autoscaler.
currentReplicas	Integer	currentReplicas is current number of replicas of pods managed by this autoscaler, as last seen by the autoscaler.
desiredReplicas	Integer	desiredReplicas is the desired number of replicas of pods managed by this autoscaler, as last calculated by the autoscaler.
lastScaleTime	String	lastScaleTime is the last time the HorizontalPodAutoscaler scaled the number of pods, used by the autoscaler to control how often the number of pods is changed.
observedGeneration	Long	observedGeneration is the most recent generation observed by this autoscaler.

Table 5-882 io.cci.api.pkg.apis.versioned.cci.v2.HorizontalPodAutoscalerCondition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another
message	String	message is a human-readable explanation containing details about the transition

Parameter	Type	Description
reason	String	reason is the reason for the condition's last transition.
status	String	status is the status of the condition (True, False, Unknown)
type	String	type describes the current condition

Table 5-883 io.cci.api.pkg.apis.versioned.cci.v2.MetricStatus

Parameter	Type	Description
containerResource	io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus object	container resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing a single container in each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
external	io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus object	external refers to a global metric that is not associated with any Kubernetes object. It allows autoscaling based on information coming from components running outside of cluster (for example length of queue in cloud messaging service, or QPS from loadbalancer running outside of cluster).
object	io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus object	object refers to a metric describing a single kubernetes object (for example, hits-per-second on an Ingress object).
pods	io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus object	pods refers to a metric describing each pod in the current scale target (for example, transactions-processed-per-second). The values will be averaged together before being compared to the target value.

Parameter	Type	Description
resource	io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus object	resource refers to a resource metric (such as those specified in requests and limits) known to Kubernetes describing each pod in the current scale target (e.g. CPU or memory). Such metrics are built in to Kubernetes, and have special scaling options on top of those available to normal per-pod metrics using the "pods" source.
type	String	type is the type of metric source. It will be one of "ContainerResource", "External", "Object", "Pods" or "Resource", each corresponds to a matching field in the object. Note: "ContainerResource" type is available on when the feature-gate HPAContainerMetrics is enabled

Table 5-884 io.cci.api.pkg.apis.versioned.cci.v2.ContainerResourceMetricStatus

Parameter	Type	Description
container	String	Container is the name of the container in the pods of the scaling target
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-885 io.cci.api.pkg.apis.versioned.cci.v2.ExternalMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric

Parameter	Type	Description
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-886 io.cci.api.pkg.apis.versioned.cci.v2.ObjectMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
describedObject	io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference object	DescribedObject specifies the descriptions of a object,such as kind,name apiVersion
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-887 io.cci.api.pkg.apis.versioned.cci.v2.CrossVersionObjectReference

Parameter	Type	Description
apiVersion	String	API version of the referent
kind	String	Kind of the referent; More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent; More info: http://kubernetes.io/docs/user-guide/identifiers#names

Table 5-888 io.cci.api.pkg.apis.versioned.cci.v2.PodsMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
metric	io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier object	metric identifies the target metric by name and selector

Table 5-889 io.cci.api.pkg.apis.versioned.cci.v2.MetricIdentifier

Parameter	Type	Description
name	String	name is the name of the given metric
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	selector is the string-encoded form of a standard kubernetes label selector for the given metric When set, it is passed as an additional parameter to the metrics server for more specific metrics scoping. When unset, just the metricName will be used to gather metrics.

Table 5-890 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-891 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-892 io.cci.api.pkg.apis.versioned.cci.v2.ResourceMetricStatus

Parameter	Type	Description
current	io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus object	current contains the current value for the given metric
name	String	Name is the name of the resource in question.

Table 5-893 io.cci.api.pkg.apis.versioned.cci.v2.MetricValueStatus

Parameter	Type	Description
averageUtilization	Integer	currentAverageUtilization is the current value of the average of the resource metric across all relevant pods, represented as a percentage of the requested value of the resource for the pods.
averageValue	String	averageValue is the current value of the average of the metric across all relevant pods (as a quantity)

Parameter	Type	Description
value	String	value is the current value of the metric (as a quantity).

Example Requests

```
{
  "apiVersion": "cci/v2",
  "kind": "HorizontalPodAutoscaler",
  "metadata": {
    "annotations": {
      "tenant.cci.io/tenant-id": "08a2c8ef8d80d4152ff8c001d0281c03"
    },
    "creationTimestamp": "2025-03-15T04:59:47Z",
    "name": "test-hpa",
    "namespace": "auto-test-converged-namespace",
    "resourceVersion": "35689767",
    "uid": "53a01c80-e967-4353-aa4b-7d616da394cf"
  },
  "spec": {
    "maxReplicas": 15,
    "metrics": [ {
      "resource": {
        "name": "memory",
        "target": {
          "averageUtilization": 50,
          "type": "Utilization"
        }
      }
    } ],
    "type": "Resource"
  },
  "minReplicas": 1,
  "scaleTargetRef": {
    "apiVersion": "cci/v2",
    "kind": "Deployment",
    "name": "test"
  }
},
{
  "status": {
    "conditions": [ {
      "lastTransitionTime": "2025-03-15T05:00:02Z",
      "message": "recommended size matches current size",
      "reason": "ReadyForNewScale",
      "status": "True",
      "type": "AbleToScale"
    }, {
      "lastTransitionTime": "2025-03-15T05:00:02Z",
      "message": "the HPA was able to successfully calculate a replica count from\\memory resource utilization (percentage of request)",
      "reason": "ValidMetricFound",
      "status": "True",
      "type": "ScalingActive"
    }, {
      "lastTransitionTime": "2025-03-15T05:05:02Z",
      "message": "the desired replica count is less than the minimum replica count",
      "reason": "TooFewReplicas",
      "status": "True",
      "type": "ScalingLimited"
    } ],
    "currentMetrics": [ {
      "resource": {
        "current": {
          "averageUtilization": 0,
          "averageValue": "1482752"
        }
      }
    } ],
  }
},
```

```
    "name" : "memory"
  },
  "type" : "Resource"
} ],
"currentReplicas" : 1,
"desiredReplicas" : 1
}
}
```

Example Responses

Status code: 200

OK

```
{
  "apiVersion" : "cci/v2",
  "kind" : "HorizontalPodAutoscaler",
  "metadata" : {
    "annotations" : {
      "tenant.cci.io/tenant-id" : "08a2c8ef8d80d4152ff8c001d0281c03"
    },
    "creationTimestamp" : "2025-03-15T04:59:47Z",
    "name" : "test-hpa",
    "namespace" : "auto-test-converged-namespaces",
    "resourceVersion" : "35690027",
    "uid" : "53a01c80-e967-4353-aa4b-7d616da394cf"
  },
  "spec" : {
    "maxReplicas" : 15,
    "metrics" : [ {
      "resource" : {
        "name" : "memory",
        "target" : {
          "averageUtilization" : 50,
          "type" : "Utilization"
        }
      }
    } ],
    "type" : "Resource"
  },
  "minReplicas" : 1,
  "scaleTargetRef" : {
    "apiVersion" : "cci/v2",
    "kind" : "Deployment",
    "name" : "test"
  }
},
"status" : {
  "conditions" : [ {
    "lastTransitionTime" : "2025-03-15T05:00:02Z",
    "message" : "recommended size matches current size",
    "reason" : "ReadyForNewScale",
    "status" : "True",
    "type" : "AbleToScale"
  }, {
    "lastTransitionTime" : "2025-03-15T05:00:02Z",
    "message" : "the HPA was able to successfully calculate a replica count\rfrom memory resource utilization (percentage of request)",
    "reason" : "ValidMetricFound",
    "status" : "True",
    "type" : "ScalingActive"
  }, {
    "lastTransitionTime" : "2025-03-15T05:05:02Z",
    "message" : "the desired replica count is less than the minimum replica\rcount",
    "reason" : "TooFewReplicas",
    "status" : "True",
    "type" : "ScalingLimited"
  } ],
  "currentMetrics" : [ {
```

```
"resource" : {
  "current" : {
    "averageUtilization" : 0,
    "averageValue" : "1482752"
  },
  "name" : "memory"
},
"type" : "Resource"
}],
"currentReplicas" : 1,
"desiredReplicas" : 1
}
```

Status Codes

Status Code	Description
200	OK
201	Created
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.6 Deployment

5.6.1 Querying Deployments in a Namespace

Function

This API is used to query the details about all Deployments in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces/{namespace}/deployments

Table 5-894 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-895 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-896 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.Deployment objects	Items is the list of Deployments.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata.

Table 5-897 io.cci.api.pkg.apis.versioned.cci.v2.Deployment

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec object	Specification of the desired behavior of the Deployment.
status	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus object	Most recently observed status of the Deployment.

Table 5-898 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec

Parameter	Type	Description
replicas	Integer	Number of desired pods. This is a pointer to distinguish between explicit zero and not specified. Defaults to 1.
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Label selector for pods. Existing ReplicaSets whose pods are selected by this will be the ones affected by this deployment. It must match the pod template's labels.
strategy	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy object	The deployment strategy to use to replace existing pods with new ones.
template	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template describes the pods that will be created.

Table 5-899 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy

Parameter	Type	Description
rollingUpdate	io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment object	Rolling update config params. Present only if DeploymentStrategyType = RollingUpdate.
type	String	Type of deployment. Can be "Recreate" or "RollingUpdate". Default is RollingUpdate. Possible enum values: • <i>"Recreate"</i> Kill all existing pods before creating new ones. • <i>"RollingUpdate"</i> Replace the old ReplicaSets by new one using rolling update i.e gradually scale down the old ReplicaSets and scale up the new one.

Table 5-900 io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment

Parameter	Type	Description
maxSurge	String	The maximum number of pods that can be scheduled above the desired number of pods. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). This can not be 0 if MaxUnavailable is 0. Absolute number is calculated from percentage by rounding up. Defaults to 25%. Example: when this is set to 30%, the new ReplicaSet can be scaled up immediately when the rolling update starts, such that the total number of old and new pods do not exceed 130% of desired pods. Once old pods have been killed, new ReplicaSet can be scaled up further, ensuring that total number of pods running at any time during the update is at most 130% of desired pods.

Parameter	Type	Description
maxUnavailable	String	The maximum number of pods that can be unavailable during the update. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). Absolute number is calculated from percentage by rounding down. This can not be 0 if MaxSurge is 0. Defaults to 25%. Example: when this is set to 30%, the old ReplicaSet can be scaled down to 70% of desired pods immediately when the rolling update starts. Once new pods are ready, old ReplicaSet can be scaled down further, followed by scaling up the new ReplicaSet, ensuring that the total number of pods available at all times during the update is at least 70% of desired pods.

Table 5-901 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-902 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations

Parameter	Type	Description
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-903 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-904 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extraEphemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-905 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-906 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-907 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-908 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-909 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-910 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-911 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-912 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-913 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-914 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-915 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-916 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-917 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-918 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-919 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-920 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-921 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-922 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-923 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-924 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-925 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-926 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-927 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-928 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-929 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-930 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-931 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-932 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-933 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-934 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-935 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-936 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-937 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-938 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-939 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-940 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-941 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-942 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-943 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-944 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-945 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-946 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-947 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-948 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-949 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-950 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-951 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-952 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-953 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus

Parameter	Type	Description
availableReplicas	Integer	Total number of available pods (ready for at least minReadySeconds) targeted by this deployment.
collisionCount	Integer	Count of hash collisions for the Deployment. The Deployment controller uses this field as a collision avoidance mechanism when it needs to create the name for the newest ReplicaSet.
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition objects	Represents the latest available observations of a deployment's current state.
observedGeneration	Long	The generation observed by the deployment controller.
readyReplicas	Integer	readyReplicas is the number of pods targeted by this Deployment with a Ready Condition.

Parameter	Type	Description
replicas	Integer	Total number of non-terminated pods targeted by this deployment (their labels match the selector).
unavailableReplicas	Integer	Total number of unavailable pods targeted by this deployment. This is the total number of pods that are still required for the deployment to have 100% available capacity. They may either be pods that are running but not yet available or pods that still have not been created.
updatedReplicas	Integer	Total number of non-terminated pods targeted by this deployment that have the desired template spec.

Table 5-954 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition

Parameter	Type	Description
lastTransitionTime	String	Last time the condition transitioned from one status to another.
lastUpdateTime	String	The last time this condition was updated.
message	String	A human readable message indicating details about the transition.
reason	String	The reason for the condition's last transition.
status	String	Status of the condition, one of True, False, Unknown.
type	String	Type of deployment condition.

Table 5-955 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.

Parameter	Type	Description
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "v1",
  "items": [ {
    "apiVersion": "cci/v2",
    "kind": "Deployment",
    "metadata": {
      "annotations": {
        "deployment.kubernetes.io/revision": "1",
        "tenant.cci.io/tenant-id": "08a2c8ef8d80d4152ff8c001d0281c03"
      },
      "creationTimestamp": "2025-03-15T03:21:21Z",
      "generation": 1,
      "name": "test",
      "namespace": "auto-test-converged-namespace",
      "resourceVersion": "35683083",
      "uid": "8dec57b8-f29c-4f2e-8c29-748026a24dca"
    },
    "spec": {
      "progressDeadlineSeconds": 600,
      "replicas": 1,
      "selector": {
        "matchLabels": {
          "app": "deploy-example"
        }
      },
      "strategy": {
        "rollingUpdate": {
          "maxSurge": "100%",
          "maxUnavailable": 0
        },
        "type": "RollingUpdate"
      }
    }
  }
]
```

```
,
"template" : {
  "metadata" : {
    "annotations" : {
      "deployment.cci.io/pod-template-uid" : "f6281275-3b14-4d74-8d84-92ce980ee8d1"
    },
    "creationTimestamp" : null,
    "labels" : {
      "app" : "deploy-example",
      "cci.io/origin-template-hash" : "65c85b6cb5"
    }
  },
  "spec" : {
    "affinity" : {
      "podAntiAffinity" : {
        "preferredDuringSchedulingIgnoredDuringExecution" : [ {
          "podAffinityTerm" : {
            "labelSelector" : {
              "matchExpressions" : [ {
                "key" : "app",
                "operator" : "In",
                "values" : [ "deploy-example" ]
              } ],
              "matchLabels" : {
                "cci.io/origin-template-hash" : "65c85b6cb5"
              }
            },
            "topologyKey" : "topology.kubernetes.io/zone"
          }
        ]
      },
      "weight" : 100
    }
  },
  "containers" : [ {
    "image" : "library/nginx:stable-alpine-perl",
    "name" : "deploy-example",
    "resources" : {
      "limits" : {
        "cpu" : "250m",
        "memory" : "256Mi"
      },
      "requests" : {
        "cpu" : "250m",
        "memory" : "256Mi"
      }
    },
    "terminationMessagePath" : "/dev/termination-log",
    "terminationMessagePolicy" : "File"
  } ],
  "dnsPolicy" : "Default",
  "imagePullSecrets" : [ {
    "name" : "imagepull-secret"
  } ],
  "restartPolicy" : "Always",
  "schedulerName" : "default-scheduler",
  "securityContext" : { },
  "terminationGracePeriodSeconds" : 30
}
},
"status" : {
  "availableReplicas" : 1,
  "conditions" : [ {
    "lastTransitionTime" : "2025-03-15T03:21:26Z",
    "lastUpdateTime" : "2025-03-15T03:21:26Z",
    "message" : "Deployment has minimum availability.",
    "reason" : "MinimumReplicasAvailable",
    "status" : "True",
    "type" : "Available"
  } ]
}
```

```
{
  "lastTransitionTime" : "2025-03-15T03:21:21Z",
  "lastUpdateTime" : "2025-03-15T03:21:26Z",
  "message" : "ReplicaSet \"test-5d87758858\" has successfully progressed.",
  "reason" : "NewReplicaSetAvailable",
  "status" : "True",
  "type" : "Progressing"
}, {
  "observedGeneration" : 1,
  "readyReplicas" : 1,
  "replicas" : 1,
  "updatedReplicas" : 1
}
}, {
  "kind" : "List",
  "metadata" : {
    "resourceVersion" : ""
  }
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.6.2 Creating a Deployment

Function

This API is used to create a Deployment.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

POST /apis/cci/v2/namespaces/{namespace}/deployments

Table 5-956 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-957 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-958 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	No	io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMetadata object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	No	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec object	Specification of the desired behavior of the Deployment.

Table 5-959 io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels

Parameter	Mandatory	Type	Description
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces

Table 5-960 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec

Parameter	Mandatory	Type	Description
replicas	No	Integer	Number of desired pods. This is a pointer to distinguish between explicit zero and not specified. Defaults to 1.

Parameter	Mandatory	Type	Description
selector	Yes	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Label selector for pods. Existing ReplicaSets whose pods are selected by this will be the ones affected by this deployment. It must match the pod template's labels.
strategy	No	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy object	The deployment strategy to use to replace existing pods with new ones.
template	Yes	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template describes the pods that will be created.

Table 5-961 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy

Parameter	Mandatory	Type	Description
rollingUpdate	No	io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment object	Rolling update config params. Present only if DeploymentStrategyType = RollingUpdate.
type	No	String	Type of deployment. Can be "Recreate" or "RollingUpdate". Default is RollingUpdate. Possible enum values: • <i>"Recreate"</i> Kill all existing pods before creating new ones. • <i>"RollingUpdate"</i> Replace the old ReplicaSets by new one using rolling update i.e gradually scale down the old ReplicaSets and scale up the new one.

Table 5-962 io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment

Parameter	Mandatory	Type	Description
maxSurge	No	String	The maximum number of pods that can be scheduled above the desired number of pods. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). This can not be 0 if MaxUnavailable is 0. Absolute number is calculated from percentage by rounding up. Defaults to 25%. Example: when this is set to 30%, the new ReplicaSet can be scaled up immediately when the rolling update starts, such that the total number of old and new pods do not exceed 130% of desired pods. Once old pods have been killed, new ReplicaSet can be scaled up further, ensuring that total number of pods running at any time during the update is at most 130% of desired pods.
maxUnavailable	No	String	The maximum number of pods that can be unavailable during the update. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). Absolute number is calculated from percentage by rounding down. This can not be 0 if MaxSurge is 0. Defaults to 25%. Example: when this is set to 30%, the old ReplicaSet can be scaled down to 70% of desired pods immediately when the rolling update starts. Once new pods are ready, old ReplicaSet can be scaled down further, followed by scaling up the new ReplicaSet, ensuring that the total number of pods available at all times during the update is at least 70% of desired pods.

Table 5-963 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Mandatory	Type	Description
metadata	No	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	No	io.cci.api.pkg.apis.versioned.cci.v2.PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-964 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	No	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
deletionGracePeriodSeconds	No	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Mandatory	Type	Description
deletionTimestamp	No	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
finalizers	No	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Mandatory	Type	Description
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	No	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels

Parameter	Mandatory	Type	Description
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	No	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.

Parameter	Mandatory	Type	Description
resourceVersion	No	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	No	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.
uid	No	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-965 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Mandatory	Type	Description
apiVersion	Yes	String	API version of the referent.

Parameter	Mandatory	Type	Description
blockOwnerDeletion	No	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	No	Boolean	If true, this reference points to the managing controller.
kind	Yes	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	Yes	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	Yes	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-966 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Mandatory	Type	Description
activeDeadlineSeconds	No	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	No	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Yes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	No	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.

Parameter	Mandatory	Type	Description
dnsPolicy	No	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	No	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.
hostAliases	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	No	String	Specifies the hostname of the Pod. If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Mandatory	Type	Description
imagePullSecrets	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod
initContainers	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/

Parameter	Mandatory	Type	Description
restartPolicy	No	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>
setHostnameAsFQDN	No	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	No	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.

Parameter	Mandatory	Type	Description
terminationGracePeriodSeconds	No	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.
volumes	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-967 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Mandatory	Type	Description
nodeAffinity	No	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	No	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-968 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Mandatory	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	No	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-969 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Mandatory	Type	Description
nodeSelectorTerms	Yes	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-970 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Mandatory	Type	Description
matchExpressions	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-971 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Mandatory	Type	Description
key	Yes	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	Yes	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	No	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-972 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Mandatory	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.

Parameter	Mandatory	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-973 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Mandatory	Type	Description
podAffinityTerm	Yes	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Yes	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-974 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Mandatory	Type	Description
labelSelector	No	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	No	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	Yes	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-975 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Mandatory	Type	Description
matchExpressions	No	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Parameter	Mandatory	Type	Description
matchLabels	No	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-976 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Mandatory	Type	Description
key	Yes	String	key is the label key that the selector applies to.
operator	Yes	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	No	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-977 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Mandatory	Type	Description
nameservers	No	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	No	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-978 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Mandatory	Type	Description
name	Yes	String	Name is this DNS resolver option's name. Required.

Parameter	Mandatory	Type	Description
value	No	String	Value is this DNS resolver option's value.

Table 5-979 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Mandatory	Type	Description
sizeInGiB	No	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-980 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Mandatory	Type	Description
hostnames	No	Array of strings	Hostnames for the above IP address.
ip	Yes	String	IP address of the host file entry.

Table 5-981 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Mandatory	Type	Description
name	No	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-982 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Mandatory	Type	Description
args	No	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Mandatory	Type	Description
command	No	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.

Parameter	Mandatory	Type	Description
envFrom	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.
image	No	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	No	io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	No	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	No	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
resources	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Mandatory	Type	Description
startupProbe	No	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	No	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	No	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Mandatory	Type	Description
terminationMessagePolicy	No	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	No	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.

Parameter	Mandatory	Type	Description
workingDir	No	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-983 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	No	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".

Parameter	Mandatory	Type	Description
valueFrom	No	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-984 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Mandatory	Type	Description
configMapKeyRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.
fieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-985 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Mandatory	Type	Description
key	Yes	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	No	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-986 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Mandatory	Type	Description
key	Yes	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	No	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the Secret or its key must be defined

Table 5-987 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Mandatory	Type	Description
configMapRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	No	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-988 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the ConfigMap must be defined

Table 5-989 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the Secret must be defined

Table 5-990 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Mandatory	Type	Description
postStart	No	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Parameter	Mandatory	Type	Description
preStop	No	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-991 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Mandatory	Type	Description
exec	No	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	No	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-992 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Mandatory	Type	Description
containerPort	Yes	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	No	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	No	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-993 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Mandatory	Type	Description
limits	No	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Mandatory	Type	Description
requests	No	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-994 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Mandatory	Type	Description
exec	No	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	No	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	No	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	No	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	No	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.

Parameter	Mandatory	Type	Description
successThreshold	No	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	No	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.
timeoutSeconds	No	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-995 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Mandatory	Type	Description
command	No	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-996 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Mandatory	Type	Description
host	No	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	No	String	Path to access on the HTTP server.
port	Yes	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	No	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-997 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Mandatory	Type	Description
name	Yes	String	The header field name
value	No	String	The header field value

Table 5-998 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Mandatory	Type	Description
host	No	String	Optional: Host name to connect to, defaults to the pod IP.
port	Yes	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-999 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Mandatory	Type	Description
extendPathMode	No	String	Extend the volume path by appending the pod metadata to the path according to specified pattern, which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	Yes	String	Path within the container at which the volume should be mounted.
name	Yes	String	This must match the Name of a Volume.
readOnly	No	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	No	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.

Parameter	Mandatory	Type	Description
subPathExpr	No	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-1000 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Mandatory	Type	Description
configMap	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	No	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	No	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	Yes	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Mandatory	Type	Description
persistentVolumeClaim	No	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	No	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1001 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1002 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-1003 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Mandatory	Type	Description
medium	No	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

Parameter	Mandatory	Type	Description
sizeLimit	No	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-1004 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolume-Source

Parameter	Mandatory	Type	Description
claimName	Yes	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
readOnly	No	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-1005 io.cci.api.pkg.apis.versioned.cci.v2.ProjectVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-1006 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Mandatory	Type	Description
configMap	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	No	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Mandatory	Type	Description
secret	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-1007 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1008 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-1009 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Mandatory	Type	Description
fieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	No	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	Yes	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1010 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Mandatory	Type	Description
apiVersion	No	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	Yes	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-1011 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Mandatory	Type	Description
containerName	No	String	Container name: required for volumes, optional for env vars
divisor	No	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	Yes	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1012 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-1013 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	No	Boolean	optional field specify whether the Secret or its keys must be defined

Parameter	Mandatory	Type	Description
secretName	Yes	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1014 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Mandatory	Type	Description
key	Yes	String	key is the key to project.
mode	No	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	Yes	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Response Parameters

Status code: 200

Table 5-1015 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec object	Specification of the desired behavior of the Deployment.
status	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus object	Most recently observed status of the Deployment.

Table 5-1016 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec

Parameter	Type	Description
replicas	Integer	Number of desired pods. This is a pointer to distinguish between explicit zero and not specified. Defaults to 1.

Parameter	Type	Description
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Label selector for pods. Existing ReplicaSets whose pods are selected by this will be the ones affected by this deployment. It must match the pod template's labels.
strategy	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy object	The deployment strategy to use to replace existing pods with new ones.
template	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template describes the pods that will be created.

Table 5-1017 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy

Parameter	Type	Description
rollingUpdate	io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment object	Rolling update config params. Present only if DeploymentStrategyType = RollingUpdate.
type	String	Type of deployment. Can be "Recreate" or "RollingUpdate". Default is RollingUpdate. Possible enum values: • <i>"Recreate"</i> Kill all existing pods before creating new ones. • <i>"RollingUpdate"</i> Replace the old ReplicaSets by new one using rolling update i.e gradually scale down the old ReplicaSets and scale up the new one.

Table 5-1018 io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment

Parameter	Type	Description
maxSurge	String	The maximum number of pods that can be scheduled above the desired number of pods. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). This can not be 0 if MaxUnavailable is 0. Absolute number is calculated from percentage by rounding up. Defaults to 25%. Example: when this is set to 30%, the new ReplicaSet can be scaled up immediately when the rolling update starts, such that the total number of old and new pods do not exceed 130% of desired pods. Once old pods have been killed, new ReplicaSet can be scaled up further, ensuring that total number of pods running at any time during the update is at most 130% of desired pods.
maxUnavailable	String	The maximum number of pods that can be unavailable during the update. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). Absolute number is calculated from percentage by rounding down. This can not be 0 if MaxSurge is 0. Defaults to 25%. Example: when this is set to 30%, the old ReplicaSet can be scaled down to 70% of desired pods immediately when the rolling update starts. Once new pods are ready, old ReplicaSet can be scaled down further, followed by scaling up the new ReplicaSet, ensuring that the total number of pods available at all times during the update is at least 70% of desired pods.

Table 5-1019 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
spec	io.cci.api.pkg.apis. .versioned.cci.v2. PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1020 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1021 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1022 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extraEphemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-1023 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-1024 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-1025 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-1026 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-1027 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-1028 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-1029 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-1030 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-1031 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1032 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1033 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-1034 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-1035 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-1036 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-1037 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-1038 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis .versioned.cci.v2. Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis .versioned.cci.v2. ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-1039 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-1040 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-1041 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-1042 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-1043 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-1044 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-1045 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-1046 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-1047 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-1048 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-1049 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String >	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1050 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-1051 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-1052 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-1053 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-1054 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-1055 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-1056 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1057 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1058 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-1059 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-1060 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-1061 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-1062 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-1063 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1064 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-1065 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1066 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-1067 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1068 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-1069 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1070 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-1071 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus

Parameter	Type	Description
availableReplicas	Integer	Total number of available pods (ready for at least minReadySeconds) targeted by this deployment.
collisionCount	Integer	Count of hash collisions for the Deployment. The Deployment controller uses this field as a collision avoidance mechanism when it needs to create the name for the newest ReplicaSet.
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition objects	Represents the latest available observations of a deployment's current state.
observedGeneration	Long	The generation observed by the deployment controller.
readyReplicas	Integer	readyReplicas is the number of pods targeted by this Deployment with a Ready Condition.

Parameter	Type	Description
replicas	Integer	Total number of non-terminated pods targeted by this deployment (their labels match the selector).
unavailableReplicas	Integer	Total number of unavailable pods targeted by this deployment. This is the total number of pods that are still required for the deployment to have 100% available capacity. They may either be pods that are running but not yet available or pods that still have not been created.
updatedReplicas	Integer	Total number of non-terminated pods targeted by this deployment that have the desired template spec.

Table 5-1072 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition

Parameter	Type	Description
lastTransitionTime	String	Last time the condition transitioned from one status to another.
lastUpdateTime	String	The last time this condition was updated.
message	String	A human readable message indicating details about the transition.
reason	String	The reason for the condition's last transition.
status	String	Status of the condition, one of True, False, Unknown.
type	String	Type of deployment condition.

Status code: 201

Table 5-1073 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec object	Specification of the desired behavior of the Deployment.
status	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus object	Most recently observed status of the Deployment.

Table 5-1074 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec

Parameter	Type	Description
replicas	Integer	Number of desired pods. This is a pointer to distinguish between explicit zero and not specified. Defaults to 1.

Parameter	Type	Description
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Label selector for pods. Existing ReplicaSets whose pods are selected by this will be the ones affected by this deployment. It must match the pod template's labels.
strategy	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy object	The deployment strategy to use to replace existing pods with new ones.
template	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template describes the pods that will be created.

Table 5-1075 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy

Parameter	Type	Description
rollingUpdate	io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment object	Rolling update config params. Present only if DeploymentStrategyType = RollingUpdate.
type	String	Type of deployment. Can be "Recreate" or "RollingUpdate". Default is RollingUpdate. Possible enum values: • <i>"Recreate"</i> Kill all existing pods before creating new ones. • <i>"RollingUpdate"</i> Replace the old ReplicaSets by new one using rolling update i.e gradually scale down the old ReplicaSets and scale up the new one.

Table 5-1076 io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment

Parameter	Type	Description
maxSurge	String	The maximum number of pods that can be scheduled above the desired number of pods. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). This can not be 0 if MaxUnavailable is 0. Absolute number is calculated from percentage by rounding up. Defaults to 25%. Example: when this is set to 30%, the new ReplicaSet can be scaled up immediately when the rolling update starts, such that the total number of old and new pods do not exceed 130% of desired pods. Once old pods have been killed, new ReplicaSet can be scaled up further, ensuring that total number of pods running at any time during the update is at most 130% of desired pods.
maxUnavailable	String	The maximum number of pods that can be unavailable during the update. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). Absolute number is calculated from percentage by rounding down. This can not be 0 if MaxSurge is 0. Defaults to 25%. Example: when this is set to 30%, the old ReplicaSet can be scaled down to 70% of desired pods immediately when the rolling update starts. Once new pods are ready, old ReplicaSet can be scaled down further, followed by scaling up the new ReplicaSet, ensuring that the total number of pods available at all times during the update is at least 70% of desired pods.

Table 5-1077 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
spec	io.cci.api.pkg.apis. .versioned.cci.v2. PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1078 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1079 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1080 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extraEphemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-1081 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-1082 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-1083 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-1084 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-1085 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-1086 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-1087 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-1088 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-1089 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1090 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1091 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-1092 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-1093 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-1094 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-1095 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-1096 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-1097 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-1098 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-1099 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-1100 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-1101 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-1102 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-1103 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-1104 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-1105 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-1106 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-1107 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1108 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-1109 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-1110 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-1111 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-1112 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-1113 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-1114 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1115 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1116 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-1117 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-1118 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-1119 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-1120 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-1121 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1122 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-1123 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1124 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-1125 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1126 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-1127 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1128 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-1129 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus

Parameter	Type	Description
availableReplicas	Integer	Total number of available pods (ready for at least minReadySeconds) targeted by this deployment.
collisionCount	Integer	Count of hash collisions for the Deployment. The Deployment controller uses this field as a collision avoidance mechanism when it needs to create the name for the newest ReplicaSet.
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition objects	Represents the latest available observations of a deployment's current state.
observedGeneration	Long	The generation observed by the deployment controller.
readyReplicas	Integer	readyReplicas is the number of pods targeted by this Deployment with a Ready Condition.

Parameter	Type	Description
replicas	Integer	Total number of non-terminated pods targeted by this deployment (their labels match the selector).
unavailableReplicas	Integer	Total number of unavailable pods targeted by this deployment. This is the total number of pods that are still required for the deployment to have 100% available capacity. They may either be pods that are running but not yet available or pods that still have not been created.
updatedReplicas	Integer	Total number of non-terminated pods targeted by this deployment that have the desired template spec.

Table 5-1130 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition

Parameter	Type	Description
lastTransitionTime	String	Last time the condition transitioned from one status to another.
lastUpdateTime	String	The last time this condition was updated.
message	String	A human readable message indicating details about the transition.
reason	String	The reason for the condition's last transition.
status	String	Status of the condition, one of True, False, Unknown.
type	String	Type of deployment condition.

Status code: 202

Table 5-1131 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec object	Specification of the desired behavior of the Deployment.
status	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus object	Most recently observed status of the Deployment.

Table 5-1132 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec

Parameter	Type	Description
replicas	Integer	Number of desired pods. This is a pointer to distinguish between explicit zero and not specified. Defaults to 1.

Parameter	Type	Description
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Label selector for pods. Existing ReplicaSets whose pods are selected by this will be the ones affected by this deployment. It must match the pod template's labels.
strategy	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy object	The deployment strategy to use to replace existing pods with new ones.
template	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template describes the pods that will be created.

Table 5-1133 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy

Parameter	Type	Description
rollingUpdate	io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment object	Rolling update config params. Present only if DeploymentStrategyType = RollingUpdate.
type	String	Type of deployment. Can be "Recreate" or "RollingUpdate". Default is RollingUpdate. Possible enum values: • <i>"Recreate"</i> Kill all existing pods before creating new ones. • <i>"RollingUpdate"</i> Replace the old ReplicaSets by new one using rolling update i.e gradually scale down the old ReplicaSets and scale up the new one.

Table 5-1134 io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment

Parameter	Type	Description
maxSurge	String	The maximum number of pods that can be scheduled above the desired number of pods. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). This can not be 0 if MaxUnavailable is 0. Absolute number is calculated from percentage by rounding up. Defaults to 25%. Example: when this is set to 30%, the new ReplicaSet can be scaled up immediately when the rolling update starts, such that the total number of old and new pods do not exceed 130% of desired pods. Once old pods have been killed, new ReplicaSet can be scaled up further, ensuring that total number of pods running at any time during the update is at most 130% of desired pods.
maxUnavailable	String	The maximum number of pods that can be unavailable during the update. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). Absolute number is calculated from percentage by rounding down. This can not be 0 if MaxSurge is 0. Defaults to 25%. Example: when this is set to 30%, the old ReplicaSet can be scaled down to 70% of desired pods immediately when the rolling update starts. Once new pods are ready, old ReplicaSet can be scaled down further, followed by scaling up the new ReplicaSet, ensuring that the total number of pods available at all times during the update is at least 70% of desired pods.

Table 5-1135 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
spec	io.cci.api.pkg.apis. .versioned.cci.v2. PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1136 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1137 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1138 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-1139 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-1140 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-1141 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-1142 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-1143 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-1144 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-1145 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-1146 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-1147 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1148 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1149 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-1150 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-1151 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-1152 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-1153 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-1154 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis .versioned.cci.v2. Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis .versioned.cci.v2. ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-1155 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-1156 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-1157 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-1158 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-1159 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-1160 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-1161 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-1162 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-1163 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-1164 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-1165 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1166 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-1167 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-1168 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-1169 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-1170 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-1171 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-1172 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1173 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1174 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-1175 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-1176 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-1177 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-1178 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-1179 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1180 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-1181 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1182 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-1183 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1184 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-1185 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1186 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-1187 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus

Parameter	Type	Description
availableReplicas	Integer	Total number of available pods (ready for at least minReadySeconds) targeted by this deployment.
collisionCount	Integer	Count of hash collisions for the Deployment. The Deployment controller uses this field as a collision avoidance mechanism when it needs to create the name for the newest ReplicaSet.
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition objects	Represents the latest available observations of a deployment's current state.
observedGeneration	Long	The generation observed by the deployment controller.
readyReplicas	Integer	readyReplicas is the number of pods targeted by this Deployment with a Ready Condition.

