

CodeArts Deploy

API Reference

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1 Before You Start

Welcome to CodeArts Deploy. CodeArts Deploy provides visualized, one-click deployment. It supports deployment on VMs or containers by using Tomcat, Spring Boot, and other templates or by flexibly orchestrating atomic actions. It also supports parallel deployment and seamless integration with CodeArts Pipeline, providing standard deployment environments and implementing automatic deployment.

You can use the APIs described in this document to perform various operations, such as creating hosts and host clusters, and deploying applications. For details about all supported operations, see [API Overview](#).

If you plan to access CodeArts Deploy through an API, ensure that you are familiar with CodeArts Deploy concepts. For details, see [Service Overview](#).

Endpoints

An endpoint is the **request address** for calling an API. Endpoints vary depending on services and regions. You can query the endpoints of a service from "Regions and Endpoints".

Table 1 lists the endpoints of CodeArts Deploy. Select a desired one based on the service requirements.

Table 1-1 CodeArts Deploy endpoints

Region Name	Region	Endpoint	Protocol
EU-Dublin	eu-west-101	codearts-deploy.eu-west-101.myhuaweicloud.eu	HTTPS

Glossary

- Account
An account is created upon successful registration with Huawei Cloud. 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 and should not be used directly to perform routine management. For security purposes, create IAM users and grant them permissions for routine management.

- User

A user is created using a domain to use cloud services. Each user has its own identity credentials (password and access keys).

An IAM user can view the account ID and user ID on the [My Credentials](#) page of the console. The account name, username, and password will be required for API authentication.

- Region

Regions are divided from the dimensions of 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 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](#).

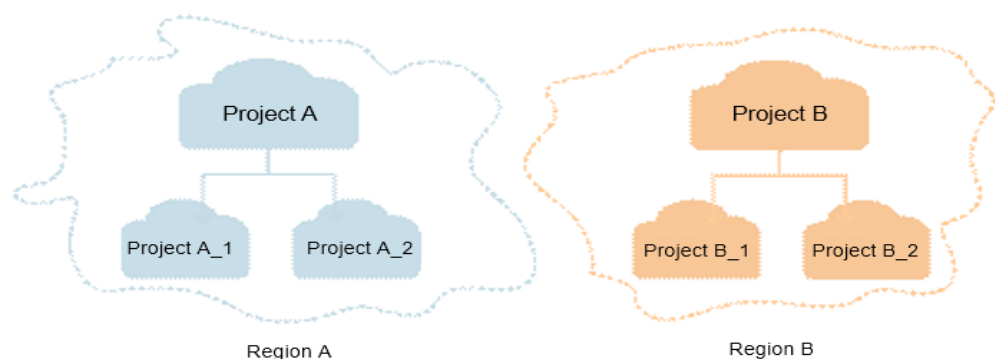
- Availability Zone (AZ)

An availability zone (AZ) contains one or more physical data centers. Each AZ has independent cooling, fire extinguishing, moisture-proof, and electricity facilities. Within an AZ, computing, network, storage, and other resources are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to support cross-AZ high-availability systems.

- Project

Projects group and isolate resources (including compute, storage, network, and other resources) across physical regions. A default project is provided for each region, and subprojects can be created under each default project. Users can be granted permissions to access all resources in a specific project. For more refined access control, create subprojects under a project and create resources in the subprojects. Users can then be assigned permissions to access only specific resources in the subprojects.

Figure 1-1 Project isolation model



You can obtain the project ID on the [My Credentials](#) page.

2 API Overview

Table 2-1 CodeArts Deploy API Overview

Type	API	Description
Host cluster management	Create a host cluster (recommended)	This API is used to create a host cluster in a project.
	Query a host cluster list (recommended)	This API is used to query a host cluster list based on conditions.
	Query a host cluster (recommended)	This API is used to query details about a host cluster by ID.
Host management	Create a host (recommended)	This API is used to create a host in a specified host cluster.
	Query a host list (recommended)	This API is used to query a host list in a specified host cluster by ID.
	Query host details (recommended)	This API is used to query host details by host ID.
Application management	Obtain an application list (recommended)	This API is used to query the application list in a project.
	Create an application (recommended)	This API is used to create an application.
	Deploy an application	This API is used to deploy an application by deployment task ID.
	Obtain application details (recommended)	This API is used to obtain application details of a specified ID.
	Delete an application (recommended)	This API is used to delete an application of a specified ID.