Parameter	Type	Description
replicas	Integer	Total number of non-terminated pods targeted by this deployment (their labels match the selector).
unavailableReplicas	Integer	Total number of unavailable pods targeted by this deployment. This is the total number of pods that are still required for the deployment to have 100% available capacity. They may either be pods that are running but not yet available or pods that still have not been created.
updatedReplicas	Integer	Total number of non-terminated pods targeted by this deployment that have the desired template spec.

Table 5-1188 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition

Parameter	Type	Description
lastTransitionTime	String	Last time the condition transitioned from one status to another.
lastUpdateTime	String	The last time this condition was updated.
message	String	A human readable message indicating details about the transition.
reason	String	The reason for the condition's last transition.
status	String	Status of the condition, one of True, False, Unknown.
type	String	Type of deployment condition.

Example Requests

```
{
  "apiVersion" : "cci/v2",
  "kind" : "Deployment",
  "metadata" : {
    "name" : "test"
  },
  "spec" : {
    "progressDeadlineSeconds" : 600,
    "replicas" : 1,
    "selector" : {
      "matchLabels" : {
```

```
    "app" : "deploy-example"
  },
  "strategy" : {
    "rollingUpdate" : {
      "maxSurge" : "100%",
      "maxUnavailable" : 0
    },
    "type" : "RollingUpdate"
  },
  "template" : {
    "metadata" : {
      "labels" : {
        "app" : "deploy-example"
      }
    },
    "spec" : {
      "affinity" : {
        "podAntiAffinity" : {
          "preferredDuringSchedulingIgnoredDuringExecution" : [ {
            "podAffinityTerm" : {
              "labelSelector" : {
                "matchExpressions" : [ {
                  "key" : "app",
                  "operator" : "In",
                  "values" : [ "deploy-example" ]
                } ]
              },
              "topologyKey" : "topology.kubernetes.io/zone"
            }
          ]
        },
        "weight" : 100
      }
    },
    "containers" : [ {
      "image" : "library/nginx:stable-alpine-perl",
      "name" : "deploy-example",
      "resources" : {
        "limits" : {
          "cpu" : "250m",
          "memory" : "256Mi"
        },
        "requests" : {
          "cpu" : "250m",
          "memory" : "256Mi"
        }
      },
      "terminationMessagePath" : "/dev/termination-log",
      "terminationMessagePolicy" : "File"
    } ],
    "dnsPolicy" : "Default",
    "imagePullSecrets" : [ {
      "name" : "imagepull-secret"
    } ],
    "restartPolicy" : "Always",
    "securityContext" : { },
    "terminationGracePeriodSeconds" : 30
  }
}
```

Example Responses

Status code: 201

Created


```
{
  "apiVersion" : "cci/v2",
  "kind" : "Deployment",
  "metadata" : {
    "annotations" : {
      "tenant.cci.io/tenant-id" : "08a2c8ef8d80d4152ff8c001d0281c03"
    },
    "creationTimestamp" : "2025-03-15T03:21:21Z",
    "generation" : 1,
    "name" : "test",
    "namespace" : "auto-test-converged-namespaces",
    "resourceVersion" : "35683068",
    "uid" : "8dec57b8-f29c-4f2e-8c29-748026a24dca"
  },
  "spec" : {
    "progressDeadlineSeconds" : 600,
    "replicas" : 1,
    "selector" : {
      "matchLabels" : {
        "app" : "deploy-example"
      }
    },
    "strategy" : {
      "rollingUpdate" : {
        "maxSurge" : "100%",
        "maxUnavailable" : 0
      },
      "type" : "RollingUpdate"
    },
    "template" : {
      "metadata" : {
        "annotations" : {
          "deployment.cci.io/pod-template-uid" : "f6281275-3b14-4d74-8d84-92ce980ee8d1"
        },
        "creationTimestamp" : null,
        "labels" : {
          "app" : "deploy-example",
          "cci.io/origin-template-hash" : "65c85b6cb5"
        }
      },
      "spec" : {
        "affinity" : {
          "podAntiAffinity" : {
            "preferredDuringSchedulingIgnoredDuringExecution" : [ {
              "podAffinityTerm" : {
                "labelSelector" : {
                  "matchExpressions" : [ {
                    "key" : "app",
                    "operator" : "In",
                    "values" : [ "deploy-example" ]
                  } ],
                  "matchLabels" : {
                    "cci.io/origin-template-hash" : "65c85b6cb5"
                  }
                }
              }
            ],
            "topologyKey" : "topology.kubernetes.io/zone"
          },
          "weight" : 100
        }
      }
    },
    "containers" : [ {
      "image" : "library/nginx:stable-alpine-perl",
      "name" : "deploy-example",
      "resources" : {
        "limits" : {
          "cpu" : "250m",
          "memory" : "256Mi"
        }
      }
    } ]
  }
}
```

```
    "requests" : {  
      "cpu" : "250m",  
      "memory" : "256Mi"  
    },  
    "terminationMessagePath" : "/dev/termination-log",  
    "terminationMessagePolicy" : "File"  
  },  
  "dnsPolicy" : "Default",  
  "imagePullSecrets" : [ {  
    "name" : "imagepull-secret"  
  } ],  
  "restartPolicy" : "Always",  
  "schedulerName" : "default-scheduler",  
  "securityContext" : { },  
  "terminationGracePeriodSeconds" : 30  
},  
"status" : { }
```

Status Codes

Status Code	Description
200	OK
201	Created
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	AlreadyExists
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.6.3 Deleting a Deployment

Function

This API is used to delete a Deployment in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

DELETE /apis/cci/v2/namespaces/{namespace}/deployments/{name}

Table 5-1189 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Deployment
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-1190 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Response Parameters

Status code: 200

Table 5-1191 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
code	Integer	Suggested HTTP return code for this status, 0 if not set.
details	io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails object	Extended data associated with the reason. Each reason may define its own extended details. This field is optional and the data returned is not guaranteed to conform to any schema except that defined by the reason type.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
message	String	A human-readable description of the status of this operation.
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Parameter	Type	Description
reason	String	A machine-readable description of why this operation is in the "Failure" status. If this value is empty there is no information available. A Reason clarifies an HTTP status code but does not override it.
status	String	Status of the operation. One of: "Success" or "Failure". More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1192 io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails

Parameter	Type	Description
causes	Array of io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause objects	The Causes array includes more details associated with the StatusReason failure. Not all StatusReasons may provide detailed causes.
group	String	The group attribute of the resource associated with the status StatusReason.
kind	String	The kind attribute of the resource associated with the status StatusReason. On some operations may differ from the requested resource Kind. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	The name attribute of the resource associated with the status StatusReason (when there is a single name which can be described).

Parameter	Type	Description
retryAfterSeconds	Integer	If specified, the time in seconds before the operation should be retried. Some errors may indicate the client must take an alternate action for those errors this field may indicate how long to wait before taking the alternate action.
uid	String	UID of the resource. (when there is a single resource which can be described). More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1193 io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause

Parameter	Type	Description
field	String	The field of the resource that has caused this error, as named by its JSON serialization. May include dot and postfix notation for nested attributes. Arrays are zero-indexed. Fields may appear more than once in an array of causes due to fields having multiple errors. Optional. Examples: "name" - the field "name" on the current resource "items[0].name" - the field "name" on the first array entry in "items"
message	String	A human-readable description of the cause of the error. This field may be presented as-is to a reader.
reason	String	A machine-readable description of the cause of the error. If this value is empty there is no information available.

Table 5-1194 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.

Parameter	Type	Description
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Status code: 202**Table 5-1195** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
code	Integer	Suggested HTTP return code for this status, 0 if not set.
details	io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails object	Extended data associated with the reason. Each reason may define its own extended details. This field is optional and the data returned is not guaranteed to conform to any schema except that defined by the reason type.

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
message	String	A human-readable description of the status of this operation.
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
reason	String	A machine-readable description of why this operation is in the "Failure" status. If this value is empty there is no information available. A Reason clarifies an HTTP status code but does not override it.
status	String	Status of the operation. One of: "Success" or "Failure". More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1196 io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails

Parameter	Type	Description
causes	Array of io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause objects	The Causes array includes more details associated with the StatusReason failure. Not all StatusReasons may provide detailed causes.
group	String	The group attribute of the resource associated with the status StatusReason.

Parameter	Type	Description
kind	String	The kind attribute of the resource associated with the status Reason. On some operations may differ from the requested resource Kind. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	The name attribute of the resource associated with the status Reason (when there is a single name which can be described).
retryAfterSeconds	Integer	If specified, the time in seconds before the operation should be retried. Some errors may indicate the client must take an alternate action for those errors this field may indicate how long to wait before taking the alternate action.
uid	String	UID of the resource. (when there is a single resource which can be described). More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1197 io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause

Parameter	Type	Description
field	String	The field of the resource that has caused this error, as named by its JSON serialization. May include dot and postfix notation for nested attributes. Arrays are zero-indexed. Fields may appear more than once in an array of causes due to fields having multiple errors. Optional. Examples: "name" - the field "name" on the current resource "items[0].name" - the field "name" on the first array entry in "items"

Parameter	Type	Description
message	String	A human-readable description of the cause of the error. This field may be presented as-is to a reader.
reason	String	A machine-readable description of the cause of the error. If this value is empty there is no information available.

Table 5-1198 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.

Parameter	Type	Description
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

- ```
{
 "apiVersion": "v1",
 "kind": "DeleteOptions",
 "propagationPolicy": "Foreground"
}
```
- ```
{
  "apiVersion": "v1",
  "kind": "DeleteOptions",

```

```
    "propagationPolicy" : "Background"
  }
```

Example Responses

Status code: 200

OK

```
{
  "apiVersion" : "cci/v2",
  "details" : {
    "group" : "cci",
    "kind" : "deployments",
    "name" : "test",
    "uid" : "8dec57b8-f29c-4f2e-8c29-748026a24dca"
  },
  "kind" : "Status",
  "metadata" : { },
  "status" : "Success"
}
```

Status Codes

Status Code	Description
200	OK
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.6.4 Querying a Deployment

Function

This API is used to query the details about a Deployment in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces/{namespace}/deployments/{name}

Table 5-1199 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Deployment
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-1200 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-1201 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec object	Specification of the desired behavior of the Deployment.
status	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus object	Most recently observed status of the Deployment.

Table 5-1202 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec

Parameter	Type	Description
replicas	Integer	Number of desired pods. This is a pointer to distinguish between explicit zero and not specified. Defaults to 1.

Parameter	Type	Description
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Label selector for pods. Existing ReplicaSets whose pods are selected by this will be the ones affected by this deployment. It must match the pod template's labels.
strategy	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy object	The deployment strategy to use to replace existing pods with new ones.
template	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template describes the pods that will be created.

Table 5-1203 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy

Parameter	Type	Description
rollingUpdate	io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment object	Rolling update config params. Present only if DeploymentStrategyType = RollingUpdate.
type	String	Type of deployment. Can be "Recreate" or "RollingUpdate". Default is RollingUpdate. Possible enum values: • <i>"Recreate"</i> Kill all existing pods before creating new ones. • <i>"RollingUpdate"</i> Replace the old ReplicaSets by new one using rolling update i.e gradually scale down the old ReplicaSets and scale up the new one.

Table 5-1204 io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment

Parameter	Type	Description
maxSurge	String	The maximum number of pods that can be scheduled above the desired number of pods. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). This can not be 0 if MaxUnavailable is 0. Absolute number is calculated from percentage by rounding up. Defaults to 25%. Example: when this is set to 30%, the new ReplicaSet can be scaled up immediately when the rolling update starts, such that the total number of old and new pods do not exceed 130% of desired pods. Once old pods have been killed, new ReplicaSet can be scaled up further, ensuring that total number of pods running at any time during the update is at most 130% of desired pods.
maxUnavailable	String	The maximum number of pods that can be unavailable during the update. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). Absolute number is calculated from percentage by rounding down. This can not be 0 if MaxSurge is 0. Defaults to 25%. Example: when this is set to 30%, the old ReplicaSet can be scaled down to 70% of desired pods immediately when the rolling update starts. Once new pods are ready, old ReplicaSet can be scaled down further, followed by scaling up the new ReplicaSet, ensuring that the total number of pods available at all times during the update is at least 70% of desired pods.

Table 5-1205 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
spec	io.cci.api.pkg.apis. .versioned.cci.v2. PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1206 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1207 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1208 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-1209 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-1210 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-1211 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-1212 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-1213 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-1214 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-1215 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-1216 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-1217 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1218 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1219 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-1220 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-1221 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-1222 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-1223 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-1224 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis .versioned.cci.v2. Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis .versioned.cci.v2. ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-1225 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-1226 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-1227 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-1228 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-1229 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-1230 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-1231 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-1232 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-1233 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-1234 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-1235 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String >	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1236 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-1237 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-1238 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-1239 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-1240 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-1241 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-1242 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1243 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1244 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-1245 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-1246 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-1247 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-1248 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-1249 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1250 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-1251 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1252 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-1253 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1254 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-1255 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1256 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-1257 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus

Parameter	Type	Description
availableReplicas	Integer	Total number of available pods (ready for at least minReadySeconds) targeted by this deployment.
collisionCount	Integer	Count of hash collisions for the Deployment. The Deployment controller uses this field as a collision avoidance mechanism when it needs to create the name for the newest ReplicaSet.
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition objects	Represents the latest available observations of a deployment's current state.
observedGeneration	Long	The generation observed by the deployment controller.
readyReplicas	Integer	readyReplicas is the number of pods targeted by this Deployment with a Ready Condition.

Parameter	Type	Description
replicas	Integer	Total number of non-terminated pods targeted by this deployment (their labels match the selector).
unavailableReplicas	Integer	Total number of unavailable pods targeted by this deployment. This is the total number of pods that are still required for the deployment to have 100% available capacity. They may either be pods that are running but not yet available or pods that still have not been created.
updatedReplicas	Integer	Total number of non-terminated pods targeted by this deployment that have the desired template spec.

Table 5-1258 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition

Parameter	Type	Description
lastTransitionTime	String	Last time the condition transitioned from one status to another.
lastUpdateTime	String	The last time this condition was updated.
message	String	A human readable message indicating details about the transition.
reason	String	The reason for the condition's last transition.
status	String	Status of the condition, one of True, False, Unknown.
type	String	Type of deployment condition.

Example Requests

None

Example Responses

Status code: 200

OK

```
{  
  "apiVersion" : "cci/v2",
```

```
"kind" : "Deployment",
"metadata" : {
  "annotations" : {
    "deployment.kubernetes.io/revision" : "1",
    "tenant.cci.io/tenant-id" : "08a2c8ef8d80d4152ff8c001d0281c03"
  },
  "creationTimestamp" : "2025-03-15T03:21:21Z",
  "generation" : 1,
  "name" : "test",
  "namespace" : "auto-test-converged-namespace",
  "resourceVersion" : "35683083",
  "uid" : "8dec57b8-f29c-4f2e-8c29-748026a24dca"
},
"spec" : {
  "progressDeadlineSeconds" : 600,
  "replicas" : 1,
  "selector" : {
    "matchLabels" : {
      "app" : "deploy-example"
    }
  },
  "strategy" : {
    "rollingUpdate" : {
      "maxSurge" : "100%",
      "maxUnavailable" : 0
    },
    "type" : "RollingUpdate"
  },
  "template" : {
    "metadata" : {
      "annotations" : {
        "deployment.cci.io/pod-template-uid" : "f6281275-3b14-4d74-8d84-92ce980ee8d1"
      },
      "creationTimestamp" : null,
      "labels" : {
        "app" : "deploy-example",
        "cci.io/origin-template-hash" : "65c85b6cb5"
      }
    },
    "spec" : {
      "affinity" : {
        "podAntiAffinity" : {
          "preferredDuringSchedulingIgnoredDuringExecution" : [ {
            "podAffinityTerm" : {
              "labelSelector" : {
                "matchExpressions" : [ {
                  "key" : "app",
                  "operator" : "In",
                  "values" : [ "deploy-example" ]
                }
              ],
              "matchLabels" : {
                "cci.io/origin-template-hash" : "65c85b6cb5"
              }
            }
          ]
        },
        "topologyKey" : "topology.kubernetes.io/zone"
      },
      "weight" : 100
    }
  },
  "containers" : [ {
    "image" : "library/nginx:stable-alpine-perl",
    "name" : "deploy-example",
    "resources" : {
      "limits" : {
        "cpu" : "250m",
        "memory" : "256Mi"
      },
      "requests" : {
```

```
        "cpu" : "250m",
        "memory" : "256Mi"
    },
    "terminationMessagePath" : "/dev/termination-log",
    "terminationMessagePolicy" : "File"
  },
  "dnsPolicy" : "Default",
  "imagePullSecrets" : [ {
    "name" : "imagepull-secret"
  } ],
  "restartPolicy" : "Always",
  "schedulerName" : "default-scheduler",
  "securityContext" : { },
  "terminationGracePeriodSeconds" : 30
}
},
"status" : {
  "availableReplicas" : 1,
  "conditions" : [ {
    "lastTransitionTime" : "2025-03-15T03:21:26Z",
    "lastUpdateTime" : "2025-03-15T03:21:26Z",
    "message" : "Deployment has minimum availability.",
    "reason" : "MinimumReplicasAvailable",
    "status" : "True",
    "type" : "Available"
  }, {
    "lastTransitionTime" : "2025-03-15T03:21:21Z",
    "lastUpdateTime" : "2025-03-15T03:21:26Z",
    "message" : "ReplicaSet \"test-5d87758858\" has successfully progressed.",
    "reason" : "NewReplicaSetAvailable",
    "status" : "True",
    "type" : "Progressing"
  } ],
  "observedGeneration" : 1,
  "readyReplicas" : 1,
  "replicas" : 1,
  "updatedReplicas" : 1
}
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType

Status Code	Description
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.6.5 Updating a Deployment

Function

This API is used to update a Deployment in a namespace.

The following fields can be updated:

- metadata.labels
- metadata.generateName
- metadata.annotations
- spec.template
- spec.replicas

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

PATCH /apis/cci/v2/namespaces/{namespace}/deployments/{name}

Table 5-1259 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Deployment

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-1260 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Currently, three types of patch request methods are supported. For details, see "Use a JSON merge patch to update a Deployment" (https://kubernetes.io/docs/tasks/manage-kubernetes-objects/update-api-object-kubectl-patch/). • JSON Patch. Content-Type: application/json-patch+json. • Merge Patch, Content-Type: application/merge-patch+json • Strategic Merge Patch. Content-Type: application/strategic-merge-patch+json As defined in RFC6902, JSON Patch contains a series of operations on the target JSON object. JSON Patch is also a JSON object. After receiving JSON Patch, the server applies the represented operations to the target JSON object. As defined in RFC 7386, Merge Patch contains some description of a JSON object. The JSON object is submitted to the server and merges with the current object of the server. This means to replace the list of the current resource object to form a new object. Strategic Merge Patch is used to add legal metadata to API objects and uses new metadata to determine which lists should be merged and which ones should not. The current metadata is used as the structure label.

Table 5-1261 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	No	io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMetadata object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	No	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec object	Specification of the desired behavior of the Deployment.

Table 5-1262 io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels

Parameter	Mandatory	Type	Description
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces

Table 5-1263 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec

Parameter	Mandatory	Type	Description
replicas	No	Integer	Number of desired pods. This is a pointer to distinguish between explicit zero and not specified. Defaults to 1.

Parameter	Mandatory	Type	Description
selector	Yes	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Label selector for pods. Existing ReplicaSets whose pods are selected by this will be the ones affected by this deployment. It must match the pod template's labels.
strategy	No	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy object	The deployment strategy to use to replace existing pods with new ones.
template	Yes	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template describes the pods that will be created.

Table 5-1264 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy

Parameter	Mandatory	Type	Description
rollingUpdate	No	io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment object	Rolling update config params. Present only if DeploymentStrategyType = RollingUpdate.
type	No	String	Type of deployment. Can be "Recreate" or "RollingUpdate". Default is RollingUpdate. Possible enum values: • <i>"Recreate"</i> Kill all existing pods before creating new ones. • <i>"RollingUpdate"</i> Replace the old ReplicaSets by new one using rolling update i.e gradually scale down the old ReplicaSets and scale up the new one.

Table 5-1265 io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment

Parameter	Mandatory	Type	Description
maxSurge	No	String	The maximum number of pods that can be scheduled above the desired number of pods. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). This can not be 0 if MaxUnavailable is 0. Absolute number is calculated from percentage by rounding up. Defaults to 25%. Example: when this is set to 30%, the new ReplicaSet can be scaled up immediately when the rolling update starts, such that the total number of old and new pods do not exceed 130% of desired pods. Once old pods have been killed, new ReplicaSet can be scaled up further, ensuring that total number of pods running at any time during the update is at most 130% of desired pods.
maxUnavailable	No	String	The maximum number of pods that can be unavailable during the update. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). Absolute number is calculated from percentage by rounding down. This can not be 0 if MaxSurge is 0. Defaults to 25%. Example: when this is set to 30%, the old ReplicaSet can be scaled down to 70% of desired pods immediately when the rolling update starts. Once new pods are ready, old ReplicaSet can be scaled down further, followed by scaling up the new ReplicaSet, ensuring that the total number of pods available at all times during the update is at least 70% of desired pods.

Table 5-1266 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Mandatory	Type	Description
metadata	No	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	No	io.cci.api.pkg.apis.versioned.cci.v2.PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1267 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	No	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
deletionGracePeriodSeconds	No	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Mandatory	Type	Description
deletionTimestamp	No	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
finalizers	No	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Mandatory	Type	Description
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	No	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels

Parameter	Mandatory	Type	Description
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	No	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.

Parameter	Mandatory	Type	Description
resourceVersion	No	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	No	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.
uid	No	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1268 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Mandatory	Type	Description
apiVersion	Yes	String	API version of the referent.

Parameter	Mandatory	Type	Description
blockOwnerDeletion	No	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	No	Boolean	If true, this reference points to the managing controller.
kind	Yes	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	Yes	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	Yes	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1269 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Mandatory	Type	Description
activeDeadlineSeconds	No	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	No	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Yes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	No	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.

Parameter	Mandatory	Type	Description
dnsPolicy	No	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	No	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.
hostAliases	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	No	String	Specifies the hostname of the Pod. If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Mandatory	Type	Description
imagePullSecrets	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod
initContainers	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/

Parameter	Mandatory	Type	Description
restartPolicy	No	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>
setHostnameAsFQDN	No	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	No	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.

Parameter	Mandatory	Type	Description
terminationGracePeriodSeconds	No	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.
volumes	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-1270 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Mandatory	Type	Description
nodeAffinity	No	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	No	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-1271 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Mandatory	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	No	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-1272 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Mandatory	Type	Description
nodeSelectorTerms	Yes	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-1273 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Mandatory	Type	Description
matchExpressions	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-1274 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Mandatory	Type	Description
key	Yes	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	Yes	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	No	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-1275 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Mandatory	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.

Parameter	Mandatory	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-1276 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Mandatory	Type	Description
podAffinityTerm	Yes	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Yes	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-1277 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Mandatory	Type	Description
labelSelector	No	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	No	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	Yes	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-1278 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Mandatory	Type	Description
matchExpressions	No	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Parameter	Mandatory	Type	Description
matchLabels	No	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1279 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Mandatory	Type	Description
key	Yes	String	key is the label key that the selector applies to.
operator	Yes	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	No	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1280 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Mandatory	Type	Description
nameservers	No	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	No	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-1281 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Mandatory	Type	Description
name	Yes	String	Name is this DNS resolver option's name. Required.

Parameter	Mandatory	Type	Description
value	No	String	Value is this DNS resolver option's value.

Table 5-1282 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Mandatory	Type	Description
sizeInGiB	No	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-1283 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Mandatory	Type	Description
hostnames	No	Array of strings	Hostnames for the above IP address.
ip	Yes	String	IP address of the host file entry.

Table 5-1284 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Mandatory	Type	Description
name	No	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-1285 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Mandatory	Type	Description
args	No	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Mandatory	Type	Description
command	No	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.

Parameter	Mandatory	Type	Description
envFrom	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.
image	No	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	No	io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	No	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	No	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
resources	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Mandatory	Type	Description
startupProbe	No	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	No	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	No	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Mandatory	Type	Description
terminationMessagePolicy	No	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	No	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.

Parameter	Mandatory	Type	Description
workingDir	No	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-1286 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	No	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".

Parameter	Mandatory	Type	Description
valueFrom	No	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-1287 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Mandatory	Type	Description
configMapKeyRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.
fieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-1288 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Mandatory	Type	Description
key	Yes	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	No	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-1289 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Mandatory	Type	Description
key	Yes	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	No	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the Secret or its key must be defined

Table 5-1290 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Mandatory	Type	Description
configMapRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	No	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-1291 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the ConfigMap must be defined

Table 5-1292 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the Secret must be defined

Table 5-1293 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Mandatory	Type	Description
postStart	No	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Parameter	Mandatory	Type	Description
preStop	No	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-1294 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Mandatory	Type	Description
exec	No	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	No	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-1295 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Mandatory	Type	Description
containerPort	Yes	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	No	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	No	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-1296 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Mandatory	Type	Description
limits	No	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Mandatory	Type	Description
requests	No	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1297 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Mandatory	Type	Description
exec	No	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	No	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	No	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	No	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	No	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.

Parameter	Mandatory	Type	Description
successThreshold	No	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	No	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.
timeoutSeconds	No	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-1298 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Mandatory	Type	Description
command	No	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-1299 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Mandatory	Type	Description
host	No	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	No	String	Path to access on the HTTP server.
port	Yes	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	No	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-1300 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Mandatory	Type	Description
name	Yes	String	The header field name
value	No	String	The header field value

Table 5-1301 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Mandatory	Type	Description
host	No	String	Optional: Host name to connect to, defaults to the pod IP.
port	Yes	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-1302 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Mandatory	Type	Description
extendPathMode	No	String	Extend the volume path by appending the pod metadata to the path according to specified pattern, which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	Yes	String	Path within the container at which the volume should be mounted.
name	Yes	String	This must match the Name of a Volume.
readOnly	No	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	No	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.

Parameter	Mandatory	Type	Description
subPathExpr	No	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-1303 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Mandatory	Type	Description
configMap	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	No	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	No	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	Yes	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Mandatory	Type	Description
persistentVolumeClaim	No	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	No	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1304 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1305 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-1306 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Mandatory	Type	Description
medium	No	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

Parameter	Mandatory	Type	Description
sizeLimit	No	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-1307 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolume-Source

Parameter	Mandatory	Type	Description
claimName	Yes	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolume-claims
readOnly	No	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-1308 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-1309 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Mandatory	Type	Description
configMap	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	No	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Mandatory	Type	Description
secret	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-1310 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1311 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-1312 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Mandatory	Type	Description
fieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	No	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	Yes	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1313 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Mandatory	Type	Description
apiVersion	No	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	Yes	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-1314 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Mandatory	Type	Description
containerName	No	String	Container name: required for volumes, optional for env vars
divisor	No	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	Yes	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1315 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-1316 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	No	Boolean	optional field specify whether the Secret or its keys must be defined

Parameter	Mandatory	Type	Description
secretName	Yes	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1317 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Mandatory	Type	Description
key	Yes	String	key is the key to project.
mode	No	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	Yes	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Response Parameters

Status code: 200

Table 5-1318 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec object	Specification of the desired behavior of the Deployment.
status	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus object	Most recently observed status of the Deployment.

Table 5-1319 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec

Parameter	Type	Description
replicas	Integer	Number of desired pods. This is a pointer to distinguish between explicit zero and not specified. Defaults to 1.

Parameter	Type	Description
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Label selector for pods. Existing ReplicaSets whose pods are selected by this will be the ones affected by this deployment. It must match the pod template's labels.
strategy	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy object	The deployment strategy to use to replace existing pods with new ones.
template	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template describes the pods that will be created.

Table 5-1320 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy

Parameter	Type	Description
rollingUpdate	io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment object	Rolling update config params. Present only if DeploymentStrategyType = RollingUpdate.
type	String	Type of deployment. Can be "Recreate" or "RollingUpdate". Default is RollingUpdate. Possible enum values: • <i>"Recreate"</i> Kill all existing pods before creating new ones. • <i>"RollingUpdate"</i> Replace the old ReplicaSets by new one using rolling update i.e gradually scale down the old ReplicaSets and scale up the new one.

Table 5-1321 io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment

Parameter	Type	Description
maxSurge	String	The maximum number of pods that can be scheduled above the desired number of pods. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). This can not be 0 if MaxUnavailable is 0. Absolute number is calculated from percentage by rounding up. Defaults to 25%. Example: when this is set to 30%, the new ReplicaSet can be scaled up immediately when the rolling update starts, such that the total number of old and new pods do not exceed 130% of desired pods. Once old pods have been killed, new ReplicaSet can be scaled up further, ensuring that total number of pods running at any time during the update is at most 130% of desired pods.
maxUnavailable	String	The maximum number of pods that can be unavailable during the update. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). Absolute number is calculated from percentage by rounding down. This can not be 0 if MaxSurge is 0. Defaults to 25%. Example: when this is set to 30%, the old ReplicaSet can be scaled down to 70% of desired pods immediately when the rolling update starts. Once new pods are ready, old ReplicaSet can be scaled down further, followed by scaling up the new ReplicaSet, ensuring that the total number of pods available at all times during the update is at least 70% of desired pods.

Table 5-1322 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
spec	io.cci.api.pkg.apis. .versioned.cci.v2. PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1323 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1324 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1325 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extraEphemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-1326 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-1327 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-1328 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-1329 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-1330 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-1331 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-1332 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-1333 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-1334 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1335 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1336 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-1337 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-1338 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-1339 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-1340 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-1341 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis .versioned.cci.v2. Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis .versioned.cci.v2. ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-1342 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-1343 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-1344 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-1345 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-1346 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-1347 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-1348 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-1349 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-1350 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-1351 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-1352 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String >	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1353 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-1354 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-1355 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-1356 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-1357 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-1358 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-1359 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1360 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1361 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-1362 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-1363 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-1364 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-1365 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-1366 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1367 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-1368 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1369 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-1370 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1371 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-1372 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1373 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-1374 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus

Parameter	Type	Description
availableReplicas	Integer	Total number of available pods (ready for at least minReadySeconds) targeted by this deployment.
collisionCount	Integer	Count of hash collisions for the Deployment. The Deployment controller uses this field as a collision avoidance mechanism when it needs to create the name for the newest ReplicaSet.
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition objects	Represents the latest available observations of a deployment's current state.
observedGeneration	Long	The generation observed by the deployment controller.
readyReplicas	Integer	readyReplicas is the number of pods targeted by this Deployment with a Ready Condition.

Parameter	Type	Description
replicas	Integer	Total number of non-terminated pods targeted by this deployment (their labels match the selector).
unavailableReplicas	Integer	Total number of unavailable pods targeted by this deployment. This is the total number of pods that are still required for the deployment to have 100% available capacity. They may either be pods that are running but not yet available or pods that still have not been created.
updatedReplicas	Integer	Total number of non-terminated pods targeted by this deployment that have the desired template spec.

Table 5-1375 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition

Parameter	Type	Description
lastTransitionTime	String	Last time the condition transitioned from one status to another.
lastUpdateTime	String	The last time this condition was updated.
message	String	A human readable message indicating details about the transition.
reason	String	The reason for the condition's last transition.
status	String	Status of the condition, one of True, False, Unknown.
type	String	Type of deployment condition.

Status code: 201

Table 5-1376 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec object	Specification of the desired behavior of the Deployment.
status	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus object	Most recently observed status of the Deployment.

Table 5-1377 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec

Parameter	Type	Description
replicas	Integer	Number of desired pods. This is a pointer to distinguish between explicit zero and not specified. Defaults to 1.

Parameter	Type	Description
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Label selector for pods. Existing ReplicaSets whose pods are selected by this will be the ones affected by this deployment. It must match the pod template's labels.
strategy	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy object	The deployment strategy to use to replace existing pods with new ones.
template	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template describes the pods that will be created.

Table 5-1378 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy

Parameter	Type	Description
rollingUpdate	io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment object	Rolling update config params. Present only if DeploymentStrategyType = RollingUpdate.
type	String	Type of deployment. Can be "Recreate" or "RollingUpdate". Default is RollingUpdate. Possible enum values: • <i>"Recreate"</i> Kill all existing pods before creating new ones. • <i>"RollingUpdate"</i> Replace the old ReplicaSets by new one using rolling update i.e gradually scale down the old ReplicaSets and scale up the new one.

Table 5-1379 io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment

Parameter	Type	Description
maxSurge	String	The maximum number of pods that can be scheduled above the desired number of pods. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). This can not be 0 if MaxUnavailable is 0. Absolute number is calculated from percentage by rounding up. Defaults to 25%. Example: when this is set to 30%, the new ReplicaSet can be scaled up immediately when the rolling update starts, such that the total number of old and new pods do not exceed 130% of desired pods. Once old pods have been killed, new ReplicaSet can be scaled up further, ensuring that total number of pods running at any time during the update is at most 130% of desired pods.
maxUnavailable	String	The maximum number of pods that can be unavailable during the update. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). Absolute number is calculated from percentage by rounding down. This can not be 0 if MaxSurge is 0. Defaults to 25%. Example: when this is set to 30%, the old ReplicaSet can be scaled down to 70% of desired pods immediately when the rolling update starts. Once new pods are ready, old ReplicaSet can be scaled down further, followed by scaling up the new ReplicaSet, ensuring that the total number of pods available at all times during the update is at least 70% of desired pods.

Table 5-1380 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
spec	io.cci.api.pkg.apis. .versioned.cci.v2. PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1381 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1382 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1383 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-1384 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-1385 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-1386 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-1387 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-1388 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-1389 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-1390 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-1391 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-1392 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1393 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1394 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-1395 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-1396 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-1397 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-1398 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-1399 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-1400 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-1401 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-1402 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-1403 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-1404 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-1405 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-1406 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-1407 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-1408 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-1409 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-1410 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1411 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-1412 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-1413 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-1414 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-1415 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-1416 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-1417 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1418 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1419 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-1420 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-1421 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-1422 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-1423 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-1424 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1425 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-1426 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1427 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-1428 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1429 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-1430 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1431 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-1432 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus

Parameter	Type	Description
availableReplicas	Integer	Total number of available pods (ready for at least minReadySeconds) targeted by this deployment.
collisionCount	Integer	Count of hash collisions for the Deployment. The Deployment controller uses this field as a collision avoidance mechanism when it needs to create the name for the newest ReplicaSet.
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition objects	Represents the latest available observations of a deployment's current state.
observedGeneration	Long	The generation observed by the deployment controller.
readyReplicas	Integer	readyReplicas is the number of pods targeted by this Deployment with a Ready Condition.

Parameter	Type	Description
replicas	Integer	Total number of non-terminated pods targeted by this deployment (their labels match the selector).
unavailableReplicas	Integer	Total number of unavailable pods targeted by this deployment. This is the total number of pods that are still required for the deployment to have 100% available capacity. They may either be pods that are running but not yet available or pods that still have not been created.
updatedReplicas	Integer	Total number of non-terminated pods targeted by this deployment that have the desired template spec.

Table 5-1433 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition

Parameter	Type	Description
lastTransitionTime	String	Last time the condition transitioned from one status to another.
lastUpdateTime	String	The last time this condition was updated.
message	String	A human readable message indicating details about the transition.
reason	String	The reason for the condition's last transition.
status	String	Status of the condition, one of True, False, Unknown.
type	String	Type of deployment condition.

Example Requests

Merge Patch, Content-Type: application/merge-patch+json

```
{
  "spec": {
    "replicas": 2
  }
}
```

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "cci/v2",
  "kind": "Deployment",
  "metadata": {
    "annotations": {
      "deployment.kubernetes.io/revision": "1",
      "tenant.cci.io/tenant-id": "08a2c8ef8d80d4152ff8c001d0281c03"
    },
    "creationTimestamp": "2025-03-15T03:21:21Z",
    "generation": 2,
    "name": "test",
    "namespace": "auto-test-converged-namespace",
    "resourceVersion": "35683786",
    "uid": "8dec57b8-f29c-4f2e-8c29-748026a24dca"
  },
  "spec": {
    "progressDeadlineSeconds": 600,
    "replicas": 2,
    "selector": {
      "matchLabels": {
        "app": "deploy-example"
      }
    },
    "strategy": {
      "rollingUpdate": {
        "maxSurge": "100%",
        "maxUnavailable": 0
      },
      "type": "RollingUpdate"
    },
    "template": {
      "metadata": {
        "annotations": {
          "deployment.cci.io/pod-template-uid": "f6281275-3b14-4d74-8d84-92ce980ee8d1"
        },
        "creationTimestamp": null,
        "labels": {
          "app": "deploy-example",
          "cci.io/origin-template-hash": "65c85b6cb5"
        }
      },
      "spec": {
        "affinity": {
          "podAntiAffinity": {
            "preferredDuringSchedulingIgnoredDuringExecution": [ {
              "podAffinityTerm": {
                "labelSelector": {
                  "matchExpressions": [ {
                    "key": "app",
                    "operator": "In",
                    "values": [ "deploy-example" ]
                  } ],
                  "matchLabels": {
                    "cci.io/origin-template-hash": "65c85b6cb5"
                  }
                },
                "topologyKey": "topology.kubernetes.io/zone"
              }
            ],
            "weight": 100
          }
        },
        "containers": [ {
```

```
    "image" : "library/nginx:stable-alpine-perl",
    "name" : "deploy-example",
    "resources" : {
      "limits" : {
        "cpu" : "250m",
        "memory" : "256Mi"
      },
      "requests" : {
        "cpu" : "250m",
        "memory" : "256Mi"
      }
    },
    "terminationMessagePath" : "/dev/termination-log",
    "terminationMessagePolicy" : "File"
  } ],
  "dnsPolicy" : "Default",
  "imagePullSecrets" : [ {
    "name" : "imagepull-secret"
  } ],
  "restartPolicy" : "Always",
  "schedulerName" : "default-scheduler",
  "securityContext" : { },
  "terminationGracePeriodSeconds" : 30
}
},
"status" : {
  "availableReplicas" : 1,
  "conditions" : [ {
    "lastTransitionTime" : "2025-03-15T03:21:26Z",
    "lastUpdateTime" : "2025-03-15T03:21:26Z",
    "message" : "Deployment has minimum availability.",
    "reason" : "MinimumReplicasAvailable",
    "status" : "True",
    "type" : "Available"
  }, {
    "lastTransitionTime" : "2025-03-15T03:21:21Z",
    "lastUpdateTime" : "2025-03-15T03:21:26Z",
    "message" : "ReplicaSet \"test-5d87758858\" has successfully progressed.",
    "reason" : "NewReplicaSetAvailable",
    "status" : "True",
    "type" : "Progressing"
  } ],
  "observedGeneration" : 1,
  "readyReplicas" : 1,
  "replicas" : 1,
  "updatedReplicas" : 1
}
}
```

Status Codes

Status Code	Description
200	OK
201	Created
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound

Status Code	Description
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.6.6 Replacing a Deployment

Function

This API is used to replace a Deployment in a namespace.