Type	API	Description
	Query the historical deployment records of a specified application in a project by the start time and end time	This API is used to query the historical deployment records of a specified application in a project based on the start time and end time.
	Query the execution parameters of a deployment record	This API is used to query the execution parameters of a deployment record.
Deploy ment record measur ement	Obtain the success rate of specified applications	This API is used to obtain the success rate of deployed applications in a specified project.
	Obtain the success rate of a deployed application	This API is used to obtain the success rate of deployed applications in a specified application.
Environ ment manage ment	Create an environment for an application	This API is used to create an environment for an application.
	Query the environment list of an application	This API is used to query the environment list of an application.
	Delete an environment from an application	This API is used to delete an environment of an application.
	Query environment details	This API is used to query environment details.
	Import a host in an environment	This API is used to import a host in an environment.
	Delete a host from an environment	This API is used to delete a host of an environment.

3 Calling APIs

3.1 Making an API Request

This section describes the structure of a REST API request, and calls the IAM API for obtaining a user token as an example. The obtained token can then be used to authenticate the calling of other APIs.

Request URI

The format of a request URI is as follows:

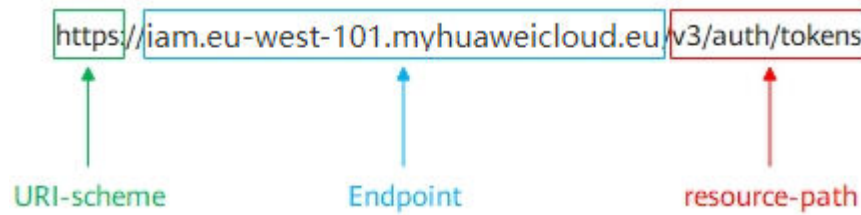
{URI-scheme}://{Endpoint}/{resource-path}?{query-string}

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

- **URI-scheme:** Protocol used to transmit requests. All APIs use HTTPS.
- **Endpoint:** Domain name or IP address of the server bearing the REST service endpoint. Obtain the value from [Regions and Endpoints](#).
- **resource-path:** Access path of an API for performing a specified operation. Obtain the value from the URI of an API. For example, the **resource-path** of the API for obtaining a user token is **/v3/auth/tokens**.
- **query-string:** optional query parameter. Ensure that a question mark (?) is included before a query parameter that is in the format of "Parameter name=Parameter value". For example, **? limit=10** indicates that a maximum of 10 data records will be displayed.

For example, to obtain the token of IAM in the **EU-Dublin** region, obtain the endpoint (**iam.eu-west-101.myhuaweicloud.eu**) of this region and the **resource-path** (**/v3/auth/tokens**) in the URI of the API for [obtaining a user token](#). Then, construct the URI as follows:

```
https://iam.eu-west-101.myhuaweicloud.eu/v3/auth/tokens
```

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

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

- **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, such as 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 URI for **obtaining a user token**, the request method is **POST**. The request is as follows:

```
POST https://iam.eu-west-101.myhuaweicloud.eu/v3/auth/tokens
```

Request Header

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

Common request header fields:

- **Content-Type**: specifies the request body type or format. This field is mandatory and its default value is **application/json**. Other values of this field will be provided for specific APIs if any.
- **X-Auth-Token**: A user token only for token-based API authentication. The user token is a response to the API used to **obtain a user token**. This API is the only one that does not require authentication.

 NOTE

In addition to supporting token-based authentication, public cloud APIs also support authentication using AK/SK. During AK/SK-based authentication, an SDK is used to sign the request, and the **Authorization** (signature information) and **X-Sdk-Date** (time when the request is sent) header fields are automatically added to the request.

For more information, see [AK/SK-based Authentication](#).

The API used to [obtain a user token](#) does not require authentication. Therefore, only the **Content-Type** field needs to be added to requests for calling the API. An example of such requests is as follows:

```
POST https://iam.eu-west-101.myhuaweicloud.eu/v3/auth/tokens
Content-Type: application/json
```

Request Body

A request body is generally sent in structured format. It corresponds to **Content-Type** in the request header and transfers content except the request header.