The following fields can be updated:

- metadata.labels
- metadata.generateName
- metadata.annotations
- spec.template
- spec.replicas

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

PUT /apis/ccl/v2/namespaces/{namespace}/deployments/{name}

Table 5-1434 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Deployment
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-1435 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-1436 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Mandatory	Type	Description
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	No	io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	No	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec object	Specification of the desired behavior of the Deployment.

Table 5-1437 io.k8s.apimachinery.pkg.apis.meta.v1.BaseObjectMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations

Parameter	Mandatory	Type	Description
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names#names

Parameter	Mandatory	Type	Description
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces

Table 5-1438 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec

Parameter	Mandatory	Type	Description
replicas	No	Integer	Number of desired pods. This is a pointer to distinguish between explicit zero and not specified. Defaults to 1.
selector	Yes	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Label selector for pods. Existing ReplicaSets whose pods are selected by this will be the ones affected by this deployment. It must match the pod template's labels.
strategy	No	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy object	The deployment strategy to use to replace existing pods with new ones.
template	Yes	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template describes the pods that will be created.

Table 5-1439 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy

Parameter	Mandatory	Type	Description
rollingUpdate	No	io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment object	Rolling update config params. Present only if DeploymentStrategyType = RollingUpdate.
type	No	String	Type of deployment. Can be "Recreate" or "RollingUpdate". Default is RollingUpdate. Possible enum values: • <i>"Recreate"</i> Kill all existing pods before creating new ones. • <i>"RollingUpdate"</i> Replace the old ReplicaSets by new one using rolling update i.e gradually scale down the old ReplicaSets and scale up the new one.

Table 5-1440 io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment

Parameter	Mandatory	Type	Description
maxSurge	No	String	The maximum number of pods that can be scheduled above the desired number of pods. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). This can not be 0 if MaxUnavailable is 0. Absolute number is calculated from percentage by rounding up. Defaults to 25%. Example: when this is set to 30%, the new ReplicaSet can be scaled up immediately when the rolling update starts, such that the total number of old and new pods do not exceed 130% of desired pods. Once old pods have been killed, new ReplicaSet can be scaled up further, ensuring that total number of pods running at any time during the update is at most 130% of desired pods.
maxUnavailable	No	String	The maximum number of pods that can be unavailable during the update. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). Absolute number is calculated from percentage by rounding down. This can not be 0 if MaxSurge is 0. Defaults to 25%. Example: when this is set to 30%, the old ReplicaSet can be scaled down to 70% of desired pods immediately when the rolling update starts. Once new pods are ready, old ReplicaSet can be scaled down further, followed by scaling up the new ReplicaSet, ensuring that the total number of pods available at all times during the update is at least 70% of desired pods.

Table 5-1441 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Mandatory	Type	Description
metadata	No	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	No	io.cci.api.pkg.apis.versioned.cci.v2.PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1442 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	No	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
deletionGracePeriodSeconds	No	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Mandatory	Type	Description
deletionTimestamp	No	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
finalizers	No	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Mandatory	Type	Description
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	No	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels

Parameter	Mandatory	Type	Description
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	No	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.

Parameter	Mandatory	Type	Description
resourceVersion	No	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	No	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.
uid	No	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1443 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Mandatory	Type	Description
apiVersion	Yes	String	API version of the referent.

Parameter	Mandatory	Type	Description
blockOwnerDeletion	No	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	No	Boolean	If true, this reference points to the managing controller.
kind	Yes	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	Yes	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	Yes	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1444 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Mandatory	Type	Description
activeDeadlineSeconds	No	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	No	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Yes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	No	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.

Parameter	Mandatory	Type	Description
dnsPolicy	No	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	No	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.
hostAliases	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	No	String	Specifies the hostname of the Pod. If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Mandatory	Type	Description
imagePullSecrets	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod
initContainers	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/

Parameter	Mandatory	Type	Description
restartPolicy	No	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>
setHostnameAsFQDN	No	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	No	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.

Parameter	Mandatory	Type	Description
terminationGracePeriodSeconds	No	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.
volumes	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-1445 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Mandatory	Type	Description
nodeAffinity	No	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	No	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-1446 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Mandatory	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	No	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-1447 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Mandatory	Type	Description
nodeSelectorTerms	Yes	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-1448 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Mandatory	Type	Description
matchExpressions	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-1449 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Mandatory	Type	Description
key	Yes	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	Yes	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	No	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-1450 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Mandatory	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringScheduling anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.

Parameter	Mandatory	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-1451 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Mandatory	Type	Description
podAffinityTerm	Yes	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Yes	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-1452 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Mandatory	Type	Description
labelSelector	No	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	No	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	Yes	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-1453 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Mandatory	Type	Description
matchExpressions	No	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.

Parameter	Mandatory	Type	Description
matchLabels	No	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1454 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Mandatory	Type	Description
key	Yes	String	key is the label key that the selector applies to.
operator	Yes	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	No	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1455 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Mandatory	Type	Description
nameservers	No	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	No	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-1456 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Mandatory	Type	Description
name	Yes	String	Name is this DNS resolver option's name. Required.

Parameter	Mandatory	Type	Description
value	No	String	Value is this DNS resolver option's value.

Table 5-1457 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Mandatory	Type	Description
sizeInGiB	No	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-1458 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Mandatory	Type	Description
hostnames	No	Array of strings	Hostnames for the above IP address.
ip	Yes	String	IP address of the host file entry.

Table 5-1459 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Mandatory	Type	Description
name	No	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-1460 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Mandatory	Type	Description
args	No	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$ (VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Mandatory	Type	Description
command	No	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.

Parameter	Mandatory	Type	Description
envFrom	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.
image	No	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	No	io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	No	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	No	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
resources	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Mandatory	Type	Description
startupProbe	No	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	No	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	No	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Mandatory	Type	Description
terminationMessagePolicy	No	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	No	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.

Parameter	Mandatory	Type	Description
workingDir	No	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-1461 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	No	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$(VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".

Parameter	Mandatory	Type	Description
valueFrom	No	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-1462 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Mandatory	Type	Description
configMapKeyRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.
fieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-1463 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Mandatory	Type	Description
key	Yes	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	No	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-1464 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Mandatory	Type	Description
key	Yes	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	No	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the Secret or its key must be defined

Table 5-1465 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Mandatory	Type	Description
configMapRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	No	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-1466 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the ConfigMap must be defined

Table 5-1467 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	Specify whether the Secret must be defined

Table 5-1468 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Mandatory	Type	Description
postStart	No	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Parameter	Mandatory	Type	Description
preStop	No	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-1469 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Mandatory	Type	Description
exec	No	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	No	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-1470 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Mandatory	Type	Description
containerPort	Yes	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	No	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	No	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-1471 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Mandatory	Type	Description
limits	No	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Mandatory	Type	Description
requests	No	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1472 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Mandatory	Type	Description
exec	No	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	No	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	No	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	No	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	No	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.

Parameter	Mandatory	Type	Description
successThreshold	No	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	No	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.
timeoutSeconds	No	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-1473 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Mandatory	Type	Description
command	No	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-1474 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Mandatory	Type	Description
host	No	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	No	String	Path to access on the HTTP server.
port	Yes	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.
scheme	No	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • "HTTP" means that the scheme used will be http:// • "HTTPS" means that the scheme used will be https://

Table 5-1475 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Mandatory	Type	Description
name	Yes	String	The header field name
value	No	String	The header field value

Table 5-1476 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Mandatory	Type	Description
host	No	String	Optional: Host name to connect to, defaults to the pod IP.
port	Yes	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-1477 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Mandatory	Type	Description
extendPathMode	No	String	Extend the volume path by appending the pod metadata to the path according to specified pattern, which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	Yes	String	Path within the container at which the volume should be mounted.
name	Yes	String	This must match the Name of a Volume.
readOnly	No	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	No	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.

Parameter	Mandatory	Type	Description
subPathExpr	No	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-1478 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Mandatory	Type	Description
configMap	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	No	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	No	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	Yes	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Mandatory	Type	Description
persistentVolumeClaim	No	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	No	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1479 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1480 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-1481 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Mandatory	Type	Description
medium	No	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir

Parameter	Mandatory	Type	Description
sizeLimit	No	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-1482 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolume-Source

Parameter	Mandatory	Type	Description
claimName	Yes	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolume-claims
readOnly	No	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-1483 io.cci.api.pkg.apis.versioned.cci.v2.ProjectVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-1484 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Mandatory	Type	Description
configMap	No	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	No	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Mandatory	Type	Description
secret	No	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-1485 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1486 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-1487 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Mandatory	Type	Description
fieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	No	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	Yes	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	No	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1488 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Mandatory	Type	Description
apiVersion	No	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	Yes	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-1489 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Mandatory	Type	Description
containerName	No	String	Container name: required for volumes, optional for env vars
divisor	No	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	Yes	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1490 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Mandatory	Type	Description
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	Yes	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	No	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-1491 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Mandatory	Type	Description
defaultMode	No	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	No	Boolean	optional field specify whether the Secret or its keys must be defined

Parameter	Mandatory	Type	Description
secretName	Yes	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1492 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Mandatory	Type	Description
key	Yes	String	key is the key to project.
mode	No	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	Yes	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Response Parameters

Status code: 200

Table 5-1493 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec object	Specification of the desired behavior of the Deployment.
status	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus object	Most recently observed status of the Deployment.

Table 5-1494 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec

Parameter	Type	Description
replicas	Integer	Number of desired pods. This is a pointer to distinguish between explicit zero and not specified. Defaults to 1.

Parameter	Type	Description
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Label selector for pods. Existing ReplicaSets whose pods are selected by this will be the ones affected by this deployment. It must match the pod template's labels.
strategy	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy object	The deployment strategy to use to replace existing pods with new ones.
template	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template describes the pods that will be created.

Table 5-1495 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy

Parameter	Type	Description
rollingUpdate	io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment object	Rolling update config params. Present only if DeploymentStrategyType = RollingUpdate.
type	String	Type of deployment. Can be "Recreate" or "RollingUpdate". Default is RollingUpdate. Possible enum values: • <i>"Recreate"</i> Kill all existing pods before creating new ones. • <i>"RollingUpdate"</i> Replace the old ReplicaSets by new one using rolling update i.e gradually scale down the old ReplicaSets and scale up the new one.

Table 5-1496 io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment

Parameter	Type	Description
maxSurge	String	The maximum number of pods that can be scheduled above the desired number of pods. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). This can not be 0 if MaxUnavailable is 0. Absolute number is calculated from percentage by rounding up. Defaults to 25%. Example: when this is set to 30%, the new ReplicaSet can be scaled up immediately when the rolling update starts, such that the total number of old and new pods do not exceed 130% of desired pods. Once old pods have been killed, new ReplicaSet can be scaled up further, ensuring that total number of pods running at any time during the update is at most 130% of desired pods.
maxUnavailable	String	The maximum number of pods that can be unavailable during the update. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). Absolute number is calculated from percentage by rounding down. This can not be 0 if MaxSurge is 0. Defaults to 25%. Example: when this is set to 30%, the old ReplicaSet can be scaled down to 70% of desired pods immediately when the rolling update starts. Once new pods are ready, old ReplicaSet can be scaled down further, followed by scaling up the new ReplicaSet, ensuring that the total number of pods available at all times during the update is at least 70% of desired pods.

Table 5-1497 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
spec	io.cci.api.pkg.apis. .versioned.cci.v2. PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1498 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1499 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1500 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-1501 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-1502 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-1503 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-1504 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-1505 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-1506 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-1507 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-1508 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-1509 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1510 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1511 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-1512 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-1513 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-1514 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-1515 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-1516 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-1517 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-1518 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-1519 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-1520 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-1521 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-1522 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-1523 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-1524 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-1525 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-1526 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-1527 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String >	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1528 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-1529 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-1530 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-1531 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-1532 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-1533 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-1534 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1535 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1536 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-1537 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-1538 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-1539 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-1540 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-1541 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1542 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-1543 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1544 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-1545 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1546 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-1547 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1548 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-1549 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus

Parameter	Type	Description
availableReplicas	Integer	Total number of available pods (ready for at least minReadySeconds) targeted by this deployment.
collisionCount	Integer	Count of hash collisions for the Deployment. The Deployment controller uses this field as a collision avoidance mechanism when it needs to create the name for the newest ReplicaSet.
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition objects	Represents the latest available observations of a deployment's current state.
observedGeneration	Long	The generation observed by the deployment controller.
readyReplicas	Integer	readyReplicas is the number of pods targeted by this Deployment with a Ready Condition.

Parameter	Type	Description
replicas	Integer	Total number of non-terminated pods targeted by this deployment (their labels match the selector).
unavailableReplicas	Integer	Total number of unavailable pods targeted by this deployment. This is the total number of pods that are still required for the deployment to have 100% available capacity. They may either be pods that are running but not yet available or pods that still have not been created.
updatedReplicas	Integer	Total number of non-terminated pods targeted by this deployment that have the desired template spec.

Table 5-1550 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition

Parameter	Type	Description
lastTransitionTime	String	Last time the condition transitioned from one status to another.
lastUpdateTime	String	The last time this condition was updated.
message	String	A human readable message indicating details about the transition.
reason	String	The reason for the condition's last transition.
status	String	Status of the condition, one of True, False, Unknown.
type	String	Type of deployment condition.

Status code: 201

Table 5-1551 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec object	Specification of the desired behavior of the Deployment.
status	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus object	Most recently observed status of the Deployment.

Table 5-1552 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentSpec

Parameter	Type	Description
replicas	Integer	Number of desired pods. This is a pointer to distinguish between explicit zero and not specified. Defaults to 1.

Parameter	Type	Description
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Label selector for pods. Existing ReplicaSets whose pods are selected by this will be the ones affected by this deployment. It must match the pod template's labels.
strategy	io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy object	The deployment strategy to use to replace existing pods with new ones.
template	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template describes the pods that will be created.

Table 5-1553 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStrategy

Parameter	Type	Description
rollingUpdate	io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment object	Rolling update config params. Present only if DeploymentStrategyType = RollingUpdate.
type	String	Type of deployment. Can be "Recreate" or "RollingUpdate". Default is RollingUpdate. Possible enum values: • <i>"Recreate"</i> Kill all existing pods before creating new ones. • <i>"RollingUpdate"</i> Replace the old ReplicaSets by new one using rolling update i.e gradually scale down the old ReplicaSets and scale up the new one.

Table 5-1554 io.cci.api.pkg.apis.versioned.cci.v2.RollingUpdateDeployment

Parameter	Type	Description
maxSurge	String	The maximum number of pods that can be scheduled above the desired number of pods. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). This can not be 0 if MaxUnavailable is 0. Absolute number is calculated from percentage by rounding up. Defaults to 25%. Example: when this is set to 30%, the new ReplicaSet can be scaled up immediately when the rolling update starts, such that the total number of old and new pods do not exceed 130% of desired pods. Once old pods have been killed, new ReplicaSet can be scaled up further, ensuring that total number of pods running at any time during the update is at most 130% of desired pods.
maxUnavailable	String	The maximum number of pods that can be unavailable during the update. Value can be an absolute number (ex: 5) or a percentage of desired pods (ex: 10%). Absolute number is calculated from percentage by rounding down. This can not be 0 if MaxSurge is 0. Defaults to 25%. Example: when this is set to 30%, the old ReplicaSet can be scaled down to 70% of desired pods immediately when the rolling update starts. Once new pods are ready, old ReplicaSet can be scaled down further, followed by scaling up the new ReplicaSet, ensuring that the total number of pods available at all times during the update is at least 70% of desired pods.

Table 5-1555 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
spec	io.cci.api.pkg.apis. .versioned.cci.v2. PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1556 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1557 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1558 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extra ephemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-1559 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-1560 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-1561 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-1562 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-1563 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-1564 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-1565 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-1566 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-1567 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1568 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1569 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-1570 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-1571 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-1572 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-1573 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-1574 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis .versioned.cci.v2. Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis .versioned.cci.v2. ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis .versioned.cci.v2. Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-1575 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-1576 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-1577 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-1578 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-1579 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-1580 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-1581 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-1582 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-1583 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-1584 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-1585 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String >	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1586 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-1587 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-1588 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-1589 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-1590 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-1591 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-1592 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1593 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1594 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-1595 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-1596 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-1597 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-1598 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-1599 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1600 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-1601 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1602 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-1603 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1604 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-1605 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1606 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-1607 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentStatus

Parameter	Type	Description
availableReplicas	Integer	Total number of available pods (ready for at least minReadySeconds) targeted by this deployment.
collisionCount	Integer	Count of hash collisions for the Deployment. The Deployment controller uses this field as a collision avoidance mechanism when it needs to create the name for the newest ReplicaSet.
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition objects	Represents the latest available observations of a deployment's current state.
observedGeneration	Long	The generation observed by the deployment controller.
readyReplicas	Integer	readyReplicas is the number of pods targeted by this Deployment with a Ready Condition.

Parameter	Type	Description
replicas	Integer	Total number of non-terminated pods targeted by this deployment (their labels match the selector).
unavailableReplicas	Integer	Total number of unavailable pods targeted by this deployment. This is the total number of pods that are still required for the deployment to have 100% available capacity. They may either be pods that are running but not yet available or pods that still have not been created.
updatedReplicas	Integer	Total number of non-terminated pods targeted by this deployment that have the desired template spec.

Table 5-1608 io.cci.api.pkg.apis.versioned.cci.v2.DeploymentCondition

Parameter	Type	Description
lastTransitionTime	String	Last time the condition transitioned from one status to another.
lastUpdateTime	String	The last time this condition was updated.
message	String	A human readable message indicating details about the transition.
reason	String	The reason for the condition's last transition.
status	String	Status of the condition, one of True, False, Unknown.
type	String	Type of deployment condition.

Example Requests

```
{
  "apiVersion" : "cci/v2",
  "kind" : "Deployment",
  "metadata" : {
    "annotations" : {
      "deployment.kubernetes.io/revision" : "1",
      "tenant.cci.io/tenant-id" : "08a2c8ef8d80d4152ff8c001d0281c03"
    },
    "creationTimestamp" : "2025-03-15T03:21:21Z",
    "generation" : 2,
    "name" : "test",
```

```
"namespace" : "auto-test-converged-namespace",
"resourceVersion" : "35683801",
"uid" : "8dec57b8-f29c-4f2e-8c29-748026a24dca"
},
"spec" : {
  "progressDeadlineSeconds" : 600,
  "replicas" : 3,
  "selector" : {
    "matchLabels" : {
      "app" : "deploy-example"
    }
  },
  "strategy" : {
    "rollingUpdate" : {
      "maxSurge" : "100%",
      "maxUnavailable" : 0
    },
    "type" : "RollingUpdate"
  },
  "template" : {
    "metadata" : {
      "annotations" : {
        "deployment.cci.io/pod-template-uid" : "f6281275-3b14-4d74-8d84-92ce980ee8d1"
      },
      "creationTimestamp" : null,
      "labels" : {
        "app" : "deploy-example",
        "cci.io/origin-template-hash" : "65c85b6cb5"
      }
    },
    "spec" : {
      "affinity" : {
        "podAntiAffinity" : {
          "preferredDuringSchedulingIgnoredDuringExecution" : [ {
            "podAffinityTerm" : {
              "labelSelector" : {
                "matchExpressions" : [ {
                  "key" : "app",
                  "operator" : "In",
                  "values" : [ "deploy-example" ]
                } ],
                "matchLabels" : {
                  "cci.io/origin-template-hash" : "65c85b6cb5"
                }
              },
              "topologyKey" : "topology.kubernetes.io/zone"
            }
          ]
        },
        "weight" : 100
      }
    }
  },
  "containers" : [ {
    "image" : "library/nginx:stable-alpine-perl",
    "name" : "deploy-example",
    "resources" : {
      "limits" : {
        "cpu" : "250m",
        "memory" : "256Mi"
      },
      "requests" : {
        "cpu" : "250m",
        "memory" : "256Mi"
      }
    },
    "terminationMessagePath" : "/dev/termination-log",
    "terminationMessagePolicy" : "File"
  } ],
  "dnsPolicy" : "Default",
  "imagePullSecrets" : [ {
```

```
    "name" : "imagepull-secret"
  } ],
  "restartPolicy" : "Always",
  "schedulerName" : "default-scheduler",
  "securityContext" : { },
  "terminationGracePeriodSeconds" : 30
}
},
"status" : {
  "availableReplicas" : 2,
  "conditions" : [ {
    "lastTransitionTime" : "2025-03-15T03:21:21Z",
    "lastUpdateTime" : "2025-03-15T03:21:26Z",
    "message" : "ReplicaSet \"test-5d87758858\" has successfully progressed.",
    "reason" : "NewReplicaSetAvailable",
    "status" : "True",
    "type" : "Progressing"
  }, {
    "lastTransitionTime" : "2025-03-15T03:32:32Z",
    "lastUpdateTime" : "2025-03-15T03:32:32Z",
    "message" : "Deployment has minimum availability.",
    "reason" : "MinimumReplicasAvailable",
    "status" : "True",
    "type" : "Available"
  } ],
  "observedGeneration" : 2,
  "readyReplicas" : 2,
  "replicas" : 2,
  "updatedReplicas" : 2
}
}
```

Example Responses

Status code: 200

OK

```
{
  "apiVersion" : "cci/v2",
  "kind" : "Deployment",
  "metadata" : {
    "annotations" : {
      "deployment.kubernetes.io/revision" : "1",
      "tenant.cci.io/tenant-id" : "08a2c8ef8d80d4152ff8c001d0281c03"
    },
    "creationTimestamp" : "2025-03-15T03:21:21Z",
    "generation" : 3,
    "name" : "test",
    "namespace" : "auto-test-converged-namespace",
    "resourceVersion" : "35684309",
    "uid" : "8dec57b8-f29c-4f2e-8c29-748026a24dca"
  },
  "spec" : {
    "progressDeadlineSeconds" : 600,
    "replicas" : 3,
    "selector" : {
      "matchLabels" : {
        "app" : "deploy-example"
      }
    },
    "strategy" : {
      "rollingUpdate" : {
        "maxSurge" : "100%",
        "maxUnavailable" : 0
      },
      "type" : "RollingUpdate"
    }
  },
}
```

```
"template" : {
  "metadata" : {
    "annotations" : {
      "deployment.cci.io/pod-template-uid" : "f6281275-3b14-4d74-8d84-92ce980ee8d1"
    },
    "creationTimestamp" : null,
    "labels" : {
      "app" : "deploy-example",
      "cci.io/origin-template-hash" : "65c85b6cb5"
    }
  },
  "spec" : {
    "affinity" : {
      "podAntiAffinity" : {
        "preferredDuringSchedulingIgnoredDuringExecution" : [ {
          "podAffinityTerm" : {
            "labelSelector" : {
              "matchExpressions" : [ {
                "key" : "app",
                "operator" : "In",
                "values" : [ "deploy-example" ]
              } ],
              "matchLabels" : {
                "cci.io/origin-template-hash" : "65c85b6cb5"
              }
            },
            "topologyKey" : "topology.kubernetes.io/zone"
          },
          "weight" : 100
        } ]
      },
      "containers" : [ {
        "image" : "library/nginx:stable-alpine-perl",
        "name" : "deploy-example",
        "resources" : {
          "limits" : {
            "cpu" : "250m",
            "memory" : "256Mi"
          },
          "requests" : {
            "cpu" : "250m",
            "memory" : "256Mi"
          }
        },
        "terminationMessagePath" : "/dev/termination-log",
        "terminationMessagePolicy" : "File"
      } ],
      "dnsPolicy" : "Default",
      "imagePullSecrets" : [ {
        "name" : "imagepull-secret"
      } ],
      "restartPolicy" : "Always",
      "schedulerName" : "default-scheduler",
      "securityContext" : { },
      "terminationGracePeriodSeconds" : 30
    }
  },
  "status" : {
    "availableReplicas" : 2,
    "conditions" : [ {
      "lastTransitionTime" : "2025-03-15T03:21:21Z",
      "lastUpdateTime" : "2025-03-15T03:21:26Z",
      "message" : "ReplicaSet \"test-5d87758858\" has successfully progressed.",
      "reason" : "NewReplicaSetAvailable",
      "status" : "True",
      "type" : "Progressing"
    } ],
    {
```

```
"lastTransitionTime" : "2025-03-15T03:32:32Z",
"lastUpdateTime" : "2025-03-15T03:32:32Z",
"message" : "Deployment has minimum availability.",
"reason" : "MinimumReplicasAvailable",
"status" : "True",
"type" : "Available"
}],
"observedGeneration" : 2,
"readyReplicas" : 2,
"replicas" : 2,
"updatedReplicas" : 2
}
}
```

Status Codes

Status Code	Description
200	OK
201	Created
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.7 Service

5.7.1 Querying Services in a Namespace

Function

This API is used to query the details about all Services in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces/{namespace}/services

Table 5-1609 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-1610 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-1611 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.Service objects	List of services
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Table 5-1612 io.cci.api.pkg.apis.versioned.cci.v2.Service

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec object	Spec defines the behavior of a service. https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus object	Most recently observed status of the service. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1613 io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Service Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations

Parameter	Type	Description
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1614 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1615 io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec

Parameter	Type	Description
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ServicePort objects	The list of ports that are exposed by this service. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies
selector	Map<String,String>	Route service traffic to pods with label keys and values matching this selector. If empty or not present, the service is assumed to have an external process managing its endpoints, which Kubernetes will not modify. Only applies to types LoadBalancer. Ignored if type is ExternalName. The valid key or value must be an empty string or consist of alphanumeric characters, '-', '_' or '.', start and end with an alphanumeric character, and length cannot exceed 63. The key can be separated by a prefix with a '/', and the prefix must comply with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#label-selectors
sessionAffinity	String	Supports "ClientIP" and "None". Used to maintain session affinity. Enable client IP based session affinity. Must be ClientIP or None. Defaults to None. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies Possible enum values: • "ClientIP" is the Client IP based. • "None" - no session affinity.
sessionAffinity-Config	io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinity-Config object	sessionAffinityConfig contains the configurations of session affinity.

Parameter	Type	Description
type	String	type determines how the Service is exposed. Valid option is LoadBalancer. "LoadBalancer" builds on NodePort and creates an external load-balancer (if supported in the current cloud) which routes to the same endpoints as the clusterIP. - " <i>LoadBalancer</i> " means a service will be exposed via an external load balancer (if the cloud provider supports it).

Table 5-1616 io.cci.api.pkg.apis.versioned.cci.v2.ServicePort

Parameter	Type	Description
name	String	The name of this port within the service. This must be a DNS_LABEL. All ports within a ServiceSpec must have unique names. When considering the endpoints for a Service, this must match the 'name' field in the EndpointPort. Optional if only one ServicePort is defined on this service. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
port	Integer	The port that will be exposed by this service. Port must be in the range 1 to 65535.
protocol	String	The IP protocol for this port. Supports "TCP", "UDP", and "SCTP". Default is TCP. Possible enum values: • "<i>SCTP</i>" is the SCTP protocol. • "<i>TCP</i>" is the TCP protocol. • "<i>UDP</i>" is the UDP protocol.

Parameter	Type	Description
targetPort	String	Number or name of the port to access on the pods targeted by the service. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME. If this is a string, it will be looked up as a named port in the target Pod's container ports. If this is not specified, the value of the 'port' field is used (an identity map). This field should be omitted or set equal to the 'port' field. More info: https://kubernetes.io/docs/concepts/services-networking/service/#defining-a-service

Table 5-1617 io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinityConfig

Parameter	Type	Description
clientIP	io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig object	clientIP contains the configurations of Client IP based session affinity.

Table 5-1618 io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig

Parameter	Type	Description
timeoutSeconds	Integer	timeoutSeconds specifies the seconds of ClientIP type session sticky time. The value must be >0 && <=86400(for 1 day) if ServiceAffinity == "ClientIP". Default value is 10800(for 3 hours).

Table 5-1619 io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Current service state

Parameter	Type	Description
loadBalancer	io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus object	LoadBalancer contains the current status of the load-balancer, if one is present.

Table 5-1620 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.

Parameter	Type	Description
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-1621 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus

Parameter	Type	Description
ingress	Array of io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress objects	Ingress is a list containing ingress points for the load-balancer. Traffic intended for the service should be sent to these ingress points.

Table 5-1622 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress

Parameter	Type	Description
ip	String	IP is set for load-balancer ingress points that are IP based (typically GCE or OpenStack load-balancers)
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.PortStatus objects	Ports is a list of records of service ports If used, every port defined in the service should have an entry in it

Table 5-1623 io.cci.api.pkg.apis.versioned.cci.v2.PortStatus

Parameter	Type	Description
error	String	Error is to record the problem with the service port The format of the error shall comply with the following rules: - built-in error values shall be specified in this file and those shall use CamelCase names cloud provider specific error values must have names that comply with the format foo.example.com/CamelCase.

Parameter	Type	Description
port	Integer	Port is the port number of the service port of which status is recorded here
protocol	String	Protocol is the protocol of the service port of which status is recorded here The supported values are: "TCP", "UDP", "SCTP" Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-1624 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.