The request body varies according to APIs. Certain APIs do not require the request body, such as GET and DELETE.

In the case of the API used to [obtain a user token](#), the request parameters and parameter description can be obtained from the API request. The following example request has a body included. Replace *username*, *domainname*, *******, and *xxxxxxxxxx* with the actual values. *username* indicates the username, *domainname* indicates the name of the account to which the user belongs, ******* indicates the login password, and *xxxxxxxxxx* indicates the project name (**eu-west-101**). You can obtain the value from [Regions and Endpoints](#).

 NOTE

The **scope** parameter specifies where a token takes effect. You can set **scope** to an account or a project under an account. In the following example, the token takes effect only for the resources in a specified project. For more information about this API, see [Obtaining a User Token](#).

```
POST https://iam.eu-west-101.myhuaweicloud.eu/v3/auth/tokens
Content-Type: application/json
```

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "*****",
          "domain": {
            "name": "domainname"
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "xxxxxxxxxx"
      }
    }
  }
}
```

```
}  
}  
}
```

If all data required by a request is available, you can send the request to call the API through [curl](#), [Postman](#), or coding. In the response to the API used to [obtain a user token](#), **x-subject-token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

3.2 Authentication

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

- Token-based authentication: Requests are authenticated using a token.
- AK/SK-based authentication: Requests are authenticated by encrypting the request body using an AK/SK pair.

Token-based Authentication

NOTE

The validity period of a token is 24 hours. When using a token for authentication, cache it to prevent frequently calling the IAM API for obtaining a user token.

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.

When calling the API to [obtain a user token](#), you must set **auth.scope** in the request body to **project**.

```
{  
  "auth": {  
    "identity": {  
      "methods": [  
        "password"  
      ],  
      "password": {  
        "user": {  
          "name": "username",  
          "password": "*****",  
          "domain": {  
            "name": "domainname"  
          }  
        }  
      }  
    }  
  },  
  "scope": {  
    "project": {  
      "name": "xxxxxxx"  
    }  
  }  
}
```

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 **ABCDEFJ....**, **X-Auth-Token: ABCDEFJ....** should be added to a request as follows:

```
GET https://iam.eu-west-101.myhuaweicloud.com/v3/auth/projects
```

```
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

AK/SK-based Authentication

NOTE

AK/SK-based authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token-based authentication is recommended.

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

- AK: access key ID. It is a unique ID associated with an SK. AK is used together with SK to sign requests.
- SK: secret access key. It is used together with an access key ID to identify a sender who initiates a request and to cryptographically sign requests, preventing the request from being modified.

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

NOTICE

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

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](#).

If status code **201** is returned for calling the API used to [obtain a user token](#), 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 fields for the API used to [obtain a user token](#). The **x-subject-token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.

Figure 3-2 Header fields of the response to the request for obtaining a user token

```
connection → keep-alive
content-type → application/json
date → Tue, 12 Feb 2019 06:52:13 GMT
server → Web Server
strict-transport-security → max-age=31536000; includeSubdomains;
transfer-encoding → chunked
via → proxy A
x-content-type-options → nosniff
x-download-options → noopen
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token
[REDACTED]
[REDACTED]
[REDACTED]
x-xss-protection → 1; mode=block
```

Response Body

The body of a response is often returned in structured format as specified in the **Content-Type** header field. The response body transfers content except the response header.

For the API used to [obtain a user token](#), the response body is as follows: The following is part of the response body for the API used to obtain a user token:

```
{
  "token": {
    "expires_at": "2019-02-13T06:52:13.855000Z",
    "methods": [
      "password"
    ],
    "catalog": [
      {
        "endpoints": [
          {
            "region_id": "eu-west-101",
            .....
          }
        ]
      }
    ]
  }
}
```

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

```
{
  "error_msg": "The format of message is error",
  "error_code": "AS.0001"
}
```

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

4 APIs

4.1 Managing Host Clusters

4.1.1 Creating a Host Cluster (Recommended)

Function

This API is used to create a host cluster in a project.

Calling Method

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

URI

POST /v1/resources/host-groups

Request Parameters

Table 4-1 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-2 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Parameter description: Host cluster name. Constraints: N/A Value range: The value consists of 3-128 characters. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed. Default value: N/A
project_id	Yes	String	Parameter description: Project ID. For details, see [Obtaining a Project ID] (CloudDeploy_api_0014.xml). Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Default value: N/A
os	Yes	String	Parameter description: OS of the host cluster. Constraints: N/A Value range: • Windows: Windows OS. • Linux: Linux OS. Default value: N/A

Parameter	Mandatory	Type	Description
slave_cluster_id	No	String	Parameter description: Slave cluster ID. If the ID is left empty, the official resource pool is used by default. The self-hosted resource pool is used when the self-hosted resource pool slave cluster ID is transferred. Constraints: N/A Value range: The value consists of 1-32 characters. Only letters and digits are allowed. Default value: N/A
description	No	String	Parameter description: Host cluster description. Constraints: N/A Value range: The value is a string of 0 to 500 characters. Default value: N/A
is_proxy_mode	Yes	Integer	Parameter description: Whether the host cluster is in the proxy mode. Constraints: N/A Value range: 0: Non-proxy mode host cluster. 1: Proxy mode host cluster. Default value: N/A

Response Parameters

Status code: 200

Table 4-3 Response body parameters

Parameter	Type	Description
id	String	Parameter description: Host cluster ID. Value range: The value consists of 32 characters. Only letters and digits are allowed.
status	String	Parameter description: Request success or failure status. Value range: • success: Request succeeded • failed: Request failed

Example Requests

When creating a host cluster, you need to enter basic information, including the host cluster name, description, operating system, and whether be proxy access mode.

```
https://{endpoint}/v1/resources/host-groups
{
  "name" : "test123",
  "description" : "",
  "project_id" : "6039d4480efc4dddb178abff98719913",
  "os" : "linux",
  "slave_cluster_id" : "",
  "is_proxy_mode" : 1
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "status" : "success",
  "id" : "f3938bd63e354d2bb9d9cf7b5dc3bf95"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.1.2 Querying a Host Cluster List (Recommended)

Function

This API is used to query a host cluster list by specified criteria.

Calling Method

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

URI

GET /v1/resources/host-groups

Table 4-4 Query Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see [Obtaining a Project ID] (CloudDeploy_api_0014.xml). Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Default value: N/A
name	No	String	Parameter description: Keyword in the host cluster name. Constraints: N/A Value range: The value consists of 3-128 characters. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed. Default value: N/A

Parameter	Mandatory	Type	Description
os	No	String	Parameter description: OS of the host cluster. Constraints: N/A Value range: - Windows: Windows OS. - Linux: Linux OS. Default value: N/A
page_index	No	Integer	Parameter description: Page number for pagination query. Constraints: N/A Value range: 1-2,147,483,647 Default value: 1
page_size	No	Integer	Parameter description: Number of items displayed on each page. Constraints: N/A Value range: 1-1,000 Default value: 1,000
sort_field	No	String	Parameter description: Sorting field query. Constraints: N/A Value range: - nick_name: Nickname. - name: Host cluster name. Default value: N/A

Parameter	Mandatory	Type	Description
sort_type	No	String	Parameter description: Sorting order. Constraints: N/A Value range: • desc: Descending order. • asc: Ascending order. Default value: desc
is_proxy_mode	No	Integer	Parameter description: Whether the host cluster is in the proxy mode. Constraints: N/A Value range: • 0: Non-proxy mode host cluster. • 1: Proxy mode host cluster. Default value: N/A
slave_cluster_id	No	String	Parameter description: Transfer default to query host clusters using the official resource pool. Transfer a self-hosted resource pool ID to query host clusters using the self-hosted resource pool. Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Or default is transferred to query the host clusters using the official resource pool. Default value: N/A

Request Parameters

Table 4-5 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-6 Response body parameters

Parameter	Type	Description
status	String	Parameter description: Request success or failure status. Value range: • success: Request succeeded • failed: Request failed
total	Integer	Parameter description: Number of host clusters. Value range: 0-1,000
result	Array of HostClusterInfo objects	Parameter description: Host cluster list. Constraints: The number of host clusters cannot exceed 1,000.

Table 4-7 HostClusterInfo

Parameter	Type	Description
id	String	Parameter description: Host cluster ID. Value range: The value consists of 32 characters. Only letters and digits are allowed.

Parameter	Type	Description
host_count	Integer	Parameter description: Number of hosts in a cluster. Value range: 0-200
name	String	Parameter description: Host cluster name. Value range: The value consists of 3-128 characters. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
project_id	String	Parameter description: Project ID. For details, see [Obtaining a Project ID] (CloudDeploy_api_0014.xml). Value range: The value consists of 32 characters. Only letters and digits are allowed.
os	String	Parameter description: OS of the host cluster. Value range: - Windows: Windows OS. - Linux: Linux OS.
slave_cluster_id	String	Parameter description: Self-hosted resource pool ID. Value range: The value consists of 32 characters. Only letters and digits are allowed.
description	String	Parameter description: Host cluster description. Value range: The value is a string of 0 to 500 characters.
permission	PermissionClusterDetail object	Parameter description: Host cluster permission information. Constraints: N/A

Parameter	Type	Description
nick_name	String	Parameter description: User nickname. Value range: The value is a string of 1 to 30 characters.
env_count	Integer	Parameter description: Number of environments associated with a host cluster. Value range: 0-200
is_proxy_mode	Integer	Parameter description: Whether the host cluster is in the proxy mode. Constraints: N/A. Value range: 0: Non-proxy mode host cluster. 1: Proxy mode host cluster. Default value: N/A

Table 4-8 PermissionClusterDetail

Parameter	Type	Description
can_view	Boolean	Parameter description: Whether a user has the view permission. Value range: - true: With the view permission - false: Without the view permission
can_edit	Boolean	Parameter description: Whether a user has the edit permission. Value range: - true: With the edit permission - false: Without the edit permission

Parameter	Type	Description
can_delete	Boolean	Parameter description: Whether a user has the delete permission. Value range: • true: With the delete permission • false: Without the delete permission
can_add_host	Boolean	Parameter description: Whether a user has the permission to add hosts Value range: • true: With the permission to add hosts • false: Without the permission to add hosts
can_manage	Boolean	Parameter description: Whether a user has permission to manage the host cluster permission matrix Value range: • true: With the permission to manage the host cluster permission matrix • false: Without the permission to manage the host cluster permission matrix
can_copy	Boolean	Parameter description: Whether the user has permission to clone hosts. Value range: • true: The user has permission to copy hosts. • false: The user does not have permission to copy hosts.

Example Requests