Parameter	Type	Description
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

None

Example Responses

Status code: 200

OK


```
{
  "apiVersion": "v1",
  "items": [ {
    "apiVersion": "cci/v2",
    "kind": "Service",
    "metadata": {
      "annotations": {
        "kubernetes.io/elb.class": "elb",
        "kubernetes.io/elb.id": "31ede280-933b-45f5-9981-a09f809a126b",
        "tenant.cci.io/tenant-id": "08a2*****c03",
        "tenant.kubernetes.io/domain-id": "08a*****ee60",
        "tenant.kubernetes.io/project-id": "08a2*****c03"
      },
      "creationTimestamp": "2024-09-26T03:21:42Z",
      "finalizers": [ "service.kubernetes.io/load-balancer-cleanup" ],
      "labels": {
        "tenant.kubernetes.io/project-id": "08a2*****c03"
      },
      "name": "service-example",
      "namespace": "test-api",
      "resourceVersion": "20208842",
      "uid": "5c06c480-da50-4ca8-8ded-0b2c6c26f68d"
    },
    "spec": {
      "ports": [ {
        "name": "service-example-port",
        "port": 8888,
        "protocol": "TCP",
        "targetPort": 80
      } ],
      "selector": {
        "app": "de-6"
      },
      "sessionAffinity": "None",
      "type": "LoadBalancer"
    },
    "status": {
      "loadBalancer": {
        "ingress": [ {
          "ip": "192.168.0.93"
        } ]
      }
    }
  } ],
  "kind": "List",
  "metadata": {
    "resourceVersion": ""
  }
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed

Status Code	Description
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.7.2 Creating a Service

Function

This API is used to create a Service.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

POST /apis/cci/v2/namespaces/{namespace}/services

Table 5-1625 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-1626 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-1627 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	Yes	io.cci.api.pkg.apis.versioned.cci.v2.BaseServiceMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Mandatory	Type	Description
spec	Yes	io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec object	Spec defines the behavior of a service. https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1628 io.cci.api.pkg.apis.versioned.cci.v2.BaseServiceMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Service Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations

Parameter	Mandatory	Type	Description
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Mandatory	Type	Description
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces

Table 5-1629 io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec

Parameter	Mandatory	Type	Description
ports	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.ServicePort objects	The list of ports that are exposed by this service. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies

Parameter	Mandatory	Type	Description
selector	No	Map<String,String>	Route service traffic to pods with label keys and values matching this selector. If empty or not present, the service is assumed to have an external process managing its endpoints, which Kubernetes will not modify. Only applies to types LoadBalancer. Ignored if type is ExternalName. The valid key or value must be an empty string or consist of alphanumeric characters, '-', '_' or '.', start and end with an alphanumeric character, and length cannot exceed 63. The key can be separated by a prefix with a '/', and the prefix must comply with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#label-selectors
sessionAffinity	No	String	Supports "ClientIP" and "None". Used to maintain session affinity. Enable client IP based session affinity. Must be ClientIP or None. Defaults to None. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies Possible enum values: • "ClientIP" is the Client IP based. • "None" - no session affinity.
sessionAffinityConfig	No	io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinityConfig object	sessionAffinityConfig contains the configurations of session affinity.

Parameter	Mandatory	Type	Description
type	Yes	String	type determines how the Service is exposed. Valid option is LoadBalancer. "LoadBalancer" builds on NodePort and creates an external load-balancer (if supported in the current cloud) which routes to the same endpoints as the clusterIP. - <i>"LoadBalancer"</i> means a service will be exposed via an external load balancer (if the cloud provider supports it).

Table 5-1630 io.cci.api.pkg.apis.versioned.cci.v2.ServicePort

Parameter	Mandatory	Type	Description
name	No	String	The name of this port within the service. This must be a DNS_LABEL. All ports within a ServiceSpec must have unique names. When considering the endpoints for a Service, this must match the 'name' field in the EndpointPort. Optional if only one ServicePort is defined on this service. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
port	Yes	Integer	The port that will be exposed by this service. Port must be in the range 1 to 65535.
protocol	No	String	The IP protocol for this port. Supports "TCP", "UDP", and "SCTP". Default is TCP. Possible enum values: • <i>"SCTP"</i> is the SCTP protocol. • <i>"TCP"</i> is the TCP protocol. • <i>"UDP"</i> is the UDP protocol.

Parameter	Mandatory	Type	Description
targetPort	No	String	Number or name of the port to access on the pods targeted by the service. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME. If this is a string, it will be looked up as a named port in the target Pod's container ports. If this is not specified, the value of the 'port' field is used (an identity map). This field should be omitted or set equal to the 'port' field. More info: https://kubernetes.io/docs/concepts/services-networking/service/#defining-a-service

Table 5-1631 io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinityConfig

Parameter	Mandatory	Type	Description
clientIP	No	io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig object	clientIP contains the configurations of Client IP based session affinity.

Table 5-1632 io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig

Parameter	Mandatory	Type	Description
timeoutSeconds	No	Integer	timeoutSeconds specifies the seconds of ClientIP type session sticky time. The value must be >0 && <=86400(for 1 day) if ServiceAffinity == "ClientIP". Default value is 10800(for 3 hours).

Response Parameters

Status code: 200

Table 5-1633 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis .versioned.cci.v2 ServiceMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis .versioned.cci.v2 ServiceSpec object	Spec defines the behavior of a service. https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis .versioned.cci.v2 ServiceStatus object	Most recently observed status of the service. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1634 io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Service Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1635 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1636 io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec

Parameter	Type	Description
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ServicePort objects	The list of ports that are exposed by this service. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies
selector	Map<String,String>	Route service traffic to pods with label keys and values matching this selector. If empty or not present, the service is assumed to have an external process managing its endpoints, which Kubernetes will not modify. Only applies to types LoadBalancer. Ignored if type is ExternalName. The valid key or value must be an empty string or consist of alphanumeric characters, '-', '_' or '.', start and end with an alphanumeric character, and length cannot exceed 63. The key can be separated by a prefix with a '/', and the prefix must comply with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#label-selectors
sessionAffinity	String	Supports "ClientIP" and "None". Used to maintain session affinity. Enable client IP based session affinity. Must be ClientIP or None. Defaults to None. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies Possible enum values: • "ClientIP" is the Client IP based. • "None" - no session affinity.
sessionAffinity-Config	io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinity-Config object	sessionAffinityConfig contains the configurations of session affinity.

Parameter	Type	Description
type	String	type determines how the Service is exposed. Valid option is LoadBalancer. "LoadBalancer" builds on NodePort and creates an external load-balancer (if supported in the current cloud) which routes to the same endpoints as the clusterIP. - <i>"LoadBalancer"</i> means a service will be exposed via an external load balancer (if the cloud provider supports it).

Table 5-1637 io.cci.api.pkg.apis.versioned.cci.v2.ServicePort

Parameter	Type	Description
name	String	The name of this port within the service. This must be a DNS_LABEL. All ports within a ServiceSpec must have unique names. When considering the endpoints for a Service, this must match the 'name' field in the EndpointPort. Optional if only one ServicePort is defined on this service. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
port	Integer	The port that will be exposed by this service. Port must be in the range 1 to 65535.
protocol	String	The IP protocol for this port. Supports "TCP", "UDP", and "SCTP". Default is TCP. Possible enum values: • <i>"SCTP"</i> is the SCTP protocol. • <i>"TCP"</i> is the TCP protocol. • <i>"UDP"</i> is the UDP protocol.

Parameter	Type	Description
targetPort	String	Number or name of the port to access on the pods targeted by the service. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME. If this is a string, it will be looked up as a named port in the target Pod's container ports. If this is not specified, the value of the 'port' field is used (an identity map). This field should be omitted or set equal to the 'port' field. More info: https://kubernetes.io/docs/concepts/services-networking/service/#defining-a-service

Table 5-1638 io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinityConfig

Parameter	Type	Description
clientIP	io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig object	clientIP contains the configurations of Client IP based session affinity.

Table 5-1639 io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig

Parameter	Type	Description
timeoutSeconds	Integer	timeoutSeconds specifies the seconds of ClientIP type session sticky time. The value must be >0 && <=86400(for 1 day) if ServiceAffinity == "ClientIP". Default value is 10800(for 3 hours).

Table 5-1640 io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Current service state

Parameter	Type	Description
loadBalancer	io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus object	LoadBalancer contains the current status of the load-balancer, if one is present.

Table 5-1641 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.

Parameter	Type	Description
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-1642 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus

Parameter	Type	Description
ingress	Array of io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress objects	Ingress is a list containing ingress points for the load-balancer. Traffic intended for the service should be sent to these ingress points.

Table 5-1643 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress

Parameter	Type	Description
ip	String	IP is set for load-balancer ingress points that are IP based (typically GCE or OpenStack load-balancers)
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.PortStatus objects	Ports is a list of records of service ports If used, every port defined in the service should have an entry in it

Table 5-1644 io.cci.api.pkg.apis.versioned.cci.v2.PortStatus

Parameter	Type	Description
error	String	Error is to record the problem with the service port The format of the error shall comply with the following rules: - built-in error values shall be specified in this file and those shall use CamelCase names cloud provider specific error values must have names that comply with the format foo.example.com/CamelCase.

Parameter	Type	Description
port	Integer	Port is the port number of the service port of which status is recorded here
protocol	String	Protocol is the protocol of the service port of which status is recorded here The supported values are: "TCP", "UDP", "SCTP" Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Status code: 201

Table 5-1645 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec object	Spec defines the behavior of a service. https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Parameter	Type	Description
status	io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus object	Most recently observed status of the service. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1646 io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Service Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1647 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1648 io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec

Parameter	Type	Description
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ServicePort objects	The list of ports that are exposed by this service. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies
selector	Map<String,String>	Route service traffic to pods with label keys and values matching this selector. If empty or not present, the service is assumed to have an external process managing its endpoints, which Kubernetes will not modify. Only applies to types LoadBalancer. Ignored if type is ExternalName. The valid key or value must be an empty string or consist of alphanumeric characters, '-', '_' or '.', start and end with an alphanumeric character, and length cannot exceed 63. The key can be separated by a prefix with a '/', and the prefix must comply with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#label-selectors
sessionAffinity	String	Supports "ClientIP" and "None". Used to maintain session affinity. Enable client IP based session affinity. Must be ClientIP or None. Defaults to None. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies Possible enum values: • "ClientIP" is the Client IP based. • "None" - no session affinity.
sessionAffinity-Config	io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinity-Config object	sessionAffinityConfig contains the configurations of session affinity.

Parameter	Type	Description
type	String	type determines how the Service is exposed. Valid option is LoadBalancer. "LoadBalancer" builds on NodePort and creates an external load-balancer (if supported in the current cloud) which routes to the same endpoints as the clusterIP. - " <i>LoadBalancer</i> " means a service will be exposed via an external load balancer (if the cloud provider supports it).

Table 5-1649 io.cci.api.pkg.apis.versioned.cci.v2.ServicePort

Parameter	Type	Description
name	String	The name of this port within the service. This must be a DNS_LABEL. All ports within a ServiceSpec must have unique names. When considering the endpoints for a Service, this must match the 'name' field in the EndpointPort. Optional if only one ServicePort is defined on this service. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
port	Integer	The port that will be exposed by this service. Port must be in the range 1 to 65535.
protocol	String	The IP protocol for this port. Supports "TCP", "UDP", and "SCTP". Default is TCP. Possible enum values: • "<i>SCTP</i>" is the SCTP protocol. • "<i>TCP</i>" is the TCP protocol. • "<i>UDP</i>" is the UDP protocol.

Parameter	Type	Description
targetPort	String	Number or name of the port to access on the pods targeted by the service. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME. If this is a string, it will be looked up as a named port in the target Pod's container ports. If this is not specified, the value of the 'port' field is used (an identity map). This field should be omitted or set equal to the 'port' field. More info: https://kubernetes.io/docs/concepts/services-networking/service/#defining-a-service

Table 5-1650 io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinityConfig

Parameter	Type	Description
clientIP	io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig object	clientIP contains the configurations of Client IP based session affinity.

Table 5-1651 io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig

Parameter	Type	Description
timeoutSeconds	Integer	timeoutSeconds specifies the seconds of ClientIP type session sticky time. The value must be >0 && <=86400(for 1 day) if ServiceAffinity == "ClientIP". Default value is 10800(for 3 hours).

Table 5-1652 io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Current service state

Parameter	Type	Description
loadBalancer	io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus object	LoadBalancer contains the current status of the load-balancer, if one is present.

Table 5-1653 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.

Parameter	Type	Description
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-1654 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus

Parameter	Type	Description
ingress	Array of io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress objects	Ingress is a list containing ingress points for the load-balancer. Traffic intended for the service should be sent to these ingress points.

Table 5-1655 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress

Parameter	Type	Description
ip	String	IP is set for load-balancer ingress points that are IP based (typically GCE or OpenStack load-balancers)
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.PortStatus objects	Ports is a list of records of service ports If used, every port defined in the service should have an entry in it

Table 5-1656 io.cci.api.pkg.apis.versioned.cci.v2.PortStatus

Parameter	Type	Description
error	String	Error is to record the problem with the service port The format of the error shall comply with the following rules: - built-in error values shall be specified in this file and those shall use CamelCase names cloud provider specific error values must have names that comply with the format foo.example.com/CamelCase.

Parameter	Type	Description
port	Integer	Port is the port number of the service port of which status is recorded here
protocol	String	Protocol is the protocol of the service port of which status is recorded here The supported values are: "TCP", "UDP", "SCTP" Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Status code: 202

Table 5-1657 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec object	Spec defines the behavior of a service. https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Parameter	Type	Description
status	io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus object	Most recently observed status of the service. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1658 io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Service Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1659 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1660 io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec

Parameter	Type	Description
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ServicePort objects	The list of ports that are exposed by this service. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies
selector	Map<String,String>	Route service traffic to pods with label keys and values matching this selector. If empty or not present, the service is assumed to have an external process managing its endpoints, which Kubernetes will not modify. Only applies to types LoadBalancer. Ignored if type is ExternalName. The valid key or value must be an empty string or consist of alphanumeric characters, '-', '_' or '.', start and end with an alphanumeric character, and length cannot exceed 63. The key can be separated by a prefix with a '/', and the prefix must comply with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#label-selectors
sessionAffinity	String	Supports "ClientIP" and "None". Used to maintain session affinity. Enable client IP based session affinity. Must be ClientIP or None. Defaults to None. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies Possible enum values: • "ClientIP" is the Client IP based. • "None" - no session affinity.
sessionAffinity-Config	io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinity-Config object	sessionAffinityConfig contains the configurations of session affinity.

Parameter	Type	Description
type	String	type determines how the Service is exposed. Valid option is LoadBalancer. "LoadBalancer" builds on NodePort and creates an external load-balancer (if supported in the current cloud) which routes to the same endpoints as the clusterIP. - <i>"LoadBalancer"</i> means a service will be exposed via an external load balancer (if the cloud provider supports it).

Table 5-1661 io.cci.api.pkg.apis.versioned.cci.v2.ServicePort

Parameter	Type	Description
name	String	The name of this port within the service. This must be a DNS_LABEL. All ports within a ServiceSpec must have unique names. When considering the endpoints for a Service, this must match the 'name' field in the EndpointPort. Optional if only one ServicePort is defined on this service. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
port	Integer	The port that will be exposed by this service. Port must be in the range 1 to 65535.
protocol	String	The IP protocol for this port. Supports "TCP", "UDP", and "SCTP". Default is TCP. Possible enum values: • <i>"SCTP"</i> is the SCTP protocol. • <i>"TCP"</i> is the TCP protocol. • <i>"UDP"</i> is the UDP protocol.

Parameter	Type	Description
targetPort	String	Number or name of the port to access on the pods targeted by the service. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME. If this is a string, it will be looked up as a named port in the target Pod's container ports. If this is not specified, the value of the 'port' field is used (an identity map). This field should be omitted or set equal to the 'port' field. More info: https://kubernetes.io/docs/concepts/services-networking/service/#defining-a-service

Table 5-1662 io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinityConfig

Parameter	Type	Description
clientIP	io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig object	clientIP contains the configurations of Client IP based session affinity.

Table 5-1663 io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig

Parameter	Type	Description
timeoutSeconds	Integer	timeoutSeconds specifies the seconds of ClientIP type session sticky time. The value must be >0 && <=86400(for 1 day) if ServiceAffinity == "ClientIP". Default value is 10800(for 3 hours).

Table 5-1664 io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Current service state

Parameter	Type	Description
loadBalancer	io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus object	LoadBalancer contains the current status of the load-balancer, if one is present.

Table 5-1665 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.

Parameter	Type	Description
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-1666 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus

Parameter	Type	Description
ingress	Array of io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress objects	Ingress is a list containing ingress points for the load-balancer. Traffic intended for the service should be sent to these ingress points.

Table 5-1667 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress

Parameter	Type	Description
ip	String	IP is set for load-balancer ingress points that are IP based (typically GCE or OpenStack load-balancers)
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.PortStatus objects	Ports is a list of records of service ports If used, every port defined in the service should have an entry in it

Table 5-1668 io.cci.api.pkg.apis.versioned.cci.v2.PortStatus

Parameter	Type	Description
error	String	Error is to record the problem with the service port The format of the error shall comply with the following rules: - built-in error values shall be specified in this file and those shall use CamelCase names cloud provider specific error values must have names that comply with the format foo.example.com/CamelCase.

Parameter	Type	Description
port	Integer	Port is the port number of the service port of which status is recorded here
protocol	String	Protocol is the protocol of the service port of which status is recorded here The supported values are: "TCP", "UDP", "SCTP" Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Example Requests

```
{
  "apiVersion": "cci/v2",
  "kind": "Service",
  "metadata": {
    "annotations": {
      "kubernetes.io/elb.class": "elb",
      "kubernetes.io/elb.id": "31ede280-933b-45f5-9981-a09f809a126b"
    },
    "name": "service-example"
  },
  "spec": {
    "ports": [ {
      "name": "service-example-port",
      "port": 8888,
      "protocol": "TCP",
      "targetPort": 80
    } ],
    "selector": {
      "app": "de-6"
    },
    "sessionAffinity": "None",
    "type": "LoadBalancer"
  }
}
```

Example Responses

Status code: 201

Created

```
{
  "apiVersion": "cci/v2",
  "kind": "Service",
  "metadata": {
    "annotations": {
      "kubernetes.io/elb.class": "elb",
      "kubernetes.io/elb.id": "31ede280-933b-45f5-9981-a09f809a126b",
      "tenant.cci.io/tenant-id": "08a2*****c03",
      "tenant.kubernetes.io/domain-id": "08a*****ee60",
      "tenant.kubernetes.io/project-id": "08a2*****c03"
    },
  },
}
```

```
"creationTimestamp" : "2024-09-26T03:21:42Z",
"finalizers" : [ "service.kubernetes.io/load-balancer-cleanup" ],
"labels" : {
  "tenant.kubernetes.io/project-id" : "08a2*****c03"
},
"name" : "service-example",
"namespace" : "test-api",
"resourceVersion" : "20208842",
"uid" : "5c06c480-da50-4ca8-8ded-0b2c6c26f68d"
},
"spec" : {
  "ports" : [ {
    "name" : "service-example-port",
    "port" : 8888,
    "protocol" : "TCP",
    "targetPort" : 80
  } ],
  "selector" : {
    "app" : "de-6"
  },
  "sessionAffinity" : "None",
  "type" : "LoadBalancer"
},
"status" : {
  "loadBalancer" : {
    "ingress" : [ {
      "ip" : "192.168.0.93"
    } ]
  }
}
}
```

Status Codes

Status Code	Description
200	OK
201	Created
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	AlreadyExists
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalError

Status Code	Description
503	ServiceUnavailable
504	ServerTimeout

5.7.3 Deleting a Service

Function

This API is used to delete a Service in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

DELETE /apis/cci/v2/namespaces/{namespace}/services/{name}

Table 5-1669 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Service
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-1670 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Response Parameters

Status code: 200

Table 5-1671 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
spec	io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec object	Spec defines the behavior of a service. https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus object	Most recently observed status of the service. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1672 io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Service Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1673 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1674 io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec

Parameter	Type	Description
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ServicePort objects	The list of ports that are exposed by this service. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies
selector	Map<String,String>	Route service traffic to pods with label keys and values matching this selector. If empty or not present, the service is assumed to have an external process managing its endpoints, which Kubernetes will not modify. Only applies to types LoadBalancer. Ignored if type is ExternalName. The valid key or value must be an empty string or consist of alphanumeric characters, '-', '_' or '.', start and end with an alphanumeric character, and length cannot exceed 63. The key can be separated by a prefix with a '/', and the prefix must comply with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#label-selectors
sessionAffinity	String	Supports "ClientIP" and "None". Used to maintain session affinity. Enable client IP based session affinity. Must be ClientIP or None. Defaults to None. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies Possible enum values: • "ClientIP" is the Client IP based. • "None" - no session affinity.
sessionAffinity-Config	io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinity-Config object	sessionAffinityConfig contains the configurations of session affinity.

Parameter	Type	Description
type	String	type determines how the Service is exposed. Valid option is LoadBalancer. "LoadBalancer" builds on NodePort and creates an external load-balancer (if supported in the current cloud) which routes to the same endpoints as the clusterIP. - " <i>LoadBalancer</i> " means a service will be exposed via an external load balancer (if the cloud provider supports it).

Table 5-1675 io.cci.api.pkg.apis.versioned.cci.v2.ServicePort

Parameter	Type	Description
name	String	The name of this port within the service. This must be a DNS_LABEL. All ports within a ServiceSpec must have unique names. When considering the endpoints for a Service, this must match the 'name' field in the EndpointPort. Optional if only one ServicePort is defined on this service. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
port	Integer	The port that will be exposed by this service. Port must be in the range 1 to 65535.
protocol	String	The IP protocol for this port. Supports "TCP", "UDP", and "SCTP". Default is TCP. Possible enum values: • "<i>SCTP</i>" is the SCTP protocol. • "<i>TCP</i>" is the TCP protocol. • "<i>UDP</i>" is the UDP protocol.

Parameter	Type	Description
targetPort	String	Number or name of the port to access on the pods targeted by the service. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME. If this is a string, it will be looked up as a named port in the target Pod's container ports. If this is not specified, the value of the 'port' field is used (an identity map). This field should be omitted or set equal to the 'port' field. More info: https://kubernetes.io/docs/concepts/services-networking/service/#defining-a-service

Table 5-1676 io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinityConfig

Parameter	Type	Description
clientIP	io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig object	clientIP contains the configurations of Client IP based session affinity.

Table 5-1677 io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig

Parameter	Type	Description
timeoutSeconds	Integer	timeoutSeconds specifies the seconds of ClientIP type session sticky time. The value must be >0 && <=86400(for 1 day) if ServiceAffinity == "ClientIP". Default value is 10800(for 3 hours).

Table 5-1678 io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Current service state

Parameter	Type	Description
loadBalancer	io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus object	LoadBalancer contains the current status of the load-balancer, if one is present.

Table 5-1679 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.

Parameter	Type	Description
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-1680 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus

Parameter	Type	Description
ingress	Array of io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress objects	Ingress is a list containing ingress points for the load-balancer. Traffic intended for the service should be sent to these ingress points.

Table 5-1681 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress

Parameter	Type	Description
ip	String	IP is set for load-balancer ingress points that are IP based (typically GCE or OpenStack load-balancers)
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.PortStatus objects	Ports is a list of records of service ports If used, every port defined in the service should have an entry in it

Table 5-1682 io.cci.api.pkg.apis.versioned.cci.v2.PortStatus

Parameter	Type	Description
error	String	Error is to record the problem with the service port The format of the error shall comply with the following rules: - built-in error values shall be specified in this file and those shall use CamelCase names cloud provider specific error values must have names that comply with the format foo.example.com/CamelCase.

Parameter	Type	Description
port	Integer	Port is the port number of the service port of which status is recorded here
protocol	String	Protocol is the protocol of the service port of which status is recorded here The supported values are: "TCP", "UDP", "SCTP" Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Status code: 202

Table 5-1683 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec object	Spec defines the behavior of a service. https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Parameter	Type	Description
status	io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus object	Most recently observed status of the service. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1684 io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Service Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1685 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1686 io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec

Parameter	Type	Description
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ServicePort objects	The list of ports that are exposed by this service. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies
selector	Map<String,String>	Route service traffic to pods with label keys and values matching this selector. If empty or not present, the service is assumed to have an external process managing its endpoints, which Kubernetes will not modify. Only applies to types LoadBalancer. Ignored if type is ExternalName. The valid key or value must be an empty string or consist of alphanumeric characters, '-', '_' or '.', start and end with an alphanumeric character, and length cannot exceed 63. The key can be separated by a prefix with a '/', and the prefix must comply with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#label-selectors
sessionAffinity	String	Supports "ClientIP" and "None". Used to maintain session affinity. Enable client IP based session affinity. Must be ClientIP or None. Defaults to None. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies Possible enum values: • "ClientIP" is the Client IP based. • "None" - no session affinity.
sessionAffinity-Config	io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinity-Config object	sessionAffinityConfig contains the configurations of session affinity.

Parameter	Type	Description
type	String	type determines how the Service is exposed. Valid option is LoadBalancer. "LoadBalancer" builds on NodePort and creates an external load-balancer (if supported in the current cloud) which routes to the same endpoints as the clusterIP. - <i>"LoadBalancer"</i> means a service will be exposed via an external load balancer (if the cloud provider supports it).

Table 5-1687 io.cci.api.pkg.apis.versioned.cci.v2.ServicePort

Parameter	Type	Description
name	String	The name of this port within the service. This must be a DNS_LABEL. All ports within a ServiceSpec must have unique names. When considering the endpoints for a Service, this must match the 'name' field in the EndpointPort. Optional if only one ServicePort is defined on this service. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
port	Integer	The port that will be exposed by this service. Port must be in the range 1 to 65535.
protocol	String	The IP protocol for this port. Supports "TCP", "UDP", and "SCTP". Default is TCP. Possible enum values: • <i>"SCTP"</i> is the SCTP protocol. • <i>"TCP"</i> is the TCP protocol. • <i>"UDP"</i> is the UDP protocol.

Parameter	Type	Description
targetPort	String	Number or name of the port to access on the pods targeted by the service. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME. If this is a string, it will be looked up as a named port in the target Pod's container ports. If this is not specified, the value of the 'port' field is used (an identity map). This field should be omitted or set equal to the 'port' field. More info: https://kubernetes.io/docs/concepts/services-networking/service/#defining-a-service

Table 5-1688 io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinityConfig

Parameter	Type	Description
clientIP	io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig object	clientIP contains the configurations of Client IP based session affinity.

Table 5-1689 io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig

Parameter	Type	Description
timeoutSeconds	Integer	timeoutSeconds specifies the seconds of ClientIP type session sticky time. The value must be >0 && <=86400(for 1 day) if ServiceAffinity == "ClientIP". Default value is 10800(for 3 hours).

Table 5-1690 io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Current service state

Parameter	Type	Description
loadBalancer	io.cci.api.pkg.apis. .versioned.cci.v2. LoadBalancerSta- tus object	LoadBalancer contains the current status of the load-balancer, if one is present.

Table 5-1691 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.

Parameter	Type	Description
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-1692 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus

Parameter	Type	Description
ingress	Array of io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress objects	Ingress is a list containing ingress points for the load-balancer. Traffic intended for the service should be sent to these ingress points.

Table 5-1693 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress

Parameter	Type	Description
ip	String	IP is set for load-balancer ingress points that are IP based (typically GCE or OpenStack load-balancers)
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.PortStatus objects	Ports is a list of records of service ports If used, every port defined in the service should have an entry in it

Table 5-1694 io.cci.api.pkg.apis.versioned.cci.v2.PortStatus

Parameter	Type	Description
error	String	Error is to record the problem with the service port The format of the error shall comply with the following rules: - built-in error values shall be specified in this file and those shall use CamelCase names cloud provider specific error values must have names that comply with the format foo.example.com/CamelCase.

Parameter	Type	Description
port	Integer	Port is the port number of the service port of which status is recorded here
protocol	String	Protocol is the protocol of the service port of which status is recorded here The supported values are: "TCP", "UDP", "SCTP" Possible enum values: "SCTP" is the SCTP protocol. "TCP" is the TCP protocol. "UDP" is the UDP protocol.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "cci/v2",
  "kind": "Service",
  "metadata": {
    "annotations": {
      "kubernetes.io/elb.class": "elb",
      "kubernetes.io/elb.id": "31ede280-933b-45f5-9981-a09f809a126b",
      "tenant.cci.io/tenant-id": "08a2*****c03",
      "tenant.kubernetes.io/domain-id": "08a*****ee60",
      "tenant.kubernetes.io/project-id": "08a2*****c03"
    },
    "creationTimestamp": "2024-09-26T03:21:42Z",
    "deletionGracePeriodSeconds": 0,
    "deletionTimestamp": "2024-10-09T18:13:07Z",
    "finalizers": [ "service.kubernetes.io/load-balancer-cleanup" ],
    "labels": {
      "tenant.kubernetes.io/project-id": "08a2*****c03",
      "usage": "just-for-test"
    },
    "name": "service-example",
    "namespace": "test-api",
    "resourceVersion": "21520832",
    "uid": "5c06c480-da50-4ca8-8ded-0b2c6c26f68d"
  },
  "spec": {
    "ports": [ {
      "name": "service-example-port",
      "port": 8888,
      "protocol": "TCP",
      "targetPort": 80
    } ],
    "selector": {
      "app": "de-6"
    }
  },
}
```

```
"sessionAffinity" : "None",
"type" : "LoadBalancer"
},
"status" : {
  "loadBalancer" : {
    "ingress" : [ {
      "ip" : "192.168.0.93"
    } ]
  }
}
```

Status Codes

Status Code	Description
200	OK
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.7.4 Replacing a Service

Function

This API is used to replace a Service in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

PUT /apis/cci/v2/namespaces/{namespace}/services/{name}

Table 5-1695 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Service
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-1696 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-1697 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	Yes	io.cci.api.pkg.apis.versioned.cci.v2.BaseServiceMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	Yes	io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec object	Spec defines the behavior of a service. https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1698 io.cci.api.pkg.apis.versioned.cci.v2.BaseServiceMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Service Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
generateName	No	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels

Parameter	Mandatory	Type	Description
name	No	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names
namespace	No	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces

Table 5-1699 io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec

Parameter	Mandatory	Type	Description
ports	No	Array of io.cci.api.pkg.apis.versioned.cci.v2.ServicePort objects	The list of ports that are exposed by this service. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies

Parameter	Mandatory	Type	Description
selector	No	Map<String,String>	Route service traffic to pods with label keys and values matching this selector. If empty or not present, the service is assumed to have an external process managing its endpoints, which Kubernetes will not modify. Only applies to types LoadBalancer. Ignored if type is ExternalName. The valid key or value must be an empty string or consist of alphanumeric characters, '-', '_' or '.', start and end with an alphanumeric character, and length cannot exceed 63. The key can be separated by a prefix with a '/', and the prefix must comply with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#label-selectors
sessionAffinity	No	String	Supports "ClientIP" and "None". Used to maintain session affinity. Enable client IP based session affinity. Must be ClientIP or None. Defaults to None. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies Possible enum values: • "ClientIP" is the Client IP based. • "None" - no session affinity.
sessionAffinityConfig	No	io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinityConfig object	sessionAffinityConfig contains the configurations of session affinity.

Parameter	Mandatory	Type	Description
type	Yes	String	type determines how the Service is exposed. Valid option is LoadBalancer. "LoadBalancer" builds on NodePort and creates an external load-balancer (if supported in the current cloud) which routes to the same endpoints as the clusterIP. - <i>"LoadBalancer"</i> means a service will be exposed via an external load balancer (if the cloud provider supports it).

Table 5-1700 io.cci.api.pkg.apis.versioned.cci.v2.ServicePort

Parameter	Mandatory	Type	Description
name	No	String	The name of this port within the service. This must be a DNS_LABEL. All ports within a ServiceSpec must have unique names. When considering the endpoints for a Service, this must match the 'name' field in the EndpointPort. Optional if only one ServicePort is defined on this service. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
port	Yes	Integer	The port that will be exposed by this service. Port must be in the range 1 to 65535.
protocol	No	String	The IP protocol for this port. Supports "TCP", "UDP", and "SCTP". Default is TCP. Possible enum values: • <i>"SCTP"</i> is the SCTP protocol. • <i>"TCP"</i> is the TCP protocol. • <i>"UDP"</i> is the UDP protocol.

Parameter	Mandatory	Type	Description
targetPort	No	String	Number or name of the port to access on the pods targeted by the service. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME. If this is a string, it will be looked up as a named port in the target Pod's container ports. If this is not specified, the value of the 'port' field is used (an identity map). This field should be omitted or set equal to the 'port' field. More info: https://kubernetes.io/docs/concepts/services-networking/service/#defining-a-service

Table 5-1701 io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinityConfig

Parameter	Mandatory	Type	Description
clientIP	No	io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig object	clientIP contains the configurations of Client IP based session affinity.

Table 5-1702 io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig

Parameter	Mandatory	Type	Description
timeoutSeconds	No	Integer	timeoutSeconds specifies the seconds of ClientIP type session sticky time. The value must be >0 && <=86400(for 1 day) if ServiceAffinity == "ClientIP". Default value is 10800(for 3 hours).

Response Parameters

Status code: 200

Table 5-1703 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis .versioned.cci.v2 ServiceMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis .versioned.cci.v2 ServiceSpec object	Spec defines the behavior of a service. https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis .versioned.cci.v2 ServiceStatus object	Most recently observed status of the service. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1704 io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Service Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1705 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1706 io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec

Parameter	Type	Description
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ServicePort objects	The list of ports that are exposed by this service. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies
selector	Map<String,String>	Route service traffic to pods with label keys and values matching this selector. If empty or not present, the service is assumed to have an external process managing its endpoints, which Kubernetes will not modify. Only applies to types LoadBalancer. Ignored if type is ExternalName. The valid key or value must be an empty string or consist of alphanumeric characters, '-', '_' or '.', start and end with an alphanumeric character, and length cannot exceed 63. The key can be separated by a prefix with a '/', and the prefix must comply with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#label-selectors
sessionAffinity	String	Supports "ClientIP" and "None". Used to maintain session affinity. Enable client IP based session affinity. Must be ClientIP or None. Defaults to None. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies Possible enum values: • "ClientIP" is the Client IP based. • "None" - no session affinity.
sessionAffinity-Config	io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinity-Config object	sessionAffinityConfig contains the configurations of session affinity.

Parameter	Type	Description
type	String	type determines how the Service is exposed. Valid option is LoadBalancer. "LoadBalancer" builds on NodePort and creates an external load-balancer (if supported in the current cloud) which routes to the same endpoints as the clusterIP. - <i>"LoadBalancer"</i> means a service will be exposed via an external load balancer (if the cloud provider supports it).

Table 5-1707 io.cci.api.pkg.apis.versioned.cci.v2.ServicePort

Parameter	Type	Description
name	String	The name of this port within the service. This must be a DNS_LABEL. All ports within a ServiceSpec must have unique names. When considering the endpoints for a Service, this must match the 'name' field in the EndpointPort. Optional if only one ServicePort is defined on this service. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
port	Integer	The port that will be exposed by this service. Port must be in the range 1 to 65535.
protocol	String	The IP protocol for this port. Supports "TCP", "UDP", and "SCTP". Default is TCP. Possible enum values: • <i>"SCTP"</i> is the SCTP protocol. • <i>"TCP"</i> is the TCP protocol. • <i>"UDP"</i> is the UDP protocol.

Parameter	Type	Description
targetPort	String	Number or name of the port to access on the pods targeted by the service. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME. If this is a string, it will be looked up as a named port in the target Pod's container ports. If this is not specified, the value of the 'port' field is used (an identity map). This field should be omitted or set equal to the 'port' field. More info: https://kubernetes.io/docs/concepts/services-networking/service/#defining-a-service

Table 5-1708 io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinityConfig

Parameter	Type	Description
clientIP	io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig object	clientIP contains the configurations of Client IP based session affinity.

Table 5-1709 io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig

Parameter	Type	Description
timeoutSeconds	Integer	timeoutSeconds specifies the seconds of ClientIP type session sticky time. The value must be >0 && <=86400(for 1 day) if ServiceAffinity == "ClientIP". Default value is 10800(for 3 hours).

Table 5-1710 io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Current service state

Parameter	Type	Description
loadBalancer	io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus object	LoadBalancer contains the current status of the load-balancer, if one is present.

Table 5-1711 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.

Parameter	Type	Description
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-1712 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus

Parameter	Type	Description
ingress	Array of io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress objects	Ingress is a list containing ingress points for the load-balancer. Traffic intended for the service should be sent to these ingress points.

Table 5-1713 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress

Parameter	Type	Description
ip	String	IP is set for load-balancer ingress points that are IP based (typically GCE or OpenStack load-balancers)
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.PortStatus objects	Ports is a list of records of service ports If used, every port defined in the service should have an entry in it

Table 5-1714 io.cci.api.pkg.apis.versioned.cci.v2.PortStatus

Parameter	Type	Description
error	String	Error is to record the problem with the service port The format of the error shall comply with the following rules: - built-in error values shall be specified in this file and those shall use CamelCase names cloud provider specific error values must have names that comply with the format foo.example.com/CamelCase.