```
https://{endpoint}/v1/resources/host-groups?  
project_id=5d091b14d7f54a139db644092fdc415c&page_index=1&page_size=10&sort_field=name&sort_type=  
asc
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "status": "success",
  "total": 1,
  "result": [ {
    "name": "testwyk",
    "description": "11122211",
    "os": "linux",
    "nick_name": "A/B Side Account",
    "id": "ab7647b0863c4e969c8949d38d591339",
    "project_id": "6039d4480efc4dddb178abff98719913",
    "permission": {
      "can_view": true,
      "can_edit": true,
      "can_delete": true,
      "can_add_host": true,
      "can_manage": true,
      "can_copy": true
    },
    "host_count": 1,
    "env_count": 1,
    "is_proxy_mode": 1,
    "slave_cluster_id": ""
  } ]
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.1.3 Querying a Host Cluster (Recommended)

Function

This API is used to query details about a host cluster by ID.

Calling Method

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

URI

GET /v1/resources/host-groups/{group_id}

Table 4-9 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Parameter description: Host cluster ID. Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Default value: N/A

Request Parameters

Table 4-10 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-11 Response body parameters

Parameter	Type	Description
status	String	Parameter description: Request success or failure status. Value range: • success: Request succeeded • failed: Request failed
result	HostClusterInfo-DetailDetail object	Parameter description: Host cluster information. Value range: N/A

Table 4-12 HostClusterInfoDetailDetail

Parameter	Type	Description
id	String	Parameter description: Host cluster ID. Value range: The value consists of 32 characters. Only letters and digits are allowed.
name	String	Parameter description: Host cluster name. Value range: The value consists of 3-128 characters. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
os	String	Parameter description: OS of the host cluster. Value range: - Windows: Windows OS. - Linux: Linux OS.
slave_cluster_id	String	Parameter description: Self-hosted resource pool ID. Value range: The value consists of 1-32 characters. Only letters and digits are allowed.
created_by	UserInfo object	Parameter description: User information, including user ID and username. Constraints: N/A
description	String	Parameter description: Host cluster description. Value range: The value is a string of 0 to 500 characters.
permission	PermissionClusterDetail object	Parameter description: Host cluster permission information. Constraints: N/A

Parameter	Type	Description
nick_name	String	Parameter description: User nickname. Value range: The value is a string of 1 to 30 characters.
is_proxy_mode	Integer	Parameter description: Whether the host cluster is in the proxy mode. Value range: 0: Non-proxy mode host cluster. 1: Proxy mode host cluster.
created_time	String	Parameter description: Time when a host cluster is created. The value format is yyyy-MM-dd HH:mm:ss. For example, '2021-04-01 17:05:53'. Value range: N/A
updated_time	String	Parameter description: Time when a host cluster is updated. The value format is yyyy-MM-dd HH:mm:ss. For example, '2021-04-01 17:05:53'. Value range: N/A

Table 4-13 UserInfo

Parameter	Type	Description
user_id	String	Parameter description: User ID. Value range: The value consists of 32 characters. Only letters and digits are allowed.
user_name	String	Parameter description: Username. Value range: The value consists of 1-255 characters. Only letters and digits are allowed.

Table 4-14 PermissionClusterDetail

Parameter	Type	Description
can_view	Boolean	Parameter description: Whether a user has the view permission. Value range: • true: With the view permission • false: Without the view permission
can_edit	Boolean	Parameter description: Whether a user has the edit permission. Value range: • true: With the edit permission • false: Without the edit permission
can_delete	Boolean	Parameter description: Whether a user has the delete permission. Value range: • true: With the delete permission • false: Without the delete permission
can_add_host	Boolean	Parameter description: Whether a user has the permission to add hosts Value range: • true: With the permission to add hosts • false: Without the permission to add hosts
can_manage	Boolean	Parameter description: Whether a user has permission to manage the host cluster permission matrix Value range: • true: With the permission to manage the host cluster permission matrix • false: Without the permission to manage the host cluster permission matrix

Parameter	Type	Description
can_copy	Boolean	Parameter description: Whether the user has permission to clone hosts. Value range: - true: The user has permission to copy hosts. - false: The user does not have permission to copy hosts.

Example Requests

`https://{endpoint}/v1/resources/host-groups/ab7647b0863c4e969c8949d38d591339`

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "status": "success",
  "result": {
    "id": "ab7647b0863c4e969c8949d38d591339",
    "name": "test",
    "description": "11122211",
    "os": "linux",
    "created_by": {
      "user_id": "6baa7454109d47c192f22078fe6cda20",
      "user_name": "devcloud_devcloud_l00490255_01"
    },
    "permission": {
      "can_view": true,
      "can_edit": true,
      "can_delete": true,
      "can_add_host": true,
      "can_manage": true,
      "can_copy": true
    },
    "is_proxy_mode": 0,
    "slave_cluster_id": "",
    "nick_name": "A/B Side Account",
    "created_time": "2021-04-01 17:05:53",
    "updated_time": "2021-04-21 14:29:14"
  }
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.1.4 Editing a Host Cluster

Function

This API is used to edit a host cluster.

Calling Method

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

URI

PUT /v1/resources/host-groups/{group_id}

Table 4-15 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Host cluster ID

Request Parameters

Table 4-16 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-17 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Host cluster name
description	No	String	Host cluster description

Parameter	Mandatory	Type	Description
slave_cluster_id	No	String	Slave cluster ID. If the value is null, the CloudOctopus slave cluster is used. If slave is user-defined, the slave cluster ID is used.