Parameter	Type	Description
port	Integer	Port is the port number of the service port of which status is recorded here
protocol	String	Protocol is the protocol of the service port of which status is recorded here The supported values are: "TCP", "UDP", "SCTP" Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Status code: 201

Table 5-1715 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec object	Spec defines the behavior of a service. https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Parameter	Type	Description
status	io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus object	Most recently observed status of the service. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1716 io.cci.api.pkg.apis.versioned.cci.v2.ServiceMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. Here is the support annotations of CCI: CCI Service Annotations . More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1717 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1718 io.cci.api.pkg.apis.versioned.cci.v2.ServiceSpec

Parameter	Type	Description
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ServicePort objects	The list of ports that are exposed by this service. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies
selector	Map<String,String>	Route service traffic to pods with label keys and values matching this selector. If empty or not present, the service is assumed to have an external process managing its endpoints, which Kubernetes will not modify. Only applies to types LoadBalancer. Ignored if type is ExternalName. The valid key or value must be an empty string or consist of alphanumeric characters, '-', '_' or '.', start and end with an alphanumeric character, and length cannot exceed 63. The key can be separated by a prefix with a '/', and the prefix must comply with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#label-selectors
sessionAffinity	String	Supports "ClientIP" and "None". Used to maintain session affinity. Enable client IP based session affinity. Must be ClientIP or None. Defaults to None. More info: https://kubernetes.io/docs/concepts/services-networking/service/#virtual-ips-and-service-proxies Possible enum values: • "ClientIP" is the Client IP based. • "None" - no session affinity.
sessionAffinity-Config	io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinity-Config object	sessionAffinityConfig contains the configurations of session affinity.

Parameter	Type	Description
type	String	type determines how the Service is exposed. Valid option is LoadBalancer. "LoadBalancer" builds on NodePort and creates an external load-balancer (if supported in the current cloud) which routes to the same endpoints as the clusterIP. - " <i>LoadBalancer</i> " means a service will be exposed via an external load balancer (if the cloud provider supports it).

Table 5-1719 io.cci.api.pkg.apis.versioned.cci.v2.ServicePort

Parameter	Type	Description
name	String	The name of this port within the service. This must be a DNS_LABEL. All ports within a ServiceSpec must have unique names. When considering the endpoints for a Service, this must match the 'name' field in the EndpointPort. Optional if only one ServicePort is defined on this service. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
port	Integer	The port that will be exposed by this service. Port must be in the range 1 to 65535.
protocol	String	The IP protocol for this port. Supports "TCP", "UDP", and "SCTP". Default is TCP. Possible enum values: • "<i>SCTP</i>" is the SCTP protocol. • "<i>TCP</i>" is the TCP protocol. • "<i>UDP</i>" is the UDP protocol.

Parameter	Type	Description
targetPort	String	Number or name of the port to access on the pods targeted by the service. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME. If this is a string, it will be looked up as a named port in the target Pod's container ports. If this is not specified, the value of the 'port' field is used (an identity map). This field should be omitted or set equal to the 'port' field. More info: https://kubernetes.io/docs/concepts/services-networking/service/#defining-a-service

Table 5-1720 io.cci.api.pkg.apis.versioned.cci.v2.SessionAffinityConfig

Parameter	Type	Description
clientIP	io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig object	clientIP contains the configurations of Client IP based session affinity.

Table 5-1721 io.cci.api.pkg.apis.versioned.cci.v2.ClientIPConfig

Parameter	Type	Description
timeoutSeconds	Integer	timeoutSeconds specifies the seconds of ClientIP type session sticky time. The value must be >0 && <=86400(for 1 day) if ServiceAffinity == "ClientIP". Default value is 10800(for 3 hours).

Table 5-1722 io.cci.api.pkg.apis.versioned.cci.v2.ServiceStatus

Parameter	Type	Description
conditions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.Condition objects	Current service state

Parameter	Type	Description
loadBalancer	io.cci.api.pkg.apis. .versioned.cci.v2. LoadBalancerSta- tus object	LoadBalancer contains the current status of the load-balancer, if one is present.

Table 5-1723 io.k8s.apimachinery.pkg.apis.meta.v1.Condition

Parameter	Type	Description
lastTransitionTime	String	lastTransitionTime is the last time the condition transitioned from one status to another. This should be when the underlying condition changed. If that is not known, then using the time when the API field changed is acceptable.
message	String	message is a human readable message indicating details about the transition. This may be an empty string.
observedGeneration	Long	observedGeneration represents the .metadata.generation that the condition was set based upon. For instance, if .metadata.generation is currently 12, but the .status.conditions[x].observedGeneration is 9, the condition is out of date with respect to the current state of the instance.
reason	String	reason contains a programmatic identifier indicating the reason for the condition's last transition. Producers of specific condition types may define expected values and meanings for this field, and whether the values are considered a guaranteed API. The value should be a CamelCase string. This field may not be empty.

Parameter	Type	Description
status	String	status of the condition, one of True, False, Unknown.
type	String	type of condition in CamelCase or in foo.example.com/CamelCase.

Table 5-1724 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerStatus

Parameter	Type	Description
ingress	Array of io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress objects	Ingress is a list containing ingress points for the load-balancer. Traffic intended for the service should be sent to these ingress points.

Table 5-1725 io.cci.api.pkg.apis.versioned.cci.v2.LoadBalancerIngress

Parameter	Type	Description
ip	String	IP is set for load-balancer ingress points that are IP based (typically GCE or OpenStack load-balancers)
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.PortStatus objects	Ports is a list of records of service ports If used, every port defined in the service should have an entry in it

Table 5-1726 io.cci.api.pkg.apis.versioned.cci.v2.PortStatus

Parameter	Type	Description
error	String	Error is to record the problem with the service port The format of the error shall comply with the following rules: - built-in error values shall be specified in this file and those shall use CamelCase names cloud provider specific error values must have names that comply with the format foo.example.com/CamelCase.

Parameter	Type	Description
port	Integer	Port is the port number of the service port of which status is recorded here
protocol	String	Protocol is the protocol of the service port of which status is recorded here The supported values are: "TCP", "UDP", "SCTP" Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Example Requests

```
{
  "apiVersion" : "cci/v2",
  "kind" : "Service",
  "metadata" : {
    "annotations" : {
      "kubernetes.io/elb.class" : "elb",
      "kubernetes.io/elb.id" : "31ede280-933b-45f5-9981-a09f809a126b",
      "tenant.cci.io/tenant-id" : "08a2*****c03",
      "tenant.kubernetes.io/domain-id" : "08a*****ee60",
      "tenant.kubernetes.io/project-id" : "08a2*****c03"
    },
    "creationTimestamp" : "2024-09-26T03:21:42Z",
    "finalizers" : [ "service.kubernetes.io/load-balancer-cleanup" ],
    "labels" : {
      "tenant.kubernetes.io/project-id" : "08a2*****c03"
    },
    "name" : "service-example",
    "namespace" : "test-api",
    "resourceVersion" : "20208842",
    "uid" : "5c06c480-da50-4ca8-8ded-0b2c6c26f68d"
  },
  "spec" : {
    "ports" : [ {
      "name" : "service-example-port",
      "port" : 8888,
      "protocol" : "TCP",
      "targetPort" : 80
    } ],
    "selector" : {
      "app" : "de-6"
    },
    "sessionAffinity" : "None",
    "type" : "LoadBalancer"
  },
  "status" : {
    "loadBalancer" : {
      "ingress" : [ {
        "ip" : "192.168.0.93"
      } ]
    }
  }
}
```

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "cci/v2",
  "kind": "Service",
  "metadata": {
    "annotations": {
      "kubernetes.io/elb.class": "elb",
      "kubernetes.io/elb.id": "31ede280-933b-45f5-9981-a09f809a126b",
      "tenant.cci.io/tenant-id": "08a2*****c03",
      "tenant.kubernetes.io/domain-id": "08a*****ee60",
      "tenant.kubernetes.io/project-id": "08a2*****c03"
    },
    "creationTimestamp": "2024-09-26T03:21:42Z",
    "finalizers": [ "service.kubernetes.io/load-balancer-cleanup" ],
    "labels": {
      "tenant.kubernetes.io/project-id": "08a2*****c03"
    },
    "name": "service-example",
    "namespace": "test-api",
    "resourceVersion": "20208842",
    "uid": "5c06c480-da50-4ca8-8ded-0b2c6c26f68d"
  },
  "spec": {
    "ports": [ {
      "name": "service-example-port",
      "port": 8888,
      "protocol": "TCP",
      "targetPort": 80
    } ],
    "selector": {
      "app": "de-6"
    },
    "sessionAffinity": "None",
    "type": "LoadBalancer"
  },
  "status": {
    "loadBalancer": {
      "ingress": [ {
        "ip": "192.168.0.93"
      } ]
    }
  }
}
```

Status Codes

Status Code	Description
200	OK
201	Created
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound

Status Code	Description
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.8 PersistentVolumeClaim

5.8.1 Deleting a PersistentVolumeClaim

Function

This API is used to delete a PersistentVolumeClaim in a namespace.

Constraints

Currently, the PVC feature is not available globally. This API is only available in TR-Istanbul and AF-Johannesburg. It will be available in more regions soon.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

DELETE /apis/cci/v2/namespaces/{namespace}/persistentvolumeclaims/{name}

Table 5-1727 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the PersistentVolumeClaim
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-1728 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Response Parameters

Status code: 200

Table 5-1729 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimSpec object	spec defines the desired characteristics of a volume requested by a pod author. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
status	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimStatus object	status represents the current information/status of a persistent volume claim. Read-only. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Table 5-1730 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations

Parameter	Type	Description
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1731 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1732 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimSpec

Parameter	Type	Description
accessModes	Array of strings	accessModes contains the desired access modes the volume should have. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
resources	io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements object	resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	selector is a label query over volumes to consider for binding.
storageClassName	String	storageClassName is the name of the StorageClass required by the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#class-1
volumeMode	String	volumeMode defines what type of volume is required by the claim. Value of Filesystem is implied when not included in claim spec.
volumeName	String	volumeName is the binding reference to the PersistentVolume backing this claim.

Table 5-1733 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1734 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1735 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Parameter	Type	Description
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1736 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimStatus

Parameter	Type	Description
accessModes	Array of strings	accessModes contains the actual access modes the volume backing the PVC has. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
allocatedResources	Map<String,String>	allocatedResources is the storage resource within AllocatedResources tracks the capacity allocated to a PVC. It may be larger than the actual capacity when a volume expansion operation is requested. For storage quota, the larger value from allocatedResources and PVC.spec.resources is used. If allocatedResources is not set, PVC.spec.resources alone is used for quota calculation. If a volume expansion capacity request is lowered, allocatedResources is only lowered if there are no expansion operations in progress and if the actual volume capacity is equal or lower than the requested capacity. This is an alpha field and requires enabling RecoverVolumeExpansionFailure feature.
capacity	Map<String,String>	capacity represents the actual resources of the underlying volume.

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimCondition objects	conditions is the current Condition of persistent volume claim. If underlying persistent volume is being resized then the Condition will be set to 'ResizeStarted'.
phase	String	phase represents the current phase of PersistentVolumeClaim. Possible enum values: • <i>"Bound"</i> used for PersistentVolumeClaims that are bound • <i>"Lost"</i> used for PersistentVolumeClaims that lost their underlying PersistentVolume. The claim was bound to a PersistentVolume and this volume does not exist any longer and all data on it was lost. • <i>"Pending"</i> used for PersistentVolumeClaims that are not yet bound
resizeStatus	String	resizeStatus stores status of resize operation. ResizeStatus is not set by default but when expansion is complete resizeStatus is set to empty string by resize controller or kubelet. This is an alpha field and requires enabling RecoverVolumeExpansionFailure feature.

Table 5-1737 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimCondition

Parameter	Type	Description
lastProbeTime	String	lastProbeTime is the time we probed the condition.
lastTransitionTime	String	lastTransitionTime is the time the condition transitioned from one status to another.
message	String	message is the human-readable message indicating details about last transition.

Parameter	Type	Description
reason	String	reason is a unique, this should be a short, machine understandable string that gives the reason for condition's last transition. If it reports "ResizeStarted" that means the underlying persistent volume is being resized.
status	String	
type	String	

Status code: 202

Table 5-1738 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimSpec object	spec defines the desired characteristics of a volume requested by a pod author. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
status	io.cci.api.pkg.apis. .versioned.cci.v2. PersistentVolume ClaimStatus object	status represents the current information/status of a persistent volume claim. Read-only. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Table 5-1739 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1740 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1741 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimSpec

Parameter	Type	Description
accessModes	Array of strings	accessModes contains the desired access modes the volume should have. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
resources	io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements object	resources represents the minimum resources the volume should have. If RecoverVolumeExpansionFailure feature is enabled users are allowed to specify resource requirements that are lower than previous value but must still be higher than capacity recorded in the status field of the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#resources
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	selector is a label query over volumes to consider for binding.
storageClassName	String	storageClassName is the name of the StorageClass required by the claim. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#class-1
volumeMode	String	volumeMode defines what type of volume is required by the claim. Value of Filesystem is implied when not included in claim spec.
volumeName	String	volumeName is the binding reference to the PersistentVolume backing this claim.

Table 5-1742 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String>	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1743 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1744 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.

Parameter	Type	Description
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1745 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimStatus

Parameter	Type	Description
accessModes	Array of strings	accessModes contains the actual access modes the volume backing the PVC has. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#access-modes-1
allocatedResources	Map<String,String>	allocatedResources is the storage resource within AllocatedResources tracks the capacity allocated to a PVC. It may be larger than the actual capacity when a volume expansion operation is requested. For storage quota, the larger value from allocatedResources and PVC.spec.resources is used. If allocatedResources is not set, PVC.spec.resources alone is used for quota calculation. If a volume expansion capacity request is lowered, allocatedResources is only lowered if there are no expansion operations in progress and if the actual volume capacity is equal or lower than the requested capacity. This is an alpha field and requires enabling RecoverVolumeExpansionFailure feature.
capacity	Map<String,String>	capacity represents the actual resources of the underlying volume.

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimCondition objects	conditions is the current Condition of persistent volume claim. If underlying persistent volume is being resized then the Condition will be set to 'ResizeStarted'.
phase	String	phase represents the current phase of PersistentVolumeClaim. Possible enum values: • <i>"Bound"</i> used for PersistentVolumeClaims that are bound • <i>"Lost"</i> used for PersistentVolumeClaims that lost their underlying PersistentVolume. The claim was bound to a PersistentVolume and this volume does not exist any longer and all data on it was lost. • <i>"Pending"</i> used for PersistentVolumeClaims that are not yet bound
resizeStatus	String	resizeStatus stores status of resize operation. ResizeStatus is not set by default but when expansion is complete resizeStatus is set to empty string by resize controller or kubelet. This is an alpha field and requires enabling RecoverVolumeExpansionFailure feature.

Table 5-1746 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimCondition

Parameter	Type	Description
lastProbeTime	String	lastProbeTime is the time we probed the condition.
lastTransitionTime	String	lastTransitionTime is the time the condition transitioned from one status to another.
message	String	message is the human-readable message indicating details about last transition.

Parameter	Type	Description
reason	String	reason is a unique, this should be a short, machine understandable string that gives the reason for condition's last transition. If it reports "ResizeStarted" that means the underlying persistent volume is being resized.
status	String	
type	String	

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "cci/v2",
  "kind": "PersistentVolumeClaim",
  "metadata": {
    "annotations": {
      "tenant.cci.io/tenant-id": "08a2c8ef8d80d4152ff8c001d0281c03",
      "volume.beta.kubernetes.io/storage-provisioner": "everest-csi-provisioner",
      "volume.kubernetes.io/storage-provisioner": "everest-csi-provisioner"
    },
    "creationTimestamp": "2025-03-15T07:03:53Z",
    "deletionGracePeriodSeconds": 0,
    "deletionTimestamp": "2025-03-15T07:05:52Z",
    "finalizers": [ "kubernetes.io/pvc-protection" ],
    "labels": {
      "sys_enterprise_project_id": "0",
      "tenant.cci.io/tenant-id": "08a2c8ef8d80d4152ff8c001d0281c03",
      "tenant.kubernetes.io/domain-id": "08a2c8ef8180d4150ff5c0012463ee60",
      "tenant.kubernetes.io/project-id": "08a2c8ef8d80d4152ff8c001d0281c03"
    }
  },
  "name": "test-pvc",
  "namespace": "auto-test-converged-namespaces",
  "resourceVersion": "457333833",
  "uid": "3bfc8ac8-f6af-477b-9975-a59e8948cf25"
},
{
  "spec": {
    "accessModes": [ "ReadWriteMany" ],
    "resources": {
      "requests": {
        "storage": "50Gi"
      }
    }
  },
  "storageClassName": "csi-sfsturbo",
  "volumeMode": "Filesystem"
},
{
  "status": {
    "phase": "Pending"
  }
}
```

```
}  
}
```

Status Codes

Status Code	Description
200	OK
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.9 ReplicaSet

5.9.1 Querying ReplicaSets in a Namespace

Function

This API is used to query the details about all ReplicaSets in a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces/{namespace}/replicasets

Table 5-1747 Path Parameters

Parameter	Mandatory	Type	Description
namespace	Yes	String	object name and auth scope, such as for teams and projects

Request Parameters

Table 5-1748 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-1749 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.ReplicaSet objects	List of ReplicaSets. More info: https://kubernetes.io/docs/concepts/workloads/controllers/replicationcontroller
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Table 5-1750 io.cci.api.pkg.apis.versioned.cci.v2.ReplicaSet

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	If the Labels of a ReplicaSet are empty, they are defaulted to be the same as the Pod(s) that the ReplicaSet manages. Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.ReplicaSetSpec object	Spec defines the specification of the desired behavior of the ReplicaSet. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.ReplicaSetStatus object	Status is the most recently observed status of the ReplicaSet. This data may be out of date by some window of time. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1751 io.cci.api.pkg.apis.versioned.cci.v2.ReplicaSetSpec

Parameter	Type	Description
minReadySeconds	Integer	Minimum number of seconds for which a newly created pod should be ready without any of its container crashing, for it to be considered available. Defaults to 0 (pod will be considered available as soon as it is ready)
replicas	Integer	Replicas is the number of desired replicas. This is a pointer to distinguish between explicit zero and unspecified. Defaults to 1. More info: https://kubernetes.io/docs/concepts/workloads/controllers/replicationcontroller/#what-is-a-replicationcontroller

Parameter	Type	Description
selector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	Selector is a label query over pods that should match the replica count. Label keys and values that must match in order to be controlled by this replica set. It must match the pod template's labels. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#label-selectors
template	io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec object	Template is the object that describes the pod that will be created if insufficient replicas are detected. More info: https://kubernetes.io/docs/concepts/workloads/controllers/replicationcontroller#pod-template

Table 5-1752 io.cci.api.pkg.apis.versioned.cci.v2.PodTemplateSpec

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.PodSpec object	Specification of the desired behavior of the pod. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1753 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations

Parameter	Type	Description
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1754 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1755 io.cci.api.pkg.apis.versioned.cci.v2.PodSpec

Parameter	Type	Description
activeDeadlineSeconds	Long	Optional duration in seconds the pod may be active on the node relative to StartTime before the system will actively try to mark it failed and kill associated containers. Value must be a positive integer.
affinity	io.cci.api.pkg.apis.versioned.cci.v2.Affinity object	If specified, the pod's scheduling constraints
containers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of containers belonging to the pod. Containers cannot currently be added or removed. There must be at least one container in a Pod. Cannot be updated.
dnsConfig	io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig object	Specifies the DNS parameters of a pod. Parameters specified here will be merged to the generated DNS configuration based on DNSPolicy. When DNSPolicy is 'None', DNSConfig must be provided.
dnsPolicy	String	Set DNS policy for the pod. Valid values are 'Default' or 'None'. DNS parameters given in DNSConfig will be merged with the policy selected with DNSPolicy. Possible enum values: • <i>"Default"</i> indicates that the pod should use the default (as determined by kubelet) DNS settings. • <i>"None"</i> indicates that the pod should use empty DNS settings. DNS parameters such as nameservers and search paths should be defined via DNSConfig.
extraEphemeralStorage	io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage object	By default, pods receive a minimum of 30GiB of ephemeral storage. The total amount of ephemeral storage can be increased. User can do this by specifying the extraEphemeralStorage parameter.

Parameter	Type	Description
hostAliases	Array of io.cci.api.pkg.apis.versioned.cci.v2.HostAlias objects	HostAliases is an optional list of hosts and IPs that will be injected into the pod's hosts file if specified. This is only valid for non-hostNetwork pods.
hostname	String	Specifies the hostname of the Pod If not specified, the pod's hostname will be set to a system-defined value. Generally, the DNS_LABEL definition in RFC 1123 must be met. In burst scenarios, the DNS_SUBDOMAIN definition with a maximum length of 63 characters must be met. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
imagePullSecrets	Array of io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference objects	ImagePullSecrets is an optional list of references to secrets in the same namespace to use for pulling any of the images used by this PodSpec. If specified, these secrets will be passed to individual puller implementations for them to use. More info: https://kubernetes.io/docs/concepts/containers/images#specifying-imagepullsecrets-on-a-pod

Parameter	Type	Description
initContainers	Array of io.cci.api.pkg.apis.versioned.cci.v2.Container objects	List of initialization containers belonging to the pod. Init containers are executed in order prior to containers being started. If any init container fails, the pod is considered to have failed and is handled according to its restartPolicy. The name for an init container or normal container must be unique among all containers. Init containers may not have Lifecycle actions, Readiness probes, Liveness probes, or Startup probes. The resourceRequirements of an init container are taken into account during scheduling by finding the highest request/limit for each resource type, and then using the max of that value or the sum of the normal containers. Limits are applied to init containers in a similar fashion. Init containers cannot currently be added or removed. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/init-containers/
restartPolicy	String	Restart policy for all containers within the pod. One of Always, OnFailure, Never. Default to Always. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle/#restart-policy Possible enum values: • <i>"Always"</i> • <i>"Never"</i> • <i>"OnFailure"</i>

Parameter	Type	Description
setHostnameAsFQDN	Boolean	If true the pod's hostname will be configured as the pod's FQDN, rather than the leaf name (the default). In Linux containers, this means setting the FQDN in the hostname field of the kernel (the nodename field of struct utsname). In Windows containers, this means setting the registry value of hostname for the registry key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters to FQDN. If a pod does not have FQDN, this has no effect. Default to false.
shareProcessNamespace	Boolean	Share a single process namespace between all of the containers in a pod. When this is set containers will be able to view and signal processes from other containers in the same pod, and the first process in each container will not be assigned PID 1. HostPID and ShareProcessNamespace cannot both be set. Optional: Default to false.
terminationGracePeriodSeconds	Long	Optional duration in seconds the pod needs to terminate gracefully. May be decreased in delete request. Value must be non-negative integer. The value zero indicates stop immediately via the kill signal (no opportunity to shut down). If this value is nil, the default grace period will be used instead. The grace period is the duration in seconds after the processes running in the pod are sent a termination signal and the time when the processes are forcibly halted with a kill signal. Set this value longer than the expected cleanup time for your process. Defaults to 30 seconds.

Parameter	Type	Description
volumes	Array of io.cci.api.pkg.apis.versioned.cci.v2.Volume objects	List of volumes that can be mounted by containers belonging to the pod. More info: https://kubernetes.io/docs/concepts/storage/volumes

Table 5-1756 io.cci.api.pkg.apis.versioned.cci.v2.Affinity

Parameter	Type	Description
nodeAffinity	io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity object	Describes node affinity scheduling rules for the pod.
podAntiAffinity	io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity object	Describes pod anti-affinity scheduling rules (e.g. avoid putting this pod in the same zone, etc. as some other pod(s)).

Table 5-1757 io.cci.api.pkg.apis.versioned.cci.v2.NodeAffinity

Parameter	Type	Description
requiredDuringSchedulingIgnoredDuringExecution	io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector object	If the affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to an update), the system may or may not try to eventually evict the pod from its node.

Table 5-1758 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelector

Parameter	Type	Description
nodeSelectorTerms	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm objects	Required. A list of node selector terms. The terms are ORed.

Table 5-1759 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorTerm

Parameter	Type	Description
matchExpressions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement objects	A list of node selector requirements by node's labels.

Table 5-1760 io.cci.api.pkg.apis.versioned.cci.v2.NodeSelectorRequirement

Parameter	Type	Description
key	String	The label key that the selector applies to. Only 'topology.kubernetes.io/zone', 'topology.kubernetes.io/region', 'failure-domain.beta.kubernetes.io/zone' and 'failure-domain.beta.kubernetes.io/region' are supported. If other keys are used, the affinity will be left empty
operator	String	Represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists, DoesNotExist. Gt, and Lt. Possible enum values: • <i>"DoesNotExist"</i> • <i>"Exists"</i> • <i>"Gt"</i> • <i>"In"</i> • <i>"Lt"</i> • <i>"NotIn"</i>
values	Array of strings	An array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. If the operator is Gt or Lt, the values array must have a single element, which will be interpreted as an integer. This array is replaced during a strategic merge patch.

Table 5-1761 io.cci.api.pkg.apis.versioned.cci.v2.PodAntiAffinity

Parameter	Type	Description
preferredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm objects	The scheduler will prefer to schedule pods to nodes that satisfy the anti-affinity expressions specified by this field, but it may choose a node that violates one or more of the expressions. The node that is most preferred is the one with the greatest sum of weights, i.e. for each node that meets all of the scheduling requirements (resource request, requiredDuringSchedulingIgnoredDuringExecution anti-affinity expressions, etc.), compute a sum by iterating through the elements of this field and adding "weight" to the sum if the node has pods which matches the corresponding podAffinityTerm; the node(s) with the highest sum are the most preferred.
requiredDuringSchedulingIgnoredDuringExecution	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm objects	If the anti-affinity requirements specified by this field are not met at scheduling time, the pod will not be scheduled onto the node. If the anti-affinity requirements specified by this field cease to be met at some point during pod execution (e.g. due to a pod label update), the system may or may not try to eventually evict the pod from its node. When there are multiple elements, the lists of nodes corresponding to each podAffinityTerm are intersected, i.e. all terms must be satisfied.

Table 5-1762 io.cci.api.pkg.apis.versioned.cci.v2.WeightedPodAffinityTerm

Parameter	Type	Description
podAffinityTerm	io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm object	Required. A pod affinity term, associated with the corresponding weight.
weight	Integer	weight associated with matching the corresponding podAffinityTerm, in the range 1-100.

Table 5-1763 io.cci.api.pkg.apis.versioned.cci.v2.PodAffinityTerm

Parameter	Type	Description
labelSelector	io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector object	A label query over a set of resources, in this case pods.
namespaces	Array of strings	namespaces specifies a static list of namespace names that the term applies to. The term is applied to the union of the namespaces listed in this field and the ones selected by namespaceSelector. null or empty namespaces list and null namespaceSelector means "this pod's namespace".
topologyKey	String	This pod should be co-located (affinity) or not co-located (anti-affinity) with the pods matching the labelSelector in the specified namespaces, where co-located is defined as running on a node whose value of the label with key topologyKey matches that of any node on which any of the selected pods is running. Empty topologyKey is not allowed.

Table 5-1764 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelector

Parameter	Type	Description
matchExpressions	Array of io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement objects	matchExpressions is a list of label selector requirements. The requirements are ANDed.
matchLabels	Map<String,String>	matchLabels is a map of {key,value} pairs. A single {key,value} in the matchLabels map is equivalent to an element of matchExpressions, whose key field is "key", the operator is "In", and the values array contains only "value". The requirements are ANDed.

Table 5-1765 io.k8s.apimachinery.pkg.apis.meta.v1.LabelSelectorRequirement

Parameter	Type	Description
key	String	key is the label key that the selector applies to.
operator	String	operator represents a key's relationship to a set of values. Valid operators are In, NotIn, Exists and DoesNotExist.
values	Array of strings	values is an array of string values. If the operator is In or NotIn, the values array must be non-empty. If the operator is Exists or DoesNotExist, the values array must be empty. This array is replaced during a strategic merge patch.

Table 5-1766 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfig

Parameter	Type	Description
nameservers	Array of strings	A list of DNS name server IP addresses and the max length of the list is 3. This will be appended to the base nameservers generated from DNSPolicy. Duplicated nameservers will be removed and total number of nameservers cannot exceed three, if exceeds, the extra part will be discarded and an event alarm will be reported.
options	Array of io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption objects	A list of DNS resolver options. This will be merged with the base options generated from DNSPolicy. Duplicated entries will be removed. Resolution options given in Options will override those that appear in the base DNSPolicy.
searches	Array of strings	A list of DNS search domains for host-name lookup. The max length of the list is 3. Unless ExpandDNSConfig is enabled, the max length is 32. This will be appended to the base search paths generated from DNSPolicy. Duplicated search paths will be removed.

Table 5-1767 io.cci.api.pkg.apis.versioned.cci.v2.PodDNSConfigOption

Parameter	Type	Description
name	String	Name is this DNS resolver option's name. Required.
value	String	Value is this DNS resolver option's value.

Table 5-1768 io.cci.api.pkg.apis.versioned.cci.v2.EphemeralStorage

Parameter	Type	Description
sizeInGiB	Integer	The size of the ephemeralStorage volume in gibibytes (GiB).

Table 5-1769 io.cci.api.pkg.apis.versioned.cci.v2.HostAlias

Parameter	Type	Description
hostnames	Array of strings	Hostnames for the above IP address.
ip	String	IP address of the host file entry.

Table 5-1770 io.cci.api.pkg.apis.versioned.cci.v2.LocalObjectReference

Parameter	Type	Description
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Table 5-1771 io.cci.api.pkg.apis.versioned.cci.v2.Container

Parameter	Type	Description
args	Array of strings	Arguments to the entrypoint. The container image's CMD is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell

Parameter	Type	Description
command	Array of strings	Entrypoint array. Not executed within a shell. The container image's ENTRYPOINT is used if this is not provided. Variable references \$(VAR_NAME) are expanded using the container's environment. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Cannot be updated. More info: https://kubernetes.io/docs/tasks/inject-data-application/define-command-argument-container/#running-a-command-in-a-shell
env	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvVar objects	List of environment variables to set in the container. Cannot be updated.
envFrom	Array of io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource objects	List of sources to populate environment variables in the container. One source can only selected configMapRef or secretRef. The keys defined within a source must be a C_IDENTIFIER. All invalid keys will be reported as an event when the container is starting. When a key exists in multiple sources, the value associated with the last source will take precedence. Values defined by an Env with a duplicate key will take precedence. Cannot be updated.

Parameter	Type	Description
image	String	Container image name. More info: https://kubernetes.io/docs/concepts/containers/images This field is optional to allow higher level config management to default or override container images in workload controllers like Deployments and StatefulSets.
lifecycle	io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle object	Actions that the management system should take in response to container lifecycle events. Cannot be updated.
livenessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container liveness. Container will be restarted if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
name	String	Name of the container specified as a DNS_LABEL. Each container in a pod must have a unique name (DNS_LABEL). Cannot be updated.
ports	Array of io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort objects	List of ports to expose from the container. Not specifying a port here DOES NOT prevent that port from being exposed. Any port which is listening on the default "0.0.0.0" address inside a container will be accessible from the network. Modifying this array with strategic merge patch may corrupt the data. For more information See https://github.com/kubernetes/kubernetes/issues/108255 . Cannot be updated.
readinessProbe	io.cci.api.pkg.apis.versioned.cci.v2.Probe object	Periodic probe of container service readiness. Container will be removed from service endpoints if the probe fails. Cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Parameter	Type	Description
resources	io.cci.api.pkg.apis. .versioned.cci.v2. ResourceRequirements object	Compute Resources required by this container. Cannot be updated. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/
startupProbe	io.cci.api.pkg.apis. .versioned.cci.v2. Probe object	StartupProbe indicates that the Pod has successfully initialized. If specified, no other probes are executed until this completes successfully. If this probe fails, the Pod will be restarted, just as if the livenessProbe failed. This can be used to provide different probe parameters at the beginning of a Pod's lifecycle, when it might take a long time to load data or warm a cache, than during steady-state operation. This cannot be updated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
stdin	Boolean	Whether this container should allocate a buffer for stdin in the container runtime. If this is not set, reads from stdin in the container will always result in EOF. Default is false.
terminationMessagePath	String	Optional: Path at which the file to which the container's termination message will be written is mounted into the container's filesystem. Message written is intended to be brief final status, such as an assertion failure message. Will be truncated by the node if greater than 4096 bytes. The total message length across all containers will be limited to 12kb. Defaults to /dev/termination-log. Cannot be updated.

Parameter	Type	Description
terminationMessagePolicy	String	Indicate how the termination message should be populated. File will use the contents of terminationMessagePath to populate the container status message on both success and failure. FallbackToLogsOnError will use the last chunk of container log output if the termination message file is empty and the container exited with an error. The log output is limited to 2048 bytes or 80 lines, whichever is smaller. Defaults to File. Cannot be updated. Possible enum values: • <i>"FallbackToLogsOnError"</i> will read the most recent contents of the container logs for the container status message when the container exits with an error and the terminationMessagePath has no contents. • <i>"File"</i> is the default behavior and will set the container status message to the contents of the container's terminationMessagePath when the container exits.
tty	Boolean	Whether this container should allocate a TTY for itself, also requires 'stdin' to be true. Default is false.
volumeMounts	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount objects	Pod volumes to mount into the container's filesystem. Cannot be updated.
workingDir	String	Container's working directory. If not specified, the container runtime's default will be used, which might be configured in the container image. Cannot be updated. Only absolute paths are supported

Table 5-1772 io.cci.api.pkg.apis.versioned.cci.v2.EnvVar

Parameter	Type	Description
name	String	Name of the environment variable. Must be a C_IDENTIFIER. If the name is duplicated, the later value will overwrite the earlier value. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
value	String	Variable references \$(VAR_NAME) are expanded using the previously defined environment variables in the container and any service environment variables. If a variable cannot be resolved, the reference in the input string will be unchanged. Double \$\$ are reduced to a single \$, which allows for escaping the \$(VAR_NAME) syntax: i.e. "\$\$(VAR_NAME)" will produce the string literal "\$ (VAR_NAME)". Escaped references will never be expanded, regardless of whether the variable exists or not. Defaults to "".
valueFrom	io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource object	Source for the environment variable's value. Select one from configMapKeyRef, secretKeyRef, fieldRef and resourceFieldRef. The env value may be rounded. Cannot be used if value is not empty.

Table 5-1773 io.cci.api.pkg.apis.versioned.cci.v2.EnvVarSource

Parameter	Type	Description
configMapKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector object	Selects a key of a ConfigMap.

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Selects a field of the pod: supports metadata.name, metadata.namespace, <i>metadata.labels['<KEY>']</i> , <i>metadata.annotations['<KEY>']</i> , spec.nodeName, spec.serviceAccountName, status.hostIP, status.podIP, status.podIPs.
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu, requests.memory) are currently supported.
secretKeyRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector object	Selects a key of a secret in the pod's namespace

Table 5-1774 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapKeySelector

Parameter	Type	Description
key	String	The key to select. A valid config key must consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap or its key must be defined

Table 5-1775 io.cci.api.pkg.apis.versioned.cci.v2.SecretKeySelector

Parameter	Type	Description
key	String	The key of the secret to select from. Must be a valid secret key which consist of alphanumeric characters, '-', '_' or '.', and length cannot exceed 253

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret or its key must be defined

Table 5-1776 io.cci.api.pkg.apis.versioned.cci.v2.EnvFromSource

Parameter	Type	Description
configMapRef	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource object	The ConfigMap to select from
prefix	String	An optional identifier to prepend to each key in the ConfigMap or Secret. Must be a C_IDENTIFIER. A valid environment variable name must consist of alphabetic characters, digits, '_', '-', or '.', and must not start with a digit
secretRef	io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource object	The Secret to select from

Table 5-1777 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the ConfigMap must be defined

Table 5-1778 io.cci.api.pkg.apis.versioned.cci.v2.SecretEnvSource

Parameter	Type	Description
name	String	Name of the referent. Complies with the definition of DNS_SUBDOMAIN in RFC 1123. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	Specify whether the Secret must be defined

Table 5-1779 io.cci.api.pkg.apis.versioned.cci.v2.Lifecycle

Parameter	Type	Description
postStart	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PostStart is called immediately after a container is created. If the handler fails, the container is terminated and restarted according to its restart policy. Other management of the container blocks until the hook completes. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks
preStop	io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler object	PreStop is called immediately before a container is terminated due to an API request or management event such as liveness/startup probe failure, preemption, resource contention, etc. The handler is not called if the container crashes or exits. The Pod's termination grace period countdown begins before the PreStop hook is executed. Regardless of the outcome of the handler, the container will eventually terminate within the Pod's termination grace period (unless delayed by finalizers). Other management of the container blocks until the hook completes or until the termination grace period is reached. More info: https://kubernetes.io/docs/concepts/containers/container-lifecycle-hooks/#container-hooks

Table 5-1780 io.cci.api.pkg.apis.versioned.cci.v2.LifecycleHandler

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.