Response Parameters

Status code: 200

Table 4-18 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
id	String	Host cluster ID

Example Requests

This API is used to edit a host cluster, including the host cluster description, host cluster name, and self-hosted resource pool ID.

```
https://{endpoint}/v1/resources/host-groups/f8421b5e91684258afc1d92ec46f67a2
```

```
{
  "description" : "Update the description",
  "name" : "Updating a Host Cluster Name",
  "slave_cluster_id" : ""
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "status" : "success",
  "id" : "f8421b5e91684258afc1d92ec46f67a2"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.1.5 Deleting a Host Cluster (Recommended)

Function

This API is used to delete a host cluster by ID.

Calling Method

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

URI

DELETE /v1/resources/host-groups/{group_id}

Table 4-19 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Parameter description: Host cluster ID. Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Default value: N/A

Request Parameters

Table 4-20 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-21 Response body parameters

Parameter	Type	Description
status	String	Parameter description: Request success or failure status. Value range: • success: Request succeeded • failed: Request failed
id	String	Parameter description: Host cluster ID. Value range: The value consists of 32 characters. Only letters and digits are allowed.

Example Requests

```
https://{endpoint}/v1/resources/host-groups/f8421b5e91684258afc1d92ec46f67a2
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "status" : "success",  
  "id" : "f8421b5e91684258afc1d92ec46f67a2"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.1.6 Querying Information About the Environment Associated with a Host Cluster

Function

This API is used to query information about the environment associated with a host cluster.

Calling Method

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

URI

GET /v1/resources/host-groups/{group_id}/environments/infos

Table 4-22 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Host cluster ID

Table 4-23 Query Parameters

Parameter	Mandatory	Type	Description
page_index	No	Integer	Page number
page_size	No	Integer	Number of records per page

Request Parameters

Table 4-24 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-25 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
total	Integer	Total number of associated environments
result	Array of EnvironmentInfo objects	Environment information list

Table 4-26 EnvironmentInfo

Parameter	Type	Description
id	String	Environment ID
name	String	Environment name
app_id	String	Application ID
app_name	String	Application name
project_id	String	Project ID

Example Requests

```
https://{endpoint}/v1/resources/host-groups/849f425a74034fd2a4e60c367414efba/environments/infos?
page_index=1&page_size=10
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "status": "success",
  "result": [ {
    "id": "54e5b8b0d10148cc96142ac9d6c1c1f6",
    "name": "Test_environment_update",
    "project_id": "7e6caf3cd9a64d5b8ea451e38221892e",
    "app_name": "VM_deployment_and_update",
    "app_id": "8ddf0566c1784da29faac80516fa8425"
  } ],
  "total": 1
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.1.7 Querying the Basic Environment Information List of an Application

Function

This API is used to query the basic environment information list of an application.

Calling Method

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

URI

GET /v1/applications/{application_id}/host-groups/base/infos

Table 4-27 Path Parameters

Parameter	Mandatory	Type	Description
application_id	Yes	String	Application ID

Table 4-28 Query Parameters

Parameter	Mandatory	Type	Description
project_uuid	Yes	String	Project ID
os	No	String	Operating system: Windows or Linux
page_index	No	Integer	Page number
page_size	No	Integer	Number of records on each page
name	No	String	Search by host cluster name

Request Parameters

Table 4-29 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-30 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
total	Integer	Total quantity
result	Array of EnvironmentBaseInfo objects	Basic environment information list

Table 4-31 EnvironmentBaseInfo

Parameter	Type	Description
name	String	Environment name
os	String	Operating system: Windows or Linux
uuid	String	Environment ID
group_id	String	Host cluster ID
host_count	Integer	Number of hosts in an environment

Example Requests

```
https://{endpoint}/v1/applications/fe50d93c5a7f4335bb44a68419606ced/host-groups/base/infos?  
project_uuid=7e6caf3cd9a64d5b8ea451e38221892e&page_index=1&page_size=1000
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "status" : "success",
  "result" : [ {
    "name" : "Create an environment test permission",
    "os" : "linux",
    "uuid" : "c51d2173c541496c9561f77ccdacf13e",
    "group_id" : "c51d2173c541496c9561f77ccdacf13e",
    "host_count" : 0
  } ],
  "total" : 1
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.2 Managing Hosts

4.2.1 Creating a Host (Recommended)

Function

This API is used to create a host in a specified host cluster.