Table 5-1781 io.cci.api.pkg.apis.versioned.cci.v2.ContainerPort

Parameter	Type	Description
containerPort	Integer	Number of port to expose on the pod's IP address. This must be a valid port number, $0 < x < 65536$.
name	String	If specified, this must be an IANA_SVC_NAME and unique within the pod. Each named port in a pod must have a unique name. Name for the port that can be referred to by services. Complies with RFC 6335 standards. More info: https://github.com/kubernetes/design-proposals-archive/blob/main/architecture/identifiers.md
protocol	String	Protocol for port. Must be UDP, TCP, or SCTP. Defaults to "TCP". Possible enum values: • "SCTP" is the SCTP protocol. • "TCP" is the TCP protocol. • "UDP" is the UDP protocol.

Table 5-1782 io.cci.api.pkg.apis.versioned.cci.v2.ResourceRequirements

Parameter	Type	Description
limits	Map<String,String>	Limits describes the maximum amount of compute resources allowed. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Parameter	Type	Description
requests	Map<String,String >	Requests describes the minimum amount of compute resources required. If Requests is omitted for a container, it defaults to Limits if that is explicitly specified, otherwise to an implementation-defined value. More info: https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/

Table 5-1783 io.cci.api.pkg.apis.versioned.cci.v2.Probe

Parameter	Type	Description
exec	io.cci.api.pkg.apis.versioned.cci.v2.ExecAction object	Exec specifies the action to take.
failureThreshold	Integer	Minimum consecutive failures for the probe to be considered failed after having succeeded. Defaults to 3. Minimum value is 1.
httpGet	io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction object	HTTPGet specifies the http request to perform.
initialDelaySeconds	Integer	Number of seconds after the container has started before liveness probes are initiated. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes
periodSeconds	Integer	How often (in seconds) to perform the probe. Default to 10 seconds. Minimum value is 1.
successThreshold	Integer	Minimum consecutive successes for the probe to be considered successful after having failed. Defaults to 1. Must be 1 for liveness and startup. Minimum value is 1.
tcpSocket	io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction object	TCPSocket specifies an action involving a TCP port.

Parameter	Type	Description
timeoutSeconds	Integer	Number of seconds after which the probe times out. Defaults to 1 second. Minimum value is 1. More info: https://kubernetes.io/docs/concepts/workloads/pods/pod-lifecycle#container-probes

Table 5-1784 io.cci.api.pkg.apis.versioned.cci.v2.ExecAction

Parameter	Type	Description
command	Array of strings	Command is the command line to execute inside the container, the working directory for the command is root ('/') in the container's filesystem. The command is simply exec'd, it is not run inside a shell, so traditional shell instructions (' ', etc) won't work. To use a shell, you need to explicitly call out to that shell. Exit status of 0 is treated as live/healthy and non-zero is unhealthy.

Table 5-1785 io.cci.api.pkg.apis.versioned.cci.v2.HTTPGetAction

Parameter	Type	Description
host	String	Host name to connect to, defaults to the pod IP. You probably want to set "Host" in httpHeaders instead.
httpHeaders	Array of io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader objects	Custom headers to set in the request. HTTP allows repeated headers.
path	String	Path to access on the HTTP server.
port	String	Name or number of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Parameter	Type	Description
scheme	String	Scheme to use for connecting to the host. Defaults to HTTP. Possible enum values: • <i>"HTTP"</i> means that the scheme used will be http:// • <i>"HTTPS"</i> means that the scheme used will be https://

Table 5-1786 io.cci.api.pkg.apis.versioned.cci.v2.HTTPHeader

Parameter	Type	Description
name	String	The header field name
value	String	The header field value

Table 5-1787 io.cci.api.pkg.apis.versioned.cci.v2.TCPSocketAction

Parameter	Type	Description
host	String	Optional: Host name to connect to, defaults to the pod IP.
port	String	Number or name of the port to access on the container. Number must be in the range 1 to 65535. Name must be an IANA_SVC_NAME.

Table 5-1788 io.cci.api.pkg.apis.versioned.cci.v2.VolumeMount

Parameter	Type	Description
extendPathMode	String	Extend the volume path by appending the pod metadata to the path according to specified pattern. which provide a way of directory isolation and help prevent the writing conflict between different pods.
mountPath	String	Path within the container at which the volume should be mounted.
name	String	This must match the Name of a Volume.

Parameter	Type	Description
readOnly	Boolean	Mounted read-only if true, read-write otherwise (false or unspecified). Defaults to false.
subPath	String	Path within the volume from which the container's volume should be mounted. Defaults to "" (volume's root). Absolute paths cannot be used.
subPathExpr	String	Expanded path within the volume from which the container's volume should be mounted. Behaves similarly to SubPath but environment variable references \$(VAR_NAME) are expanded using the container's environment. Defaults to "" (volume's root). SubPathExpr and SubPath are mutually exclusive.

Table 5-1789 io.cci.api.pkg.apis.versioned.cci.v2.Volume

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource object	configMap represents a configMap that should populate this volume
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource object	downwardAPI represents downward API about the pod that should populate this volume
emptyDir	io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource object	emptyDir represents a temporary directory that shares a pod's lifetime. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
name	String	name of the volume. Must be a DNS_LABEL and unique within the pod. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names

Parameter	Type	Description
persistentVolumeClaim	io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource object	persistentVolumeClaimVolumeSource represents a reference to a PersistentVolumeClaim in the same namespace. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims
projected	io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource object	projected items for all in one resources secrets, configmaps, and downward API
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource object	secret represents a secret that should populate this volume. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1790 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1791 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeSource

Parameter	Type	Description
defaultMode	Integer	Optional: mode bits to use on created files by default. Must be a Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of downward API volume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be covered.

Table 5-1792 io.cci.api.pkg.apis.versioned.cci.v2.EmptyDirVolumeSource

Parameter	Type	Description
medium	String	medium represents what type of storage medium should back this directory. The default is "" which means to use the node's default medium. Must be an empty string (default) or Memory. More info: https://kubernetes.io/docs/concepts/storage/volumes#emptydir
sizeLimit	String	sizeLimit is the total amount of local storage required for this EmptyDir volume. The size limit is also applicable for memory medium. The maximum usage on memory medium EmptyDir would be the minimum value between the SizeLimit specified here and the sum of memory limits of all containers in a pod. The default is nil which means that the limit is undefined. It takes effect only when medium is memory. More info: https://kubernetes.io/docs/concepts/storage/volumes/#emptydir

Table 5-1793 io.cci.api.pkg.apis.versioned.cci.v2.PersistentVolumeClaimVolumeSource

Parameter	Type	Description
claimName	String	claimName is the name of a PersistentVolumeClaim in the same namespace as the pod using this volume. More info: https://kubernetes.io/docs/concepts/storage/persistent-volumes#persistentvolumeclaims

Parameter	Type	Description
readOnly	Boolean	readOnly Will force the ReadOnly setting in VolumeMounts. Default false.

Table 5-1794 io.cci.api.pkg.apis.versioned.cci.v2.ProjectedVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode are the mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
sources	Array of io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection objects	sources is the list of volume projections

Table 5-1795 io.cci.api.pkg.apis.versioned.cci.v2.VolumeProjection

Parameter	Type	Description
configMap	io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection object	configMap information about the configMap data to project
downwardAPI	io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection object	downwardAPI information about the downwardAPI data to project

Parameter	Type	Description
secret	io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection object	secret information about the secret data to project

Table 5-1796 io.cci.api.pkg.apis.versioned.cci.v2.ConfigMapProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced ConfigMap will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the ConfigMap, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional specify whether the ConfigMap or its keys must be defined

Table 5-1797 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile objects	Items is a list of DownwardAPIVolume file. Select one between resourceFieldRef and fieldRef to reference. Different references point to the same path will be rejected.

Table 5-1798 io.cci.api.pkg.apis.versioned.cci.v2.DownwardAPIVolumeFile

Parameter	Type	Description
fieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector object	Required: Selects a field of the pod: only annotations, labels, uid, name and namespace are supported.
mode	Integer	Optional: mode bits used to set permissions on this file, must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	Required: Path is the relative path name of the file to be created. Must not be absolute or contain the '..' path. Must be utf-8 encoded. The first item of the relative path must not start with '..'
resourceFieldRef	io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector object	Selects a resource of the container: only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1799 io.cci.api.pkg.apis.versioned.cci.v2.ObjectFieldSelector

Parameter	Type	Description
apiVersion	String	Version of the schema the FieldPath is written in terms of, defaults to "v1". Only "v1" is supported currently
fieldPath	String	Path of the field to select in the specified API version. Only annotations, labels, uid, name and namespace are supported.

Table 5-1800 io.cci.api.pkg.apis.versioned.cci.v2.ResourceFieldSelector

Parameter	Type	Description
containerName	String	Container name: required for volumes, optional for env vars
divisor	String	Specifies the output format of the exposed resources, defaults to "1". If divisor is set to zero or is not set, the configuration is displayed as zero, but actually still use the default "1". More info: https://kubernetes.io/docs/reference/kubernetes-api/common-definitions/quantity/#Quantity
resource	String	Required: resource to select, only resources limits and requests (limits.cpu, limits.memory, requests.cpu and requests.memory) are currently supported.

Table 5-1801 io.cci.api.pkg.apis.versioned.cci.v2.SecretProjection

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items if unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be rejected. Paths must be relative and may not contain the '..' path or start with '..'.
name	String	Name of the referent. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/names/#names
optional	Boolean	optional field specify whether the Secret or its key must be defined

Table 5-1802 io.cci.api.pkg.apis.versioned.cci.v2.SecretVolumeSource

Parameter	Type	Description
defaultMode	Integer	defaultMode is Optional: mode bits used to set permissions on created files by default. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. Defaults to 0644. Directories within the path are not affected by this setting. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath objects	items If unspecified, each key-value pair in the Data field of the referenced Secret will be projected into the volume as a file whose name is the key and content is the value. If specified, the listed keys will be projected into the specified paths, and unlisted keys will not be present. If a key is specified which is not present in the Secret, the volume setup will error unless it is marked optional. Different keys point to the same path will be covered. Paths must be relative and may not contain the '..' path or start with '..'.
optional	Boolean	optional field specify whether the Secret or its keys must be defined
secretName	String	secretName is the name of the secret in the pod's namespace to use. More info: https://kubernetes.io/docs/concepts/storage/volumes#secret

Table 5-1803 io.cci.api.pkg.apis.versioned.cci.v2.KeyToPath

Parameter	Type	Description
key	String	key is the key to project.

Parameter	Type	Description
mode	Integer	mode is Optional: mode bits used to set permissions on this file. Must be an octal value between 0000 and 0777 or a decimal value between 0 and 511. YAML accepts both octal and decimal values, JSON requires decimal values for mode bits. If not specified, the volume defaultMode will be used. This might be in conflict with other options that affect the file mode, like fsGroup, and the result can be other mode bits set.
path	String	path is the relative path of the file to map the key to. May not be an absolute path. May not contain the path element '..'. May not start with the string '..'.

Table 5-1804 io.cci.api.pkg.apis.versioned.cci.v2.ReplicaSetStatus

Parameter	Type	Description
availableReplicas	Integer	The number of available replicas (ready for at least minReadySeconds) for this replica set.
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.ReplicaSetCondition objects	Represents the latest available observations of a replica set's current state.
fullyLabeledReplicas	Integer	The number of pods that have labels matching the labels of the pod template of the replicaset.
observedGeneration	Long	ObservedGeneration reflects the generation of the most recently observed ReplicaSet.
readyReplicas	Integer	readyReplicas is the number of pods targeted by this ReplicaSet with a Ready Condition.

Parameter	Type	Description
replicas	Integer	Replicas is the most recently observed number of replicas. More info: https://kubernetes.io/docs/concepts/workloads/controllers/replicationcontroller/#what-is-a-replicationcontroller

Table 5-1805 io.cci.api.pkg.apis.versioned.cci.v2.ReplicaSetCondition

Parameter	Type	Description
lastTransitionTime	String	The last time the condition transitioned from one status to another.
message	String	A human readable message indicating details about the transition.
reason	String	The reason for the condition's last transition.
status	String	Status of the condition, one of True, False, Unknown.
type	String	Type of replica set condition.

Table 5-1806 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.

Parameter	Type	Description
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "v1",
  "items": [ {
    "apiVersion": "cci/v2",
    "kind": "ReplicaSet",
    "metadata": {
      "annotations": {
        "deployment.kubernetes.io/desired-replicas": "1",
        "deployment.kubernetes.io/max-replicas": "2",
        "deployment.kubernetes.io/revision": "1",
        "tenant.cci.io/tenant-id": "08a2c8ef8d80d4152ff8c001d0281c03"
      },
      "creationTimestamp": "2025-03-15T04:58:10Z",
      "generation": 1,
      "labels": {
        "app": "deploy-example",
        "cci.io/origin-template-hash": "5b95c8bb5",
        "pod-template-hash": "85987887d4"
      },
      "name": "test-85987887d4",
      "namespace": "auto-test-converged-namespace",
      "ownerReferences": [ {
        "apiVersion": "cci/v2",
        "blockOwnerDeletion": true,
        "controller": true,
        "kind": "Deployment",
        "name": "test",
        "uid": "e08bc8aa-8ea3-4a75-9370-0b0213368dc1"
      } ],
      "resourceVersion": "35689333",
      "uid": "29f8477c-c88e-4edd-9d98-3bd0ee5953f0"
    }
  } ]
}
```

```
},
"spec": {
  "replicas": 1,
  "selector": {
    "matchLabels": {
      "app": "deploy-example",
      "pod-template-hash": "85987887d4"
    }
  },
  "template": {
    "metadata": {
      "annotations": {
        "deployment.cci.io/pod-template-uid": "d71f5748-8804-44b3-9e6a-cf25f1d20561"
      },
      "creationTimestamp": null,
      "labels": {
        "app": "deploy-example",
        "cci.io/origin-template-hash": "5b95c8bb5",
        "pod-template-hash": "85987887d4"
      }
    },
    "spec": {
      "affinity": {
        "podAntiAffinity": {
          "preferredDuringSchedulingIgnoredDuringExecution": [ {
            "podAffinityTerm": {
              "labelSelector": {
                "matchExpressions": [ {
                  "key": "app",
                  "operator": "In",
                  "values": [ "deploy-example" ]
                } ],
                "matchLabels": {
                  "cci.io/origin-template-hash": "5b95c8bb5"
                }
              },
              "topologyKey": "topology.kubernetes.io/zone"
            }
          ]
        },
        "weight": 100
      }
    },
    "containers": [ {
      "image": "library/nginx:stable-alpine-perl",
      "name": "deploy-example",
      "resources": {
        "limits": {
          "cpu": "250m",
          "memory": "256Mi"
        },
        "requests": {
          "cpu": "250m",
          "memory": "256Mi"
        }
      },
      "terminationMessagePath": "/dev/termination-log",
      "terminationMessagePolicy": "File"
    } ],
    "dnsPolicy": "Default",
    "imagePullSecrets": [ {
      "name": "imagepull-secret"
    } ],
    "restartPolicy": "Always",
    "schedulerName": "default-scheduler",
    "securityContext": { },
    "terminationGracePeriodSeconds": 30
  }
},
},
```

```
"status" : {  
  "availableReplicas" : 1,  
  "fullyLabeledReplicas" : 1,  
  "observedGeneration" : 1,  
  "readyReplicas" : 1,  
  "replicas" : 1  
}  
}],  
"kind" : "List",  
"metadata" : {  
  "resourceVersion" : ""  
}  
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.10 Namespace

5.10.1 Querying All Namespaces

Function

This API is used to query the details about all namespaces.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces

Request Parameters

Table 5-1807 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-1808 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
items	Array of io.cci.api.pkg.apis.versioned.cci.v2.Namespace objects	Items is the list of Namespace objects in the list. More info: https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces/
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Table 5-1809 io.cci.api.pkg.apis.versioned.cci.v2.Namespace

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Parameter	Type	Description
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. Namespace does not support generateName, so metadata.name is required. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.NamespaceSpec object	Spec defines the behavior of the Namespace. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.NamespaceStatus object	Status describes the current status of a Namespace. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1810 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1811 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1812 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceSpec

Parameter	Type	Description
finalizers	Array of strings	Finalizers is an opaque list of values that must be empty to permanently remove object from storage. More info: https://kubernetes.io/docs/tasks/administer-cluster/namespaces/

Table 5-1813 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NamespaceCondition objects	Represents the latest available observations of a namespace's current state.
phase	String	Phase is the current lifecycle phase of the namespace. More info: https://kubernetes.io/docs/tasks/administer-cluster/namespaces/ Possible enum values: • <i>"Active"</i> means the namespace is available for use in the system • <i>"Terminating"</i> means the namespace is undergoing graceful termination

Table 5-1814 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceCondition

Parameter	Type	Description
lastTransitionTime	String	Time is a wrapper around time.Time which supports correct marshaling to YAML and JSON. Wrappers are provided for many of the factory methods that the time package offers.
message	String	
reason	String	
status	String	Status of the condition, one of True, False, Unknown.

Parameter	Type	Description
type	String	Type of namespace controller condition.

Table 5-1815 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.

Parameter	Type	Description
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

None

Example Responses

Status code: 200

OK

- Example 1

```
"v1"
```

- Example 2

```
[ {
  "apiVersion" : "cci/v2",
  "kind" : "Namespace",
  "metadata" : {
    "annotations" : {
      "tag.cci.io/tms-tags" : "",
      "tenant.cci.io/tenant-id" : "08a2*****c03",
      "tenant.kubernetes.io/domain-id" : "08a*****ee60",
      "tenant.kubernetes.io/domain-name" : "fake-user",
      "tenant.kubernetes.io/project-id" : "08a2*****c03",
      "tenant.kubernetes.io/project-name" : "region1",
      "volcano.sh/queue-name" : "v5-queue"
    },
    "creationTimestamp" : "2024-01-19T01:54:37Z",
    "labels" : {
      "kubernetes.io/metadata.name" : "test-namespace"
    },
    "name" : "test-namespace",
    "resourceVersion" : "244237486",
    "uid" : "6cfc5cc1-467c-4d16-a25b-c9ee756c2e69"
  },
  "spec" : {
    "finalizers" : [ "kubernetes" ]
  },
  "status" : {
    "phase" : "Active"
  }
} ]
```

- Example 3

```
"List"
```

- Example 4

```
{
  "resourceVersion" : ""
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType

Status Code	Description
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.10.2 Creating a Namespace

Function

This API is used to create a namespace.

A network must be created in a namespace to define the mapping between this network and a Virtual Private Cloud (VPC). For more information, see "Namespace and Network" (devg_na.xml).

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

POST /apis/cci/v2/namespaces

Request Parameters

Table 5-1816 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Table 5-1817 Request body parameters

Parameter	Mandatory	Type	Description
apiVersion	No	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	No	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds

Parameter	Mandatory	Type	Description
metadata	Yes	io.cci.api.pkg.apis.versioned.cci.v2.NamespaceCreateMeta object	Namespace standard object's metadata. Namespace does not support generateName. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	No	io.cci.api.pkg.apis.versioned.cci.v2.NamespaceSpec object	Spec defines the behavior of the Namespace. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1818 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceCreateMeta

Parameter	Mandatory	Type	Description
annotations	No	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
labels	No	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels

Parameter	Mandatory	Type	Description
name	Yes	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Table 5-1819 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceSpec

Parameter	Mandatory	Type	Description
finalizers	No	Array of strings	Finalizers is an opaque list of values that must be empty to permanently remove object from storage. More info: https://kubernetes.io/docs/tasks/administer-cluster/namespaces/

Response Parameters

Status code: 200

Table 5-1820 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. Namespace does not support generateName, so metadata.name is required. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.NamespaceSpec object	Spec defines the behavior of the Namespace. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.NamespaceStatus object	Status describes the current status of a Namespace. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1821 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations

Parameter	Type	Description
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1822 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1823 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceSpec

Parameter	Type	Description
finalizers	Array of strings	Finalizers is an opaque list of values that must be empty to permanently remove object from storage. More info: https://kubernetes.io/docs/tasks/administer-cluster/namespaces/

Table 5-1824 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NamespaceCondition objects	Represents the latest available observations of a namespace's current state.
phase	String	Phase is the current lifecycle phase of the namespace. More info: https://kubernetes.io/docs/tasks/administer-cluster/namespaces/ Possible enum values: • <i>"Active"</i> means the namespace is available for use in the system • <i>"Terminating"</i> means the namespace is undergoing graceful termination

Table 5-1825 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceCondition

Parameter	Type	Description
lastTransitionTime	String	Time is a wrapper around time.Time which supports correct marshaling to YAML and JSON. Wrappers are provided for many of the factory methods that the time package offers.
message	String	
reason	String	
status	String	Status of the condition, one of True, False, Unknown.

Parameter	Type	Description
type	String	Type of namespace controller condition.

Status code: 201

Table 5-1826 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. Namespace does not support generateName, so metadata.name is required. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.NamespaceSpec object	Spec defines the behavior of the Namespace. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.NamespaceStatus object	Status describes the current status of a Namespace. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1827 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1828 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1829 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceSpec

Parameter	Type	Description
finalizers	Array of strings	Finalizers is an opaque list of values that must be empty to permanently remove object from storage. More info: https://kubernetes.io/docs/tasks/administer-cluster/namespaces/

Table 5-1830 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NamespaceCondition objects	Represents the latest available observations of a namespace's current state.
phase	String	Phase is the current lifecycle phase of the namespace. More info: https://kubernetes.io/docs/tasks/administer-cluster/namespaces/ Possible enum values: • <i>"Active"</i> means the namespace is available for use in the system • <i>"Terminating"</i> means the namespace is undergoing graceful termination

Table 5-1831 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceCondition

Parameter	Type	Description
lastTransitionTime	String	Time is a wrapper around time.Time which supports correct marshaling to YAML and JSON. Wrappers are provided for many of the factory methods that the time package offers.
message	String	
reason	String	
status	String	Status of the condition, one of True, False, Unknown.

Parameter	Type	Description
type	String	Type of namespace controller condition.

Status code: 202

Table 5-1832 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. Namespace does not support generateName, so metadata.name is required. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.NamespaceSpec object	Spec defines the behavior of the Namespace. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.NamespaceStatus object	Status describes the current status of a Namespace. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1833 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1834 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1835 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceSpec

Parameter	Type	Description
finalizers	Array of strings	Finalizers is an opaque list of values that must be empty to permanently remove object from storage. More info: https://kubernetes.io/docs/tasks/administer-cluster/namespaces/

Table 5-1836 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NamespaceCondition objects	Represents the latest available observations of a namespace's current state.
phase	String	Phase is the current lifecycle phase of the namespace. More info: https://kubernetes.io/docs/tasks/administer-cluster/namespaces/ Possible enum values: • <i>"Active"</i> means the namespace is available for use in the system • <i>"Terminating"</i> means the namespace is undergoing graceful termination

Table 5-1837 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceCondition

Parameter	Type	Description
lastTransitionTime	String	Time is a wrapper around time.Time which supports correct marshaling to YAML and JSON. Wrappers are provided for many of the factory methods that the time package offers.
message	String	
reason	String	
status	String	Status of the condition, one of True, False, Unknown.

Parameter	Type	Description
type	String	Type of namespace controller condition.

Example Requests

```
{
  "apiVersion": "cci/v2",
  "kind": "Namespace",
  "metadata": {
    "name": "test"
  }
}
```

Example Responses

Status code: 201

Created

```
{
  "apiVersion": "cci/v2",
  "kind": "Namespace",
  "metadata": {
    "annotations": {
      "tenant.cci.io/tenant-id": "08a2*****c03",
      "tenant.kubernetes.io/domain-id": "08a*****ee60",
      "tenant.kubernetes.io/domain-name": "fake-user",
      "tenant.kubernetes.io/project-id": "08a2*****c03",
      "tenant.kubernetes.io/project-name": "region1",
      "volcano.sh/queue-name": "v5-queue"
    },
    "creationTimestamp": "2024-10-09T11:41:54Z",
    "labels": {
      "kubernetes.io/metadata.name": "test"
    },
    "name": "test",
    "resourceVersion": "391012875",
    "uid": "3c746853-0eed-4d16-b634-970e49efe97c"
  },
  "spec": {
    "finalizers": [ "kubernetes" ]
  },
  "status": {
    "phase": "Active"
  }
}
```

Status Codes

Status Code	Description
200	OK
201	Created
202	Accepted
400	BadRequest

Status Code	Description
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	AlreadyExists
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.10.3 Deleting a Namespace

Function

This API is used to delete a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

DELETE /apis/cci/v2/namespaces/{name}

Table 5-1838 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Namespace

Request Parameters

Table 5-1839 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .
Content-Type	Yes	String	Message body type (format). The default value is application/json .

Response Parameters

Status code: 200

Table 5-1840 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
code	Integer	Suggested HTTP return code for this status, 0 if not set.

Parameter	Type	Description
details	io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails object	Extended data associated with the reason. Each reason may define its own extended details. This field is optional and the data returned is not guaranteed to conform to any schema except that defined by the reason type.
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
message	String	A human-readable description of the status of this operation.
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
reason	String	A machine-readable description of why this operation is in the "Failure" status. If this value is empty there is no information available. A Reason clarifies an HTTP status code but does not override it.
status	String	Status of the operation. One of: "Success" or "Failure". More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1841 io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails

Parameter	Type	Description
causes	Array of io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause objects	The Causes array includes more details associated with the StatusReason failure. Not all StatusReasons may provide detailed causes.

Parameter	Type	Description
group	String	The group attribute of the resource associated with the status StatusReason.
kind	String	The kind attribute of the resource associated with the status StatusReason. On some operations may differ from the requested resource Kind. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	The name attribute of the resource associated with the status StatusReason (when there is a single name which can be described).
retryAfterSeconds	Integer	If specified, the time in seconds before the operation should be retried. Some errors may indicate the client must take an alternate action for those errors this field may indicate how long to wait before taking the alternate action.
uid	String	UID of the resource. (when there is a single resource which can be described). More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1842 io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause

Parameter	Type	Description
field	String	The field of the resource that has caused this error, as named by its JSON serialization. May include dot and postfix notation for nested attributes. Arrays are zero-indexed. Fields may appear more than once in an array of causes due to fields having multiple errors. Optional. Examples: "name" - the field "name" on the current resource "items[0].name" - the field "name" on the first array entry in "items"
message	String	A human-readable description of the cause of the error. This field may be presented as-is to a reader.
reason	String	A machine-readable description of the cause of the error. If this value is empty there is no information available.

Table 5-1843 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.

Parameter	Type	Description
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Status code: 202**Table 5-1844** Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
code	Integer	Suggested HTTP return code for this status, 0 if not set.
details	io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails object	Extended data associated with the reason. Each reason may define its own extended details. This field is optional and the data returned is not guaranteed to conform to any schema except that defined by the reason type.

Parameter	Type	Description
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
message	String	A human-readable description of the status of this operation.
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta object	Standard list metadata. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
reason	String	A machine-readable description of why this operation is in the "Failure" status. If this value is empty there is no information available. A Reason clarifies an HTTP status code but does not override it.
status	String	Status of the operation. One of: "Success" or "Failure". More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1845 io.k8s.apimachinery.pkg.apis.meta.v1.StatusDetails

Parameter	Type	Description
causes	Array of io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause objects	The Causes array includes more details associated with the StatusReason failure. Not all StatusReasons may provide detailed causes.
group	String	The group attribute of the resource associated with the status StatusReason.

Parameter	Type	Description
kind	String	The kind attribute of the resource associated with the status Reason. On some operations may differ from the requested resource Kind. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	The name attribute of the resource associated with the status Reason (when there is a single name which can be described).
retryAfterSeconds	Integer	If specified, the time in seconds before the operation should be retried. Some errors may indicate the client must take an alternate action for those errors this field may indicate how long to wait before taking the alternate action.
uid	String	UID of the resource. (when there is a single resource which can be described). More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1846 io.k8s.apimachinery.pkg.apis.meta.v1.StatusCause

Parameter	Type	Description
field	String	The field of the resource that has caused this error, as named by its JSON serialization. May include dot and postfix notation for nested attributes. Arrays are zero-indexed. Fields may appear more than once in an array of causes due to fields having multiple errors. Optional. Examples: "name" - the field "name" on the current resource "items[0].name" - the field "name" on the first array entry in "items"

Parameter	Type	Description
message	String	A human-readable description of the cause of the error. This field may be presented as-is to a reader.
reason	String	A machine-readable description of the cause of the error. If this value is empty there is no information available.

Table 5-1847 io.k8s.apimachinery.pkg.apis.meta.v1.ListMeta

Parameter	Type	Description
continue	String	continue may be set if the user set a limit on the number of items returned, and indicates that the server has more data available. The value is opaque and may be used to issue another request to the endpoint that served this list to retrieve the next set of available objects. Continuing a consistent list may not be possible if the server configuration has changed or more than a few minutes have passed. The resourceVersion field returned when using this continue value will be identical to the value in the first response, unless you have received this token from an error message.

Parameter	Type	Description
remainingItemCount	Long	remainingItemCount is the number of subsequent items in the list which are not included in this list response. If the list request contained label or field selectors, then the number of remaining items is unknown and the field will be left unset and omitted during serialization. If the list is complete (either because it is not chunking or because this is the last chunk), then there are no more remaining items and this field will be left unset and omitted during serialization. Servers older than v1.15 do not set this field. The intended use of the remainingItemCount is <i>estimating</i> the size of a collection. Clients should not rely on the remainingItemCount to be set or to be exact.
resourceVersion	String	String that identifies the server's internal version of this object that can be used by clients to determine when objects have changed. Value must be treated as opaque by clients and passed unmodified back to the server. Populated by the system. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "cci/v2",
  "kind": "Namespace",
  "metadata": {
    "annotations": {
      "tenant.cci.io/tenant-id": "08a2*****c03",
      "tenant.kubernetes.io/domain-id": "08a*****ee60",
      "tenant.kubernetes.io/domain-name": "fake-user",
      "tenant.kubernetes.io/project-id": "08a2*****c03",
      "tenant.kubernetes.io/project-name": "region1",
      "volcano.sh/queue-name": "v5-queue"
    },
    "creationTimestamp": "2024-10-09T11:50:45Z",
    "deletionTimestamp": "2024-10-09T11:55:42Z",
    "labels": {
      "kubernetes.io/metadata.name": "test"
    },
    "name": "test",
    "resourceVersion": "391017723",
    "uid": "5a8f7966-70cb-41c6-bec7-46f37eda4973"
  },
  "spec": {
    "finalizers": [ "kubernetes" ]
  },
  "status": {
    "phase": "Terminating"
  }
}
```

Status Codes

Status Code	Description
200	OK
202	Accepted
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

5.10.4 Querying a Namespace

Function

This API is used to query the details about a namespace.

Calling Method

For details, see [Calling APIs](#).

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see [Permissions Policies and Supported Actions](#) for details on the required permissions.
- If you are using identity policy-based authorization, no identity policy-based permission required for calling this API.

URI

GET /apis/cci/v2/namespaces/{name}

Table 5-1848 Path Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	name of the Namespace

Request Parameters

Table 5-1849 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or an AK/SK pair. If token authentication is used, this parameter is mandatory and must be set to a user token. For details, see Authentication .

Response Parameters

Status code: 200

Table 5-1850 Response body parameters

Parameter	Type	Description
apiVersion	String	APIVersion defines the versioned schema of this representation of an object. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources
kind	String	Kind is a string value representing the REST resource this object represents. Servers may infer this from the endpoint the client submits requests to. Cannot be updated. In CamelCase. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
metadata	io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta object	Standard object's metadata. Namespace does not support generateName, so metadata.name is required. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
spec	io.cci.api.pkg.apis.versioned.cci.v2.NamespaceSpec object	Spec defines the behavior of the Namespace. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status
status	io.cci.api.pkg.apis.versioned.cci.v2.NamespaceStatus object	Status describes the current status of a Namespace. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#spec-and-status

Table 5-1851 io.k8s.apimachinery.pkg.apis.meta.v1.ObjectMeta

Parameter	Type	Description
annotations	Map<String,String>	Annotations is an unstructured key value map stored with a resource that may be set by external tools to store and retrieve arbitrary metadata. They are not queryable and should be preserved when modifying objects. More info: http://kubernetes.io/docs/user-guide/annotations
creationTimestamp	String	CreationTimestamp is a timestamp representing the server time when this object was created. It is not guaranteed to be set in happens-before order across separate operations. Clients may not set this value. It is represented in RFC3339 form and is in UTC. Populated by the system. Read-only. Null for lists. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata
deletionGracePeriodSeconds	Long	Number of seconds allowed for this object to gracefully terminate before it will be removed from the system. Only set when deletionTimestamp is also set. May only be shortened. Read-only.

Parameter	Type	Description
deletionTimestamp	String	DeletionTimestamp is RFC 3339 date and time at which this resource will be deleted. This field is set by the server when a graceful deletion is requested by the user, and is not directly settable by a client. The resource is expected to be deleted (no longer visible from resource lists, and not reachable by name) after the time in this field, once the finalizers list is empty. As long as the finalizers list contains items, deletion is blocked. Once the deletionTimestamp is set, this value may not be unset or be set further into the future, although it may be shortened or the resource may be deleted prior to this time. For example, a user may request that a pod is deleted in 30 seconds. The Kubelet will react by sending a graceful termination signal to the containers in the pod. After that 30 seconds, the Kubelet will send a hard termination signal (SIGKILL) to the container and after cleanup, remove the pod from the API. In the presence of network partitions, this object may still exist after this timestamp, until an administrator or automated process can determine the resource is fully terminated. If not set, graceful deletion of the object has not been requested. Populated by the system when a graceful deletion is requested. Read-only. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#metadata

Parameter	Type	Description
finalizers	Array of strings	Must be empty before the object is deleted from the registry. Each entry is an identifier for the responsible component that will remove the entry from the list. If the deletionTimestamp of the object is non-nil, entries in this list can only be removed. Finalizers may be processed and removed in any order. Order is NOT enforced because it introduces significant risk of stuck finalizers. finalizers is a shared field, any actor with permission can reorder it. If the finalizer list is processed in order, then this can lead to a situation in which the component responsible for the first finalizer in the list is waiting for a signal (field value, external system, or other) produced by a component responsible for a finalizer later in the list, resulting in a deadlock. Without enforced ordering finalizers are free to order amongst themselves and are not vulnerable to ordering changes in the list.

Parameter	Type	Description
generateName	String	GenerateName is an optional prefix, used by the server, to generate a unique name ONLY IF the Name field has not been provided. If this field is used, the name returned to the client will be different than the name passed. This value will also be combined with a unique suffix. The provided value has the same validation rules as the Name field, and may be truncated by the length of the suffix required to make the value unique on the server. If this field is specified and the generated name exists, the server will return a 409. Applied only if Name is not specified. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#idempotency
generation	Long	A sequence number representing a specific generation of the desired state. Populated by the system. Read-only.
labels	Map<String,String>	Map of string keys and values that can be used to organize and categorize (scope and select) objects. May match selectors of replication controllers and services. More info: http://kubernetes.io/docs/user-guide/labels
name	String	Name must be unique within a namespace. Is required when creating resources, although some resources may allow a client to request the generation of an appropriate name automatically. Name is primarily intended for creation idempotence and configuration definition. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/identifiers#names

Parameter	Type	Description
namespace	String	Namespace defines the space within which each name must be unique. An empty namespace is equivalent to the "default" namespace, but "default" is the canonical representation. Not all objects are required to be scoped to a namespace - the value of this field for those objects will be empty. Must be a DNS_LABEL. Cannot be updated. More info: http://kubernetes.io/docs/user-guide/namespaces
ownerReferences	Array of io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference objects	List of objects depended by this object. If ALL objects in the list have been deleted, this object will be garbage collected. If this object is managed by a controller, then an entry in this list will point to this controller, with the controller field set to true. There cannot be more than one managing controller.
resourceVersion	String	An opaque value that represents the internal version of this object that can be used by clients to determine when objects have changed. May be used for optimistic concurrency, change detection, and the watch operation on a resource or set of resources. Clients must treat these values as opaque and passed unmodified back to the server. They may only be valid for a particular resource or set of resources. Populated by the system. Read-only. Value must be treated as opaque by clients and . More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#concurrency-control-and-consistency
selfLink	String	Deprecated: selfLink is a legacy read-only field that is no longer populated by the system.

Parameter	Type	Description
uid	String	UID is the unique in time and space value for this object. It is typically generated by the server on successful creation of a resource and is not allowed to change on PUT operations. Populated by the system. Read-only. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1852 io.k8s.apimachinery.pkg.apis.meta.v1.OwnerReference

Parameter	Type	Description
apiVersion	String	API version of the referent.
blockOwnerDeletion	Boolean	If true, AND if the owner has the "foregroundDeletion" finalizer, then the owner cannot be deleted from the key-value store until this reference is removed. See https://kubernetes.io/docs/concepts/architecture/garbage-collection/#foreground-deletion for how the garbage collector interacts with this field and enforces the foreground deletion. Defaults to false. To set this field, a user needs "delete" permission of the owner, otherwise 422 (Unprocessable Entity) will be returned.
controller	Boolean	If true, this reference points to the managing controller.
kind	String	Kind of the referent. More info: https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds
name	String	Name of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#names
uid	String	UID of the referent. More info: http://kubernetes.io/docs/user-guide/identifiers#uids

Table 5-1853 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceSpec

Parameter	Type	Description
finalizers	Array of strings	Finalizers is an opaque list of values that must be empty to permanently remove object from storage. More info: https://kubernetes.io/docs/tasks/administer-cluster/namespaces/

Table 5-1854 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceStatus

Parameter	Type	Description
conditions	Array of io.cci.api.pkg.apis.versioned.cci.v2.NamespaceCondition objects	Represents the latest available observations of a namespace's current state.
phase	String	Phase is the current lifecycle phase of the namespace. More info: https://kubernetes.io/docs/tasks/administer-cluster/namespaces/ Possible enum values: • <i>"Active"</i> means the namespace is available for use in the system • <i>"Terminating"</i> means the namespace is undergoing graceful termination

Table 5-1855 io.cci.api.pkg.apis.versioned.cci.v2.NamespaceCondition

Parameter	Type	Description
lastTransitionTime	String	Time is a wrapper around time.Time which supports correct marshaling to YAML and JSON. Wrappers are provided for many of the factory methods that the time package offers.
message	String	
reason	String	
status	String	Status of the condition, one of True, False, Unknown.

Parameter	Type	Description
type	String	Type of namespace controller condition.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "apiVersion": "cci/v2",
  "kind": "Namespace",
  "metadata": {
    "annotations": {
      "tag.cci.io/tms-tags": "",
      "tenant.cci.io/tenant-id": "08a2*****c03",
      "tenant.kubernetes.io/domain-id": "08a*****ee60",
      "tenant.kubernetes.io/domain-name": "fake-user",
      "tenant.kubernetes.io/project-id": "08a2*****c03",
      "tenant.kubernetes.io/project-name": "region1",
      "volcano.sh/queue-name": "v5-queue"
    },
    "creationTimestamp": "2024-10-09T11:45:26Z",
    "labels": {
      "kubernetes.io/metadata.name": "test"
    },
    "name": "test",
    "resourceVersion": "391014484",
    "uid": "7ea9e4d0-2cf4-44cc-8938-f332d90bc665"
  },
  "spec": {
    "finalizers": [ "kubernetes" ]
  },
  "status": {
    "phase": "Active"
  }
}
```

Status Codes

Status Code	Description
200	OK
400	BadRequest
401	Unauthorized
403	Forbidden
404	NotFound

Status Code	Description
405	MethodNotAllowed
406	NotAcceptable
409	Conflict
415	UnsupportedMediaType
422	Invalid
429	TooManyRequests
500	InternalServerError
503	ServiceUnavailable
504	ServerTimeout

6 Permissions Policies and Supported Actions

6.1 Introduction

You can use Identity and Access Management (IAM) for fine-grained permissions management of your CCI resources. If your account does not need individual IAM users, you can skip this section.

With IAM, you can control access to specific resource using IAM users, user groups, IAM agencies. You can grant users permissions by using [roles](#) and [policies](#). Roles are provided by IAM to define service-based permissions that match users' job responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

IAM supports both role-based access control (RBAC) and attribute-based access control (ABAC).

RBAC is a role-based authorization model. By default, a new principal does not have any permissions. You need to assign a system-defined role, system-defined policy, or custom policy to the principal and select the authorization scope so that the principal can have the specified permissions.

ABAC is a policy-based authorization model, which offers more fine-grained, flexible access control. An administrator can tailor access control policies based on service requirements and then attach the policies to a principal so that the principal can have the specified permissions. The principal can then perform specific operations on cloud services based on the assigned permissions.

The following table describes the differences between these two authorization models.

Table 6-1 Differences between RBAC and ABAC

Parameter	Core Relationship	Permissions	Authorization Method	Scenario
RBAC	Roles	• System-defined roles • System-defined policies • Custom policies	Assigning roles or policies to principals	It offers a simple approach to access management but is not always flexible enough. For more granular permissions control, administrators need to constantly add more roles, which may lead to role explosion. This model can work well for small and medium-sized enterprises where there is not too much work involved in maintaining roles and permissions.
ABAC	Policies	• System-defined policies • Custom policies	• Granting policies to principals • Attaching policies to principals	It gives you more granular, more flexible control of your resources. There is no need to modify existing rules to accommodate new users. All administrators need to do is assign relevant attributes to the new users. However, this model can be hard to set up. It requires a certain amount of expertise and is suitable for medium- and large-sized enterprises.

Assume that you want to grant IAM users the permissions needed to create ECSs in CN North-Beijing4 and CCI pods in CN South-Guangzhou. With RBAC, the administrator needs to create two custom policies and assign both to the IAM users. With ABAC, the administrator only needs to create one custom policy, configure the condition key **g:RequestedRegion** for the policy, and then attach the policy to the users or grant the users the access permissions to the specified regions. ABAC is more flexible than RBAC.

Policies and actions in the two authorization models are not interoperable. You are advised to use the ABAC authorization model.

If you use IAM users in your account to call an API, the IAM users must be granted the required permissions. The required permissions are determined by the actions supported by the API. Only users with the policies allowing for those actions can call the API successfully.

Assume that an IAM user wants to call an API to query the CCI pod list. With policy-based authorization, the IAM user must be granted the permissions allowing for action **cci:pod:list**.

6.2 Supported Actions in RBAC

This section describes the actions supported by CCI in role-based access control (RBAC).

Supported Actions

CCI provides system-defined policies that can be directly used in IAM. You can also create custom policies and use them to supplement system-defined policies, implementing more refined access control. Operations supported by policies are specific to APIs. The following are common concepts related to policies:

- Permissions: statements that allow or deny certain operations in a policy
- APIs: REST APIs that can be called by a user who has been granted specific permissions
- Actions: specific operations that are allowed or denied
- Dependencies: actions which a specific action depends on. When allowing an action for a user, you also need to allow any existing action dependencies for that user.
- IAM projects or enterprise projects: the authorization scope of a custom policy. A custom policy can be applied to IAM projects or enterprise projects or both. Policies that contain actions for both IAM and enterprise projects can be used and applied for both IAM and Enterprise Management. Policies that contain actions only for IAM projects can be used and applied to IAM only. Administrators can check whether an action supports IAM projects or enterprise projects in the action list. For details about the differences between IAM and enterprise management, see [Differences Between IAM and Enterprise Management](#).

CCI supports the following actions in custom policies:

- Lifecycle management actions, such as the actions supported by the APIs for querying CCI namespace list, for querying the CCI pod list, for querying a CCI pod, for creating CCI pod, and for querying CCI pod logs
- ConfigMap management actions, such as the actions supported by the APIs for creating, deleting, modifying, creating, and deleting a ConfigMap or secret

Lifecycle Management Actions

Table 6-2 Lifecycle management actions

Permission	API	Action	IAM Project	Enterprise Project
Listing namespaces	GET /apis/cci/v2/namespaces	cci:namespace:list	√	√

Permission	API	Action	IAM Project	Enterprise Project
Creating a namespace	POST /apis/cce/v2/namespaces	cci:namespace:create	√	√
Querying a namespace	GET /apis/cce/v2/namespaces/{name}	cci:namespace:get	√	√
Deleting a namespace	DELETE /apis/cce/v2/namespaces/{name}	cci:namespace:delete	√	√
Listing ConfigMaps in a namespace	GET /apis/cce/v2/namespaces/{namespace}/configmaps	cci:configmap:list	√	√
Creating a ConfigMap	POST /apis/cce/v2/namespaces/{namespace}/configmaps	cci:configmap:create	√	√
Replacing a ConfigMap	PUT /apis/cce/v2/namespaces/{namespace}/configmaps/{name}	cci:configmap:update	√	√
Deleting a ConfigMap	DELETE /apis/cce/v2/namespaces/{namespace}/configmaps/{name}	cci:configmap:delete	√	√
Listing pods in a namespace	GET /apis/cce/v2/namespaces/{namespace}/pods	cci:pod:list	√	√
Creating a pod	POST /apis/cce/v2/namespaces/{namespace}/pods	cci:pod:create	√	√
Querying a pod	GET /apis/cce/v2/namespaces/{namespace}/pods/{name}	cci:pod:get	√	√
Deleting a pod	DELETE /apis/cce/v2/namespaces/{namespace}/pods/{name}	cci:pod:delete	√	√

Permission	API	Action	IAM Project	Enterprise Project
Listing secrets in a namespace	GET /apis/ccl/v2/namespaces/{namespace}/secrets	cci:secret:list	√	√
Creating a secret	POST /apis/ccl/v2/namespaces/{namespace}/secrets	cci:secret:create	√	√
Querying a secret	GET /apis/ccl/v2/namespaces/{namespace}/secrets/{name}	cci:secret:get	√	√
Replacing a secret	PUT /apis/ccl/v2/namespaces/{namespace}/secrets/{name}	cci:secret:update	√	√
Deleting a secret	DELETE /apis/ccl/v2/namespaces/{namespace}/secrets/{name}	cci:secret:delete	√	√
Listing networks in a namespace	GET /apis/yangtse/v2/namespaces/{namespace}/networks	cci:network:list	√	√
Creating a network	POST /apis/yangtse/v2/namespaces/{namespace}/networks	cci:network:create	√	√
Replacing a network	PUT /apis/yangtse/v2/namespaces/{namespace}/networks/{name}	cci:network:update	√	√
Running commands in a container	POST /apis/ccl/v2/namespaces/{namespace}/pods/{name}/exec	cci:pod:exec	√	√
Deleting a Persistent VolumeClaim	DELETE /apis/ccl/v2/namespaces/{namespace}/persistentvolumeclaims/{name}	cci:persistentvolumeclaim:delete	√	√

Permission	API	Action	IAM Project	Enterprise Project
Creating a Service	POST /apis/ccl/v2/namespaces/{namespace}/services	ccl:service:create	√	√
Replacing a Service	PUT /apis/ccl/v2/namespaces/{namespace}/services/{name}	ccl:service:update	√	√
Deleting a Service	DELETE /apis/ccl/v2/namespaces/{namespace}/services/{name}	ccl:service:delete	√	√
Listing Deployments in a namespace	GET /apis/ccl/v2/namespaces/{namespace}/deployments	ccl:deployment:list	√	√
Creating a Deployment	POST /apis/ccl/v2/namespaces/{namespace}/deployments	ccl:deployment:create	√	√
Querying a Deployment	GET /apis/ccl/v2/namespaces/{namespace}/deployments/{name}	ccl:deployment:get	√	√
Replacing a Deployment	PUT /apis/ccl/v2/namespaces/{namespace}/deployments/{name}	ccl:deployment:update	√	√
Deleting a Deployment	DELETE /apis/ccl/v2/namespaces/{namespace}/deployments/{name}	ccl:deployment:delete	√	√
Updating a Deployment	PATCH /apis/ccl/v2/namespaces/{namespace}/deployments/{name}	ccl:deployment:update	√	√
Listing Horizontal PodAutoscalers in a namespace	GET /apis/ccl/v2/namespaces/{namespace}/horizontalpodautoscalers	ccl:horizontalpodautoscaler:list	√	√

Permission	API	Action	IAM Project	Enterprise Project
Creating a Horizontal PodAutoscaler	POST /apis/cce/v2/namespaces/{namespace}/horizontalpodautoscalers	cci:horizontalpodautoscaler:create	√	√
Querying a Horizontal PodAutoscaler	GET /apis/cce/v2/namespaces/{namespace}/horizontalpodautoscalers/{name}	cci:horizontalpodautoscaler:get	√	√
Replacing a Horizontal PodAutoscaler	PUT /apis/cce/v2/namespaces/{namespace}/horizontalpodautoscalers/{name}	cci:horizontalpodautoscaler:update	√	√
Deleting a Horizontal PodAutoscaler	DELETE /apis/cce/v2/namespaces/{namespace}/horizontalpodautoscalers/{name}	cci:horizontalpodautoscaler:delete	√	√
Updating a Horizontal PodAutoscaler	PATCH /apis/cce/v2/namespaces/{namespace}/horizontalpodautoscalers/{name}	cci:horizontalpodautoscaler:update	√	√

6.3 Actions Supported by Identity Policy-based Authorization

IAM provides system-defined identity policies to define typical cloud service permissions. You can also create custom identity policies using the actions supported by cloud services for more refined access control.

In addition to IAM, the [Organizations](#) service also provides [Service Control Policies \(SCPs\)](#) to set access control policies.

SCPs do not actually grant any permissions to an entity. They only set the permissions boundary for the entity. When SCPs are attached to an organizational unit (OU) or a member account, the SCPs do not directly grant permissions to that OU or member account. Instead, the SCPs only determine what permissions are available for that member account or those member accounts under that OU. The granted permissions can be applied only if they are allowed by the SCPs.

To learn more about how IAM is different from Organizations for access control, see [How IAM Is Different from Organizations for Access Control?](#)

This section describes the elements used by IAM custom identity policies and Organizations SCPs. The elements include actions, resources, and conditions.

- For details about how to use these elements to edit an IAM custom identity policy, see [Creating a Custom Identity Policy](#).
- For details about how to use these elements to edit a custom SCP, see [Creating an SCP](#).

Actions

Actions are specific operations that are allowed or denied in an identity policy.

- The Access Level column describes how the action is classified (List, Read, or Write). This classification helps you understand the level of access that an action grants when you use it in an identity policy.
- The Resource Type column indicates whether the action supports resource-level permissions.
 - You can use a wildcard (*) to indicate all resource types. If this column is empty (-), the action does not support resource-level permissions and you must specify all resources ("*") in your identity policy statements.
 - If this column includes a resource type, you must specify the URN in the Resource element of your identity policy statements.
 - Required resources are marked with asterisks (*) in the table. If you specify a resource in a statement using this action, then it must be of this type.

For details about the resource types defined by CCI, see [Resources](#).

- The Condition Key column contains keys that you can specify in the Condition element of an identity policy statement.
 - If the Resource Type column has values for an action, the condition key takes effect only for the listed resource types.
 - If the Resource Type column is empty (-) for an action, the condition key takes effect for all resources that action supports.
 - If the Condition Key column is empty (-) for an action, the action does not support any condition keys.

For details about the condition keys defined by CCI, see [Conditions](#).

- The Alias column lists the policy actions that are configured in identity policies. With these actions, you can use APIs for policy-based authorization. For details, see [Policies and Identity Policies](#).

The following table lists the actions that you can define in identity policy statements for CCI.

Table 6-3 Actions supported by CCI

Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cci:namespace:list	Grants permission to query all namespaces.	List	namespace *	-	-
cci:namespace:create	Grants permission to create a namespace.	Write	namespace *	-	-
cci:namespace:get	Grants permission to query a namespace.	Read	namespace *	g:ResourceTag/<tag-key>	-
cci:namespace:delete	Grants permission to delete a namespace.	Write	namespace *	g:ResourceTag/<tag-key>	-
cci:network:list	Grants permission to query all networks.	List	network *	-	-
cci:network:create	Grants permission to create a network.	Write	network *	-	-
cci:network:get	Grants permission to query a network.	Read	network *	-	-
cci:network:delete	Grants permission to delete a network.	Write	network *	-	-
cci:network:update	Grants permission to update a network.	Write	network *	-	-

Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cci:configmap:list	Grants permission to query all ConfigMaps.	List	configmap *	-	-
cci:configmap:create	Grants permission to create a ConfigMap.	Write	configmap *	-	-
cci:configmap:get	Grants permission to query a ConfigMap.	Read	configmap *	-	-
cci:configmap:delete	Grants permission to delete a ConfigMap.	Write	configmap *	-	-
cci:configmap:update	Grants permission to update a ConfigMap.	Write	configmap *	-	-
cci:pod:list	Grants permission to query all pods.	List	pod *	-	-
cci:pod:create	Grants permission to create a pod.	Write	pod *	cci:AssociatePublicIp	-
cci:pod:get	Grants permission to query a pod.	Read	pod *	-	-
cci:pod:delete	Grants permission to delete a pod.	Write	pod *	-	-
cci:pod:update	Grants permission to update a pod.	Write	pod *	-	-

Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cci:pod:getLog	Grants permission to query pod logs.	Read	pod *	-	-
cci:pod:exec	Grants permission to run commands in the containers of a pod.	Write	pod *	cci:Container Name	-
cci:secret:list	Grants permission to query all secrets.	List	secret *	-	-
cci:secret:create	Grants permission to create a secret.	Write	secret *	-	-
cci:secret:get	Grants permission to query a secret.	Read	secret *	-	-
cci:secret:delete	Grants permission to delete a secret.	Write	secret *	-	-
cci:secret:update	Grants permission to update a secret.	Write	secret *	-	-
cci:persistentvolume:list	Grants permission to query all PersistentVolumes.	List	persistentvolume *	-	-
cci:persistentvolume:create	Grants permission to create a PersistentVolume.	Write	persistentvolume *	-	-

Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cci:persistentvolume:get	Grants permission to query a PersistentVolume.	Read	persistentvolume *	-	-
cci:persistentvolume:update	Grants permission to update a PersistentVolume.	Write	persistentvolume *	-	-
cci:persistentvolume:delete	Grants permission to delete a PersistentVolume.	Write	persistentvolume *	-	-
cci:persistentvolumeclaim:list	Grants permission to query all PersistentVolumeClaims.	List	persistentvolumeclaim *	-	-
cci:persistentvolumeclaim:create	Grants permission to create a PersistentVolumeClaim.	Write	persistentvolumeclaim *	-	-
cci:persistentvolumeclaim:get	Grants permission to query a PersistentVolumeClaim.	Read	persistentvolumeclaim *	-	-
cci:persistentvolumeclaim:update	Grants permission to update a PersistentVolumeClaim.	Write	persistentvolumeclaim *	-	-
cci:persistentvolumeclaim:delete	Grants permission to delete a PersistentVolumeClaim.	Write	persistentvolumeclaim *	-	-

Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cci:storageclasses:list	Grants permission to query all StorageClasses.	List	-	-	-
cci:deployments:list	Grants permission to query all Deployments.	List	deployment *	-	-
cci:deployments:create	Grants permission to create a Deployment.	Write	deployment *	cci:AssociatePublicIp	-
cci:deployments:get	Grants permission to query a Deployment.	Read	deployment *	-	-
cci:deployments:delete	Grants permission to delete a Deployment.	Write	deployment *	-	-
cci:deployments:update	Grants permission to update a Deployment.	Write	deployment *	cci:AssociatePublicIp	-
cci:services:list	Grants permission to query all Services.	List	service *	-	-
cci:services:create	Grants permission to create a Service.	Write	service *	-	-
cci:services:get	Grants permission to query a Service.	Read	service *	-	-

Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cci:service:delete	Grants permission to delete a Service.	Write	service *	-	-
cci:service:update	Grants permission to update a Service.	Write	service *	-	-
cci:horizontalpodautoscaler:list	Grants permission to query all HorizontalPod Autoscalers.	List	-	-	-
cci:horizontalpodautoscaler:create	Grants permission to create a HorizontalPod Autoscaler.	Write	-	-	-
cci:horizontalpodautoscaler:get	Grants permission to query a HorizontalPod Autoscaler.	Read	-	-	-
cci:horizontalpodautoscaler:delete	Grants permission to delete a HorizontalPod Autoscaler.	Write	-	-	-
cci:horizontalpodautoscaler:update	Grants permission to update a HorizontalPod Autoscaler.	Write	-	-	-
cci::updateobservabilityconfiguration	Grants permission to update the Observability Configuration.	Write	-	-	cci:observabilityconfiguration:update

Action	Description	Access Level	Resource Type (*: required)	Condition Key	Alias
cci::getobservabilityconfiguration	Grants permission to query the Observability Configuration.	Read	-	-	cci:observabilityconfiguration:get
cci:poolbinding:list	Grants permission to query all PoolBindings.	List	-	-	-
cci:poolbinding:create	Grants permission to create a PoolBinding.	Write	-	-	-
cci:poolbinding:get	Grants permission to query a PoolBinding.	Read	-	-	-
cci:poolbinding:delete	Grants permission to delete a PoolBinding.	Write	-	-	-

Each API of CCI usually supports one or more actions. [Table 6-4](#) lists the supported actions and dependencies.

Table 6-4 Actions and dependencies supported by CCI APIs

API	Action	Dependencies
GET /apis/ci/v2/namespaces	cci:namespace:list	-
POST /apis/ci/v2/namespaces	cci:namespace:create	-
GET /apis/ci/v2/namespaces/{name}	cci:namespace:get	-
DELETE /apis/ci/v2/namespaces/{name}	cci:namespace:delete	-

API	Action	Dependencies
GET /apis/ccl/v2/ namespaces/ {namespace}/ configmaps	ccl:configmap:list	-
POST /apis/ccl/v2/ namespaces/ {namespace}/ configmaps	ccl:configmap:create	-
GET /apis/ccl/v2/ namespaces/ {namespace}/ configmaps/{name}	ccl:configmap:get	-
PUT /apis/ccl/v2/ namespaces/ {namespace}/ configmaps/{name}	ccl:configmap:update	-
DELETE / apis/ccl/v2/ namespaces/ {namespace}/ configmaps/{name}	ccl:configmap:delete	-
GET /apis/ccl/v2/ namespaces/ {namespace}/pods	ccl:pod:list	-
POST /apis/ccl/v2/ namespaces/ {namespace}/pods	ccl:pod:create	-
GET /apis/ccl/v2/ namespaces/ {namespace}/pods/ {name}	ccl:pod:get	-
PUT /apis/ccl/v2/ namespaces/ {namespace}/pods/ {name}	ccl:pod:update	-
DELETE / apis/ccl/v2/ namespaces/ {namespace}/pods/ {name}	ccl:pod:delete	-

API	Action	Dependencies
PATCH /apis/cci/v2/namespaces/{namespace}/pods/{name}	cci:pod:update	-
GET /apis/cci/v2/namespaces/{namespace}/secrets	cci:secret:list	-
POST /apis/cci/v2/namespaces/{namespace}/secrets	cci:secret:create	-
GET /apis/cci/v2/namespaces/{namespace}/secrets/{name}	cci:secret:get	-
PUT /apis/cci/v2/namespaces/{namespace}/secrets/{name}	cci:secret:update	-
DELETE /apis/cci/v2/namespaces/{namespace}/secrets/{name}	cci:secret:delete	-
GET /apis/yangtse/v2/namespaces/{namespace}/networks	cci:network:list	-
POST /apis/yangtse/v2/namespaces/{namespace}/networks	cci:network:create	-
GET /apis/yangtse/v2/namespaces/{namespace}/networks/{name}	cci:network:get	-

API	Action	Dependencies
PUT /apis/ yangtse/v2/ namespaces/ {namespace}/ networks/{name}	cci:network:update	-
DELETE /apis/ yangtse/v2/ namespaces/ {namespace}/ networks/{name}	cci:network:delete	-
POST /apis/cci/v2/ namespaces/ {namespace}/pods/ {name}/exec	cci:pod:exec	-
GET /apis/cci/v2/ namespaces/ {namespace}/pods/ {name}/log	cci:pod:getLog	-
GET /apis/cci/v2/ persistentvolumes	cci:persistentvolume:list	-
POST /apis/cci/v2/ persistentvolumes	cci:persistentvolume:create	-
GET /apis/cci/v2/ persistentvolumes/ {name}	cci:persistentvolume:get	-
PUT /apis/cci/v2/ persistentvolumes/ {name}	cci:persistentvolume:update	-
DELETE / apis/cci/v2/ persistentvolumes/ {name}	cci:persistentvolume:delete	-
GET /apis/cci/v2/ namespaces/ {namespace}/ persistentvolume- claims	cci:persistentvolume- claim:list	-
POST /apis/cci/v2/ namespaces/ {namespace}/ persistentvolume- claims	cci:persistentvolume- claim:create	-

API	Action	Dependencies
GET /apis/csi/v2/ namespaces/ {namespace}/ persistentvolume- claims/{name}	csi:persistentvolume- claim:get	-
PUT /apis/csi/v2/ namespaces/ {namespace}/ persistentvolume- claims/{name}	csi:persistentvolume- claim:update	-
DELETE / apis/csi/v2/ namespaces/ {namespace}/ persistentvolume- claims/{name}	csi:persistentvolume- claim:delete	-
GET /apis/csi/v2/ storageclasses	csi:storageclass:list	-
GET /apis/csi/v2/ namespaces/ {namespace}/ services	csi:service:list	-
POST /apis/csi/v2/ namespaces/ {namespace}/ services	csi:service:create	-
GET /apis/csi/v2/ namespaces/ {namespace}/ services/{name}	csi:service:get	-
PUT /apis/csi/v2/ namespaces/ {namespace}/ services/{name}	csi:service:update	-
DELETE / apis/csi/v2/ namespaces/ {namespace}/ services/{name}	csi:service:delete	-
PATCH /apis/csi/v2/ namespaces/ {namespace}/ services/{name}	csi:service:update	-

API	Action	Dependencies
GET /apis/ci/v2/ namespaces/ {namespace}/ deployments	cci:deployment:list	-
POST /apis/ci/v2/ namespaces/ {namespace}/ deployments	cci:deployment:create	-
GET /apis/ci/v2/ namespaces/ {namespace}/ deployments/ {name}	cci:deployment:get	-
PUT /apis/ci/v2/ namespaces/ {namespace}/ deployments/ {name}	cci:deployment:update	-
DELETE / apis/ci/v2/ namespaces/ {namespace}/ deployments/ {name}	cci:deployment:delete	-
PATCH /apis/ci/v2/ namespaces/ {namespace}/ deployments/ {name}	cci:deployment:update	-
GET /apis/ci/v2/ namespaces/ {namespace}/ horizontalpodau- toscalsers	cci:horizontalpodautoscal- er:list	-
POST /apis/ci/v2/ namespaces/ {namespace}/ horizontalpodau- toscalsers	cci:horizontalpodautoscal- er:create	-
GET /apis/ci/v2/ namespaces/ {namespace}/ horizontalpodau- toscalsers/{name}	cci:horizontalpodautoscal- er:get	-

API	Action	Dependencies
PUT /apis/cci/v2/namespaces/{namespace}/horizontalpodautoscalers/{name}	cci:horizontalpodautoscaler:update	-
DELETE /apis/cci/v2/namespaces/{namespace}/horizontalpodautoscalers/{name}	cci:horizontalpodautoscaler:delete	-
PATCH /apis/cci/v2/namespaces/{namespace}/horizontalpodautoscalers/{name}	cci:horizontalpodautoscaler:update	-
PUT /v1/observabilityconfiguration	cci::updateobservabilityconfiguration	-
GET /v1/observabilityconfiguration	cci::getobservabilityconfiguration	-
GET /apis/loadbalancer.network.openvessel.io/v1/namespaces/{namespace}/poolbindings	cci:poolbinding:list	-
POST /apis/loadbalancer.network.openvessel.io/v1/namespaces/{namespace}/poolbindings	cci:poolbinding:create	-
GET /apis/loadbalancer.network.openvessel.io/v1/namespaces/{namespace}/poolbindings/{name}	cci:poolbinding:get	-

API	Action	Dependencies
DELETE /apis/ loadbalancer.networ king.openvessel.io/v 1/namespaces/ {namespace}/ poolbindings/ {name}	cci:poolbinding:delete	-

Resources

A resource type indicates the resources that an identity policy applies to. If you specify a resource type for any action in [Table 6-5](#), the resource URN must be specified in the identity policy statements using that action, and the identity policy applies only to resources of this type. If no resource type is specified, the Resource element is marked with an asterisk (*) and the identity policy applies to all resources. You can also set condition keys in an identity policy to define resource types.

The following table lists the resource types that you can define in identity policy statements for CCI.

Table 6-5 Resource types supported by CCI

Resource Type	URN
deployment	cci:<region>:<account-id>:deployment:<namespace-name>/<deployment-name>
secret	cci:<region>:<account-id>:secret:<namespace-name>/<secret-name>
namespace	cci:<region>:<account-id>:namespace:<namespace-name>
service	cci:<region>:<account-id>:service:<namespace-name>/<service-name>
network	cci:<region>:<account-id>:network:<namespace-name>/<network-name>
persistentvolume	cci:<region>:<account-id>:persistentvolume:<persistentvolume-name>
imagesnapshot	cci:<region>:<account-id>:imagesnapshot:<imagesnapshot-name>
configmap	cci:<region>:<account-id>:configmap:<namespace-name>/<configmap-name>
pod	cci:<region>:<account-id>:pod:<namespace-name>/<pod-name>

Resource Type	URN
persistentvolumeclaim	cci:<region>:<account-id>persistentvolume-claim:<namespace-name>/<persistentvolumeclaim-name>

Conditions

Condition Key Overview

A Condition element lets you specify conditions for when an identity policy is in effect. It contains [condition keys](#) and [operators](#).

- The condition key that you specify can be a global condition key or a service-specific condition key.
 - Global condition keys (with the g: prefix) apply to all actions. Cloud services do not need to provide user identity information. Instead, the system automatically obtains such information and authenticates users. For details, see [Global Condition Keys](#).
 - Service-specific condition keys (with the abbreviation of a service name plus a colon as the prefix, for example, cci) apply only to operations of the xx service. For details, see [Table 6-6](#).
 - The number of values associated with a condition key in the request context of an API call makes the condition key single-valued or multivalued. Single-valued condition keys have at most one value in the request context of an API call. Multivalued condition keys can have multiple values in the request context of an API call. For example, a request can originate from at most one VPC endpoint, so g:SourceVpce is a single-valued condition key. You can tag resources and include multiple tag key-value pairs in a request, so g:TagKeys is a multivalued condition key.
- A condition operator, condition key, and a condition value together constitute a complete condition statement. An identity policy can be applied only when its request conditions are met. For supported condition operators, see [operators](#).

Service-specific condition keys supported by CCI

The following table lists the condition keys that you can define in identity policies for CCI. You can include these condition keys to specify conditions for when your identity policy is in effect.

Table 6-6 Service-specific condition keys supported by CCI

Service-specific Condition Key	Type	Single-valued/ Multivalued	Description
cci:AssociatePublicIp	boolean	Single-valued	Filters access by the associate switch value for binding eip to pod.

Service-specific Condition Key	Type	Single-valued/ Multivalued	Description
cci:ContainerName	string	Single-valued	Filters access by the container name for execute command in container.

7 Appendix

7.1 Patch Request Method Operation Description

Kubernetes APIs use the HTTP header "Content-Type" to distinguish between patch operations.

Operation Description

Currently, two types of patch request method operations are supported:

1. **Merge Patch, Content-Type: application/merge-patch+json**
According to RFC 7386, merge patch contains some description of a resource object (namely, JSON object). The JSON object is submitted to the server end, and merges with the current object of the server end (that is, replaces the list field of the current resource object) to form a new object.
2. **Strategic Merge Patch, Content-Type: application/strategic-merge-patch+json**
Strategic Merge Patch is used to add legal metadata to API objects, and uses new metadata to determine which list should be merged and which should not. The current metadata is used as the structure labels.

For more information about the difference between **Merge Patch** and **Strategic Merge Patch**, see [Patch Request Method Operation Examples](#).

7.2 Patch Request Method Operation Examples

This section provides examples of **Merge Patch** and **Strategic Merge Patch** method operations. The examples in this section are for reference only.

Operation Examples

The following is an example request for creating a deployment.

Example request

```
{  
  "apiVersion": "cci/v2",
```

```
"kind": "Deployment",
"metadata": {
  "annotations": {
    "description": ""
  },
  "labels": {},
  "name": "nginx"
},
"spec": {
  "replicas": 2,
  "selector": {
    "matchLabels": {
      "app": "nginx"
    }
  },
  "template": {
    "metadata": {
      "annotations": {
        "vm.cci.io/pod-size-specs": "2.00_4.0",
        "resource.cci.io/pod-size-specs": "2.00_4.0",
      },
      "labels": {
        "app": "nginx"
      }
    },
    "spec": {
      "containers": [
        {
          "image": "library/nginx:stable-alpine-perl",
          "name": "container-0",
          "resources": {
            "limits": {
              "cpu": "2000m",
              "memory": "4096Mi"
            },
            "requests": {
              "cpu": "2000m",
              "memory": "4096Mi"
            }
          },
          "command": [],
          "lifecycle": {}
        }
      ],
      "dnsPolicy": "",
      "imagePullSecrets": [
        {
          "name": "imagepull-secret"
        }
      ],
      "dnsConfig": {}
    },
    "minReadySeconds": 0,
    "strategy": {
      "type": "RollingUpdate",
      "rollingUpdate": {
        "maxSurge": 0,
        "maxUnavailable": 1
      }
    }
  }
}
```

Example response

```
{
  "kind": "Deployment",
  "apiVersion": "cci/v2",
  "metadata": {
```

```
"name": "nginx",
"namespace": "zsqwload2",
"uid": "xxxxxxxx-xxxx-xxxx-xxxxxxxxxxxx",
"resourceVersion": "1080724",
"generation": 1,
"creationTimestamp": "2024-04-30T08:48:10Z",
"managedFields": []
},
"spec": {
  "replicas": 2,
  "selector": {
    "matchLabels": {
      "app": "nginx"
    }
  },
  "template": {
    "metadata": {
      "creationTimestamp": null,
      "labels": {
        "app": "nginx"
      },
      "annotations": {
        "deployment.cci.io/pod-template-uid": "xxxxxxxx-xxxx-xxxx-xxxxxxxxxxxx",
        "resource.cci.io/pod-size-specs": "2.00_4.0",
        "vm.cci.io/pod-size-specs": "2.00_4.0"
      }
    },
    "spec": {
      "containers": [
        {
          "name": "container-0",
          "image": "library/nginx:stable-alpine-perl",
          "resources": {
            "limits": {
              "cpu": "2",
              "memory": "4Gi"
            },
            "requests": {
              "cpu": "2",
              "memory": "4Gi"
            }
          },
          "lifecycle": {},
          "terminationMessagePath": "/dev/termination-log",
          "terminationMessagePolicy": "File"
        }
      ],
      "restartPolicy": "Always",
      "terminationGracePeriodSeconds": 30,
      "dnsPolicy": "Default",
      "securityContext": {},
      "imagePullSecrets": [
        {
          "name": "imagepull-secret"
        }
      ],
      "schedulerName": "default-scheduler",
      "dnsConfig": {}
    }
  },
  "strategy": {
    "type": "RollingUpdate",
    "rollingUpdate": {
      "maxUnavailable": 1,
      "maxSurge": 0
    }
  },
  "progressDeadlineSeconds": 600
},
```



```
"status": {}  
}
```

- If you use **Merge Patch** to add a container to the **template** field of a specified deployment, the list of existing containers is then replaced by the new container.

Merge Patch request

```
{  
  "spec": {  
    "template": {  
      "spec": {  
        "containers": [  
          {  
            "name": "hello-world",  
            "image": "busybox:latest"  
          }  
        ]  
      }  
    }  
  }  
}
```

Merge Patch response

```
{  
  "kind": "Deployment",  
  "apiVersion": "cci/v2",  
  "metadata": {  
    "name": "nginx",  
    "namespace": "zsqwklod2",  
    "uid": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",  
    "resourceVersion": "1080882",  
    "generation": 2,  
    "creationTimestamp": "2024-04-30T08:51:37Z",  
    "annotations": {  
      "deployment.kubernetes.io/revision": "1",  
      "description": "",  
      "tenant.cci.io/tenant-id": "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx"  
    },  
    "managedFields": []  
  },  
  "spec": {  
    "replicas": 2,  
    "selector": {  
      "matchLabels": {  
        "app": "nginx"  
      }  
    },  
    "template": {  
      "metadata": {  
        "creationTimestamp": null,  
        "labels": {  
          "app": "nginx"  
        }  
      },  
      "annotations": {  
        "deployment.cci.io/pod-template-uid": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",  
        "resource.cci.io/pod-size-specs": "2.00_4.0",  
        "vm.cci.io/pod-size-specs": "2.00_4.0"  
      }  
    },  
    "spec": {  
      "containers": [  
        {  
          "name": "hello-world",  
          "image": "busybox:latest",  
          "resources": {},  
          "terminationMessagePath": "/dev/termination-log",  
          "terminationMessagePolicy": "File"  
        }  
      ]  
    }  
  }  
}
```

```
    ],
    "restartPolicy": "Always",
    "terminationGracePeriodSeconds": 30,
    "dnsPolicy": "Default",
    "securityContext": {},
    "imagePullSecrets": [
      {
        "name": "imagepull-secret"
      }
    ],
    "schedulerName": "default-scheduler",
    "dnsConfig": {}
  }
},
"strategy": {
  "type": "RollingUpdate",
  "rollingUpdate": {
    "maxUnavailable": 1,
    "maxSurge": 0
  }
},
"progressDeadlineSeconds": 600
},
"status": {
  "observedGeneration": 1,
  "replicas": 2,
  "updatedReplicas": 2,
  "unavailableReplicas": 2,
  "conditions": [
    {
      "type": "Available",
      "status": "False",
      "lastUpdateTime": "2024-04-30T08:51:37Z",
      "lastTransitionTime": "2024-04-30T08:51:37Z",
      "reason": "MinimumReplicasUnavailable",
      "message": "Deployment does not have minimum availability."
    },
    {
      "type": "Progressing",
      "status": "True",
      "lastUpdateTime": "2024-04-30T08:51:37Z",
      "lastTransitionTime": "2024-04-30T08:51:37Z",
      "reason": "ReplicaSetUpdated",
      "message": "ReplicaSet \"nginx-78f5ff5dff\" is progressing."
    }
  ]
}
}
```

The **containers** list is replaced by the new container.

- If you use **Strategic Merge Patch** to add metadata to a resource object, the new metadata then determines which list should be merged and which should not.

Strategic Merge Patch request

```
{
  "spec": {
    "template": {
      "spec": {
        "containers": [
          {
            "name": "hello-world22",
            "image": "busybox:latest"
          }
        ]
      }
    }
  }
}
```

Strategic Merge Patch response

```
{
  "kind": "Deployment",
  "apiVersion": "cci/v2",
  "metadata": {
    "name": "nginx",
    "namespace": "zsqwkload2",
    "uid": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
    "resourceVersion": "1080952",
    "generation": 3,
    "creationTimestamp": "2024-04-30T08:51:37Z",
    "annotations": {
      "deployment.kubernetes.io/revision": "2",
      "description": "",
      "tenant.cci.io/tenant-id": "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx"
    },
    "managedFields": []
  },
  "spec": {
    "replicas": 2,
    "selector": {
      "matchLabels": {
        "app": "nginx"
      }
    },
    "template": {
      "metadata": {
        "creationTimestamp": null,
        "labels": {
          "app": "nginx"
        }
      },
      "annotations": {
        "deployment.cci.io/pod-template-uid": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
        "resource.cci.io/pod-size-specs": "2.00_4.0",
        "vm.cci.io/pod-size-specs": "2.00_4.0"
      }
    },
    "spec": {
      "containers": [
        {
          "name": "hello-world22",
          "image": "busybox:latest",
          "resources": {},
          "terminationMessagePath": "/dev/termination-log",
          "terminationMessagePolicy": "File"
        },
        {
          "name": "hello-world",
          "image": "busybox:latest",
          "resources": {},
          "terminationMessagePath": "/dev/termination-log",
          "terminationMessagePolicy": "File"
        }
      ],
      "restartPolicy": "Always",
      "terminationGracePeriodSeconds": 30,
      "dnsPolicy": "Default",
      "securityContext": {},
      "imagePullSecrets": [
        {
          "name": "imagepull-secret"
        }
      ],
      "schedulerName": "default-scheduler",
      "dnsConfig": {}
    }
  },
  "strategy": {
    "type": "RollingUpdate",
  }
```

```
"rollingUpdate": {
  "maxUnavailable": 1,
  "maxSurge": 0
},
"progressDeadlineSeconds": 600
},
"status": {
  "observedGeneration": 2,
  "replicas": 2,
  "updatedReplicas": 1,
  "readyReplicas": 1,
  "availableReplicas": 1,
  "unavailableReplicas": 1,
  "conditions": [
    {
      "type": "Available",
      "status": "True",
      "lastUpdateTime": "2024-04-30T08:52:57Z",
      "lastTransitionTime": "2024-04-30T08:52:57Z",
      "reason": "MinimumReplicasAvailable",
      "message": "Deployment has minimum availability."
    },
    {
      "type": "Progressing",
      "status": "True",
      "lastUpdateTime": "2024-04-30T08:52:57Z",
      "lastTransitionTime": "2024-04-30T08:51:37Z",
      "reason": "ReplicaSetUpdated",
      "message": "ReplicaSet \"nginx-5dc68ffd6d\" is progressing."
    }
  ]
}
```

The **containers** list merges with the new content according to the value of the **name** field.

7.3 Namespace and Network

A namespace provides a method of allocating resources among multiple users. It applies to scenarios where multiple teams or projects exist.

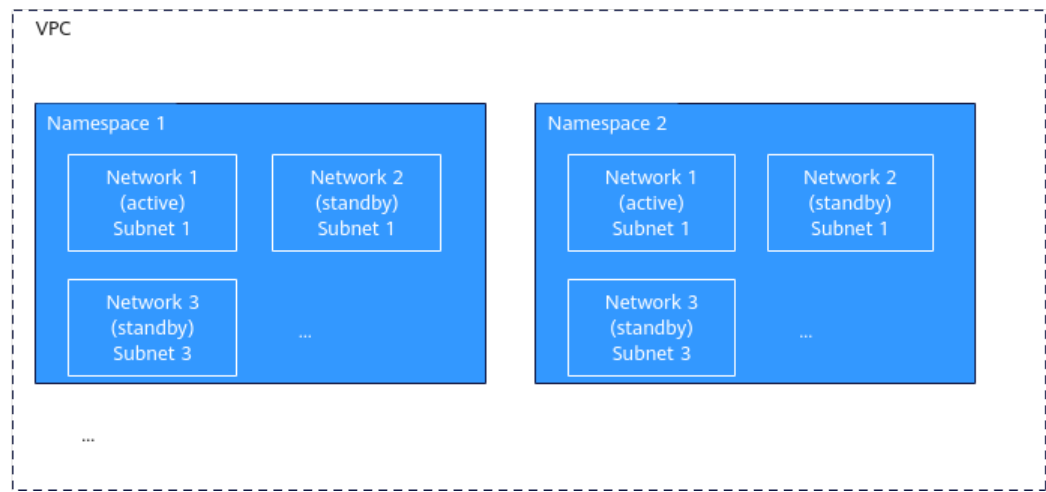
A network is a resource object extended for CCI. You can associate a network with a Virtual Private Cloud (VPC) and its subnets so that CCI can use network resources of the public cloud.

Relationship Between Namespaces and Networks

As shown in [Figure 7-1](#), when a namespace is created, the corresponding networks are created. In these networks, you can configure one or more subnets of a single VPC. Containers and other resources created in this namespace will run in the VPC and subnet you select.

If you want to run resources of multiple services in the same VPC, you need to consider network planning, including subnet CIDR block division and IP address planning.

Figure 7-1 Relationship between namespaces and VPC subnets



Scenarios Where Multiple Namespaces Are Used

Because namespaces enable partial environment isolation, you can create different namespaces, such as production, test, and development namespaces based on project attributes when there are a large number of projects and persons.

Creating a Namespace and Network

For details, see [Getting Started](#).

7.4 Status Codes

Status Code	Name	Description
100	Continue	The server has received the initial part of the request and the client should continue to send the remaining part. It is issued on a provisional basis while request processing continues. It alerts the client to wait for a final response.
101	Switching Protocols	The requester has asked the server to switch protocols and the server has agreed to do so. The target protocol must be more advanced than the source protocol. For example, the current HTTP protocol is switched to a later version of HTTP.
200	OK	The results of GET, PUT, and POST operations are returned normally.
201	Created	The request has been fulfilled, resulting in the creation of a new resource.

Status Code	Name	Description
202	Accepted	The request has been accepted for processing, but the processing has not been completed.
203	Non-Authoritative Information	The server successfully processed the request, but is returning information that may be from another source.
204	NoContent	The server has successfully processed the request, but does not return any content. The status code is returned in response to an HTTP OPTIONS request.
205	Reset Content	The server has successfully processed the request, but does not return any content. Unlike a 204 response, this response requires that the requester reset the content.
206	Partial Content	The server has successfully processed a part of the GET request.
300	Multiple Choices	There are multiple options for the requested resource. For example, this code could be used to present a list of resource characteristics and addresses from which the client such as a browser may choose.
301	Moved Permanently	This and all future requests should be permanently directed to the given URI indicated in this response.
302	Found	The requested resource was temporarily moved.
303	See Other	The response to the request can be found under a different URI, and should be retrieved using a GET or POST method.
304	Not Modified	The requested resource has not been modified. In such case, there is no need to retransmit the resource since the client still has a previously-downloaded copy.
305	Use Proxy	The requested resource is available only through a proxy.
306	Unused	This HTTP status code is no longer used.
400	BadRequest	The request is invalid. The client should modify the request instead of re-initiating it.
401	Unauthorized	The authorization information provided by the client is incorrect or invalid.

Status Code	Name	Description
402	Payment Required	This status code is reserved for future use.
403	Forbidden	The server has received the request and understood it, but the server is refusing to respond to it. The client should modify the request instead of re-initiating it.
404	NotFound	The requested resource cannot be found. The client should modify the request instead of re-initiating it.
405	MethodNotAllowed	A request method is not supported for the requested resource. The client should modify the request instead of re-initiating it.
406	Not Acceptable	The server cannot fulfill the request based on the content characteristics of the request.
407	Proxy Authentication Required	This code is similar to 401, but indicates that the client must first authenticate itself with the proxy.
408	Request Time-out	The server timed out waiting for the request. The client may re-initiate the request without modifications at any later time.
409	Conflict	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exists, or the request fails to be processed because of the update of the conflict request.
410	Gone	The requested resource cannot be found. The status code indicates that the requested resource has been deleted permanently.
411	Length Required	The server refused to process the request because the request does not specify the length of its content.
412	Precondition Failed	The server does not meet one of the preconditions that the requester puts on the request.

Status Code	Name	Description
413	Request Entity Too Large	The server refuses to process a request because the request entity is too large. The server may disable the connection to prevent the client from sending requests consecutively. If the server temporarily cannot process the request, the response will contain a Retry-After header field.
414	Request-URI Too Large	The URI provided was too long for the server to process.
415	Unsupported Media Type	The server does not support the media type in the request.
416	Requested range not satisfiable	The requested range is invalid.
417	Expectation Failed	The server fails to meet the requirements of the Expect request-header field.
422	UnprocessableEntity	The request is well-formed but is unable to be processed due to semantic errors.
429	TooManyRequests	The client sends excessive requests to the server within a given time (exceeding the limit on the access frequency of the client), or the server receives excessive requests within a given time (beyond its processing capability). In this case, the client should repeat requests after the time specified in the Retry-After header of the response expires.
500	InternalServerError	The server is able to receive the request but it could not understand the request.
501	Not Implemented	The server does not support the requested function.
502	Bad Gateway	The server acting as a gateway or proxy receives an invalid response from a remote server.
503	ServiceUnavailable	The requested service is invalid. The client should modify the request instead of re-initiating it.
504	ServerTimeout	The server could not return a timely response. The response will reach the client only if the request carries a timeout parameter.
505	HTTP Version not supported	The server does not support the HTTP protocol version used in the request.

7.5 Error Codes

If an error occurs in API calling, no result is returned. Identify the error cause based on the error codes of each API. If an error occurs in API calling, HTTP status code 4xx or 5xx is returned. The response body contains the specific error code and information. If you are unable to identify the cause of an error, contact customer service and provide the error code so that we can help you solve the problem as soon as possible.

Format of an Error Response Body

If an error occurs during API calling, the system returns an error code and message to you. The following shows the format of an error response body:

```
{
  "kind": "Status",
  "apiVersion": "v1",
  "metadata": {},
  "status": "Failure",
  "message": "Namespace name already exists.",
  "reason": "Conflict",
  "code": 409,
  "errorCode": "CCI.02.409101"
}
```

In the preceding information, **code** is an HTTP status code, **errorCode** is an error code, and **message** describes the error.

Error Code Description

If an error code starting with **APIGW** is returned after you call a CCI API, rectify the fault by referring to the instructions provided in [API Gateway Error Codes](#).

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.01.400101	request body error	Request failed. The request body is invalid.	Check the request body based on the API document.
400	CCI.01.400102	provide namespace request ed	Failed to query namespace details. The namespace to be queried is not specified.	Specify the namespace to be queried and try again.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.01.400103	missing user token in the request header	Failed to create the network. The request header does not contain the X-User-Token.	Ensure that the request header contains the X-User-Token.
400	CCI.01.400104	no agency quota found from iam, please enlarge your quota	The maximum of IAM agencies has reached.	Submit a service ticket to increase your quota.
400	CCI.01.400105	must specify namespace name through fieldSelector, example: fieldSelector=metadata.name=namespaceName	The namespace name must be specified using fieldSelector , for example, fieldSelector=metadata.name=namespaceName .	Specify the namespace name with fieldSelector .
400	CCI.01.400106	volume import: request body error	The request body for importing the volume is invalid.	Check the request body based on the volume import API document.
400	CCI.01.400107	enterprise id not valid	Invalid enterprise project ID.	Modify the enterprise project ID and try again.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.01.400201	subnet cidr subnet invalid: within the coverage of VPC, and no more subnets overlap	Invalid subnet CIDR block. The subnet CIDR block cannot overlap with other subnets in the VPC.	Modify the subnet CIDR block to ensure that it does not overlap with other subnets.
400	CCI.01.400202	project id in network request body invalid	Failed to create the network. The Annotation field of the request body does not contain project_id .	Modify the Annotation field to ensure that it contains project_id and try again.
400	CCI.01.400301	storage type parameter invalid: nfs/obs/bs	Invalid storage class. Supported storage classes are NFS, OBS, and BS.	Modify the storage type parameter and try again.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.01.400302	storage volume id format invalid: the beginning and end of a numeric letter, which may contain an underline in the middle of the numeric letter	Invalid storage volume ID format. The ID can contain only letters, digits, and underscores (_) and must start and end with a digit or a letter.	Change the storage volume ID and try again.
400	CCI.01.400303	storage volume id len invalid: no bigger than 64	Invalid length of the storage volume ID. The ID can contain a maximum of 64 characters.	Change the storage volume ID and try again.
400	CCI.01.400304	storage request body invalid	Failed to release the storage volume. The delete_volume field is invalid.	Modify the delete_volume field and try again.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.01.400305	storage volume not available	Failed to import the storage volume. The storage volume status is abnormal.	Contact technical support to rectify the storage volume fault and try again.
400	CCI.01.400306	storage volume is not found	Failed to import the storage volume. The storage volume does not exist.	Ensure that the storage volume to be imported exists and try again.
400	CCI.01.400307	nfs storage class type err,use "nfs-rw"	Failed to import the storage volume. The specified NFS storage is not supported. Only storage class nfs-rw is supported.	Import nfs-rw.
400	CCI.01.400308	storage volume type err, available: sas/ssd/sata	Failed to import the storage volume. The storage specifications are not supported. Supported specifications are SAS, SSD, and SATA.	Import a storage volume of supported storage format, for example, SAS, SSD, and SATA.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.01.400309	storage volume already provisioned	Failed to import the storage volume. The current volume has been imported.	Check whether the current volume has been imported.
400	CCI.01.400401	invalid billing request body: unsupported billing status	Invalid billing request body. The billing status is not supported.	Change it to a supported status.
400	CCI.01.400402	invalid billing request body: unsupported billing resource type	Invalid billing request body. The billing resource type is not supported.	Change it to a supported resource type.
400	CCI.01.400403	invalid billing request user: inner user can not be freeze or unfreeze	Invalid billing request body. The operations on internal users are not supported.	Change the user to a non-internal user.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.01.400404	invalid billing request body: resourceinfos can not match scene	Invalid billing request body. The resourceinfos does not match scene.	Change it to a supported scene field.
500	CCI.01.500101	find no cluster endpoint for namespace xxx from icluster response header	Failed to query the cluster address by namespace.	Contact technical support.
403	CCI.01.403009	your account is in arrears, please recharge	Request failed: The account is in arrears.	Top up the account.
403	CCI.01.403010	your account has been frozen, please contact customer service	Request error: The account has been frozen.	Submit a service ticket to contact customer service.
403	CCI.01.403014	Request error: The account has been restricted.	Submit a service ticket to contact customer service.	

Status Code	Error Codes	Error Message	Description	Measure
403	CCI.01.403101	only gpu beta users can use gpu in cci	Request failed. You have not applied for the GPU OBT.	Apply for the GPU OBT.
403	CCI.01.403102	only obs beta users can use obs in cci	Request failed. You have not applied for the OBS OBT.	Apply for the OBS OBT.
403	CCI.01.403103	user's token can not match auth token for resourceUser's	Authentication failed. The domain in the token does not match the requested domain.	Ensure that the domain in the token matches that in the request.
403	CCI.01.403104	current user has no right	Authentication failed. You do not have the permission to perform this operation.	Check whether you have the permission.
403	CCI.01.403105	insufficient operation permission, require cci:namespace:create	Failed to create the namespace. You do not have the cci:namespace:create permission.	Apply for the cci:namespace:create permission from the administrator.

Status Code	Error Codes	Error Message	Description	Measure
403	CCI.01.403106	insufficient operation permission, require cci:namespace:delete	Failed to delete the namespace. You do not have the cci:namespace:delete permission.	Apply for the cci:namespace:delete permission from the administrator.
403	CCI.01.403107	insufficient operation permission, require cci:namespace:update	Failed to update the namespace. You do not have the cci:namespace:update permission.	Apply for the cci:namespace:update permission from the administrator.
403	CCI.01.403108	insufficient operation permission, require cci:namespace:get	Failed to obtain the namespace details. You do not have the cci:namespace:get permission.	Apply for the cci:namespace:get permission from the administrator.
403	CCI.01.403109	insufficient operation permission, require cci:namespace:list	Failed to obtain the namespace list. You do not have the cci:namespace:list permission.	Apply for the cci:namespace:list permission from the administrator.

Status Code	Error Codes	Error Message	Description	Measure
403	CCI.01.403110	insufficient operation permission, require cci:namespaceSubResource:create	Failed to create the resource. You do not have the cci:namespaceSubResource:create permission.	Apply for the cci:namespaceSubResource:create permission from the administrator.
403	CCI.01.403111	insufficient operation permission, require cci:namespaceSubResource:delete	Failed to delete the resource. You do not have the cci:namespaceSubResource:delete permission.	Apply for the cci:namespaceSubResource:delete permission from the administrator.
403	CCI.01.403112	insufficient operation permission, require cci:namespaceSubResource:update	Failed to update the resource. You do not have the cci:namespaceSubResource:update permission.	Apply for the cci:namespaceSubResource:update permission from the administrator.

Status Code	Error Codes	Error Message	Description	Measure
403	CCI.01.403113	insufficient operation permission, require cci:namespaceSubResource:get	Failed to obtain the resource details. You do not have the cci:namespaceSubResource:get permission.	Apply for the namespaceSubResource get permission from the administrator.
403	CCI.01.403114	insufficient operation permission, require cci:namespaceSubResource:list	Failed to obtain the resource list. You do not have the cci:namespaceSubResource:list permission.	Apply for the namespaceSubResource list permission from the administrator.
403	CCI.01.403122	user has no agency to cci. Please apply an agency to cci	Request failed. You have not authorized the CCI service.	Log in to the CCI console, select the corresponding region, and authorize CCI to create an agency.
403	CCI.04.403112	Chart must have same name and version with original chart	Failed to update the chart. The chart version and name must be the same as those in the original chart.	Ensure that the chart version and name are the same as those in the original chart.

Status Code	Error Codes	Error Message	Description	Measure
403	CCI.04.403124	The official chart is forbidden to be downloaded	Failed to download the chart. Official charts cannot be downloaded .	Contact technical support.
403	CCI.04.403125	Chart is used, can't deleted	Failed to delete the chart. The chart is in use.	Contact technical support.
403	CCI.04.403126	The chart is deprecated, please select a higher version	The selected chart version has expired.	Select a later version.
403	CCI.04.403129	Only add-on charts have readme.md now, the target chart is not an add-on chart	Operation failed. The chart associated with the readme.md file is not an add-on chart.	Associate it with an add-on chart.
403	CCI.04.403130	Not allowed to update chart belong to other tenant	Request failed. You cannot operate the charts of other users.	Do not operate the charts of other users.

Status Code	Error Codes	Error Message	Description	Measure
403	CCI.04.403131	Update release is forbidden:The status of release is not DEPLOYED or FAILED	Update failed. Only releases in the Installed or Failed status can be updated.	Contact technical support.
400	CCI.04.400104	Validate chart version failed	Request failed because the chart version is invalid. The version can contain a maximum of 64 characters and must comply with the SemVer specification , for example, 1.0.0, 1.0.0-alpha, and 1.0.0-alpha+001.	Specify a chart version that meets the version format requirements.
400	CCI.04.400105	the ID should not be empty	The chart ID cannot be left blank.	Enter a correct chart ID.
400	CCI.04.400111	Only add-on allowed	Request failed. This request supports only add-on charts.	Specify an add-on chart.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.04.400112	the length of ID is more than 64	Request failed. The chart ID cannot contain more than 64 characters.	Enter a correct chart ID.
400	CCI.04.400113	Chart ID format is Invalid, must match the regex	Request failed. The chart ID format is invalid.	Enter a correct chart ID.
400	CCI.04.400118	Validate chart failed	Request failed. The chart format is incorrect. The file name extension must be .tgz and the size cannot exceed 2 MB.	Specify a chart file with the .tgz extension and less than 2 MB.
400	CCI.04.400119	Chart file not found	Request failed. The chart is empty.	Specify a chart that is not empty.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.04.400121	Chart format is invalid, Chart package name and version must be same with chart name and version	The chart package format is invalid. The chart package name and version must be the same as those described in the chart.	Specify a chart package whose name and version are the same as those in the chart.
400	CCI.04.400126	No target version selected , select one please	Request failed. The add-on version is not specified.	Specify an add-on version.
400	CCI.04.400131	Unsupported language	Failed to delete the readme file. The language of the request parameters is not supported. Supported language: English	Ensure that the language of the readme file is English.
400	CCI.04.400201	Invalid release name	Request failed. The release name cannot be left blank.	Enter a correct release name.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.04.400202	Release name length error	Request failed. The release name cannot contain more than 24 characters.	Enter a correct release name.
400	CCI.04.400203	Release name not match regex	Request failed. The release name format is invalid. The release name can contain only letters, digits, and underscores (_) and must start with a letter and end with a letter or digit.	Enter a correct release name.
400	CCI.04.400214	The update action must be either upgrade or rollback	Failed to update the release because the requested action is invalid. Supported actions are upgrade and rollback.	Change the requested action to upgrade or rollback.
400	CCI.04.400218	Invalid release version	Request failed. Invalid release version.	Enter a correct version.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.04.400302	Failed to Unmarshal	Request failed. Invalid request body.	Specify a correct request body format.
400	CCI.04.400304	The request body is too large	Request failed. The chart package size exceeds 2 MB.	Ensure that the size of the chart package is less than 2 MB.
400	CCI.04.400306	Validate chart package failed	An error occurred when the chart package was being verified.	Check whether the format of the YAML files in the package is correct.
404	CCI.04.404204	Release not found	Request failed. The release to be queried does not exist.	Query the correct application.
409	CCI.04.409112	The chart is already existed in database	Failed to upload the chart. The chart name already exists.	Change the chart name and try again.
409	CCI.04.409123	The chart name is conflict with public charts	Failed to upload the chart. The chart name conflicts with an official chart name.	Change the chart name and try again.

Status Code	Error Codes	Error Message	Description	Measure
409	CCI.04.409213	Release already exists in this cluster	Failed to create the release. The release name already exists.	Change the release name and try again.
400	CCI.02.400101	ummarshal ERROR: BadNamespaceRequestBody	Failed to create the namespace. The request body is incorrect.	Rectify the request body error based on the API document.
400	CCI.02.400102	get service account tenant name failed	Failed to obtain the tenant name. The tenant is not in the whitelist.	Obtain a tenant in the whitelist.
400	CCI.02.400103	Unsupported Content Type	The request contains an incorrect text type.	Specify a correct text type.
400	CCI.02.400104	ummarshal ERROR: BadQuotaRequestBody	Failed to create the quota. The request body is incorrect.	Specify a correct request body.
400	CCI.02.400105	update quotas failed	Failed to update the quota.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.02.400106	used namespaces exceeds quota, could not create any more	Failed to create the namespace. The namespace quota is insufficient.	Contact technical support.
400	CCI.02.400107	delete namespace failed, namespace is empty	Failed to delete the namespace. The namespace is empty and cannot be deleted.	Ensure that the namespace to be deleted is not empty.
400	CCI.02.400108	get flavor info by name failed, flavor name is empty	Failed to query flavor information by name. The Name field is empty.	Enter a correct value for the Name field.
400	CCI.02.400109	Create namespace failed: NamespaceNameInvalid	Failed to create the namespace. The Name field is invalid.	Enter a correct value for the Name field.
400	CCI.02.400110	Create namespace failed: NamespaceFlavorInvalid	Failed to create the namespace. The Flavor field is invalid.	Enter a correct value for the Flavor field.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.02.400111	Create namespace failed: NamespaceFlavorMissed	Failed to create the namespace. The Flavor field is empty.	Enter a correct value for the Flavor field.
400	CCI.02.400112	Create namespace failed: NamespaceDomainIDMissed	Failed to create the namespace. The DomainID field is empty.	Enter a correct value for the DomainID field.
400	CCI.02.400113	Create namespace failed: NamespaceProjectIDMissed	Failed to create the namespace. The ProjectID field is empty.	Enter a correct value for the ProjectID field.
400	CCI.02.400114	Get namespace failed: NamespaceProjectIDMissed	Failed to query the namespace. The ProjectID field is empty.	Enter a correct value for the ProjectID field.
400	CCI.02.400116	Get available cluster info from resource manager failed: NoAllocatedCluster	Failed to create the namespace. The cluster resource is insufficient. Try again later.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.02.400117	Get namespace failed: PaginationParameterInvalid	Failed to query the namespace. The pagination parameter is invalid.	Enter a correct pagination parameter.
400	CCI.02.400118	Create namespace failed: EnterpriseProjectIDEmpty	Failed to create the namespace. The Enterprise Project ID field is empty.	Enter a correct enterprise project ID.
400	CCI.02.400119	Create namespace failed: EnterpriseProjectNotSupported	Failed to create the namespace. Enterprise projects are not supported.	Contact technical support.
404	CCI.02.404101	flavor not found	Failed to query flavor information. The requested flavor does not exist.	Query the correct flavor.
404	CCI.02.404102	resource quota not found	Failed to query resource quota information. The requested resource quota does not exist.	Query the correct resource quota.

Status Code	Error Codes	Error Message	Description	Measure
404	CCI.02.404103	quota not found	Failed to query quota information. The requested quota does not exist.	Query the correct resource quota.
409	CCI.02.409101	namespace name is already exist	Failed to create the namespace. The namespace already exists.	Change the namespace name and try again.
409	CCI.02.409102	Failed to migrate the namespace	Failed to migrate the namespace. The namespace is already on a dedicated node.	Select a non-dedicated namespace.
500	CCI.03.500102	Internal error	Internal error. An error occurs during interaction with CSB.	Contact customer service or try again later.
500	CCI.03.500101	Return error	Return error. The return body fails to be converted into the JSON format.	Contact customer service or try again later.
500	CCI.03.500002	Database request error	Database request error.	Contact customer service or try again later.

Status Code	Error Codes	Error Message	Description	Measure
500	CCI.03.500001	An internal processing error occurs	Internal processing error.	Contact customer service or try again later.
400	CCI.03.400105	Request error	Request error. The package information is not carried.	Enter a valid order request.
400	CCI.03.400106	Request failed	Request failed. The current user is not eligible to purchase the package.	Contact customer service to apply for the purchase permission.
400	CCI.03.400107	Request failed	Request failed. The number of packages purchased by the user has reached the upper limit.	Purchase again after the current package is used up.
400	CCI.03.400108	Request failed	Request failed. The number of packages purchased by the user in the specified period has reached the upper limit.	Purchase again in the next period.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.02.400122	Failed to migrate the namespace.	Failed to migrate the namespace. The namespace status is abnormal.	Restore the namespace to the normal status and try again.
400	CCI.02.400121	Failed to migrate the namespace.	Failed to migrate the namespace. No dedicated node is available in the namespace.	Contact customer service to purchase a dedicated node.
400	CCI.03.400109	Request failed	Request failed. The remaining quantity of this package is insufficient.	Increase the package quota or reduce the purchase quantity.
400	CCI.02.400120	Failed to migrate the namespace.	Failed to migrate the namespace. The on-demand elastic bearer parameter is invalid.	Set a valid parameter.
400	CCI.03.400110	Request failed	Request failed. The promotion package is invalid.	Purchase a valid package.

Status Code	Error Codes	Error Message	Description	Measure
400	CCI.03.400111	Request failed	Request failed. The promotion activity ID is invalid because it is empty or too long.	Enter a valid promotion activity ID.
400	CCI.03.400001	The request does not carry a token	The request does not carry a token.	Enter a valid token in the request body.
400	CCI.03.400101	Request error	Request failed. The request body is invalid.	Enter a valid request body.
400	CCI.03.400102	Request error	Request error. Failed to parse the request body in JSON format.	Enter a valid order request.
400	CCI.03.400103	Request failed	Request failed. The token does not contain user information.	Enter a valid token.
400	CCI.03.400104	Request failed	Request failed. The POC package is invalid.	Purchase a valid package.

7.6 Obtaining a Project ID

Scenarios

A project ID is required for some URLs when an API is called. Therefore, you need to obtain a project ID in advance. Two methods are available:

- [Obtain the Project ID by Calling an API](#)
- [Obtain the Project ID from the Console](#)

Obtain the Project ID by Calling an API

You can obtain a project ID by calling the API used to [query projects based on specified criteria](#).

The API used to obtain a project ID is GET `https://{Endpoint}/v3/projects`. {Endpoint} is the IAM endpoint and can be obtained from [Regions and Endpoints](#). For details about API authentication, see [Authentication](#).

The following is an example response. The value of **id** is the project ID.

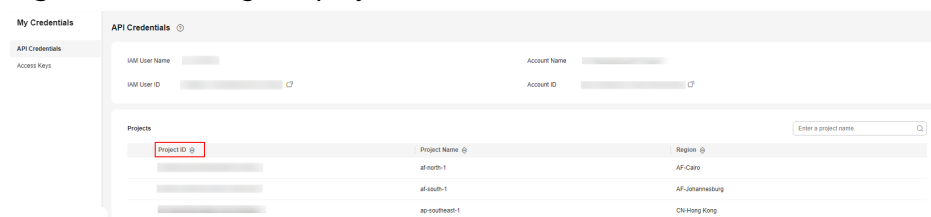
```
{
  "projects": [
    {
      "domain_id": "65ewtrgaggshhk1223245sghjlse684b",
      "is_domain": false,
      "parent_id": "65ewtrgaggshhk1223245sghjlse684b",
      "name": "project_name",
      "description": "",
      "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects/a4adasfjljaaaakla12334jklga9sasfg"
      },
      "id": "a4adasfjljaaaakla12334jklga9sasfg",
      "enabled": true
    }
  ],
  "links": {
    "next": null,
    "previous": null,
    "self": "https://www.example.com/v3/projects"
  }
}
```

Obtain a Project ID from the Console

To obtain a project ID from the console, perform the following operations:

1. Access [My Credentials](#).
2. On the **API Credentials** page, check the project ID in the project list.

Figure 7-2 Viewing the project ID



7.7 Obtaining an Account ID

An account ID (domain ID) is required for some URLs when an API is called. To obtain an account ID, perform the following operations:

1. Log in to the management console.
2. Click the username in the upper right corner and choose **My Credentials** from the drop-down list.

On the **My Credentials** page, view account ID.

Figure 7-3 Obtaining your account ID