Calling Method

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

URI

POST /v1/resources/host-groups/{group_id}/hosts

Table 4-32 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Host cluster ID

Request Parameters

Table 4-33 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-34 Request body parameters

Parameter	Mandatory	Type	Description
host_name	Yes	String	Host name
ip	Yes	String	An IPv4 or IPv6 IP address.
port	Yes	Integer	SSH port, for example, 22.
os	Yes	String	Operating system: Windows or Linux, which must be the same as that of the host cluster.
as_proxy	Yes	Boolean	Proxy or not
proxy_host_id	No	String	Proxy ID
authorization	Yes	HostAuthorizationBody object	Log in to the host for authentication by password or key.
install_icagent	No	Boolean	Application Operations Management (AOM) is enabled for free to provide metric monitoring, log query, and alarm functions. (The ICAgent is automatically installed and supports only Huawei Cloud Linux hosts.)

Table 4-35 HostAuthorizationBody

Parameter	Mandatory	Type	Description
username	Yes	String	Username. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.).
password	No	String	Password. When the authentication type is 0, the password is mandatory.
private_key	No	String	Key. When the authentication type is 1, the key is mandatory.
trusted_type	Yes	Integer	Authentication type. 0 indicates password authentication, and 1 indicates key authentication.

Response Parameters

Status code: 200

Table 4-36 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
id	String	Host ID

Example Requests

When creating a host, you need to enter the basic information about the host, including the host name, IP address, port number, username, and password.

```
https://{endpoint}/v1/resources/host-groups/ab7647b0863c4e969c8949d38d591339/hosts
```

```
{
  "host_name": "100.101.28.215",
  "ip": "100.101.28.215",
  "port": "22",
  "os": "linux",
  "as_proxy": false,
  "proxy_host_id": "",
  "authorization": {
    "username": "root",
    "password": "*****",
    "private_key": "",
    "trusted_type": 0
  },
  "install_icagent": true
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "status" : "success",
  "id" : "300d6d2e53624d0da08b182099ad10f7"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.2.2 Querying a Host List (Recommended)

Function

This API is used to query a host list in a specified host cluster by ID.

Calling Method

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

URI

GET /v1/resources/host-groups/{group_id}/hosts

Table 4-37 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Project ID

Table 4-38 Query Parameters

Parameter	Mandatory	Type	Description
key_field	No	String	Fuzzy search information about the host name
environment_id	No	String	Environment ID

Parameter	Mandatory	Type	Description
page_index	No	Integer	Page number
page_size	No	Integer	Number of items displayed on each page. The default value is 10.
sort_key	No	String	Sorting field: as_proxy host_name owner_name. If this parameter is left blank, the default sorting mode is used.
sort_dir	No	String	Sorting mode: DESC (default) and ASC.
as_proxy	No	Boolean	Proxy or not

Request Parameters

Table 4-39 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-40 Response body parameters

Parameter	Type	Description
total	Integer	Host quantity
status	String	Request success or failure status
result	Array of HostInfo objects	Host information list

Table 4-41 HostInfo

Parameter	Type	Description
uuid	String	Host ID
ip	String	Host IP address
os	String	Host OS
port	Integer	Port
authorization	HostAuthorizationBody object	Log in to the host for authentication by password or key.
permission	PermissionHostDetailNew object	Host-related permission details
host_name	String	Host name
as_proxy	Boolean	Proxy or not
group_id	String	Host cluster ID
proxy_host_id	String	Proxy ID
owner_id	String	Host owner ID
owner_name	String	Host owner name
proxy_host	HostInfo object	Proxy details
connection_status	String	Connectivity status
create_time	String	Creation time
lastest_connection_time	String	Last connection time
connection_result	String	Connectivity verification result
nick_name	String	Host owner alias
import_status	String	Import status
env_count	Integer	Number of associated environments

Table 4-42 HostAuthorizationBody

Parameter	Type	Description
username	String	Username. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.).
password	String	Password. When the authentication type is 0, the password is mandatory.

Parameter	Type	Description
private_key	String	Key. When the authentication type is 1, the key is mandatory.
trusted_type	Integer	Authentication type. 0 indicates password authentication, and 1 indicates key authentication.

Table 4-43 PermissionHostDetailNew

Parameter	Type	Description
can_view	Boolean	Whether you have the view permission
can_edit	Boolean	Whether you have the edit permission
can_delete	Boolean	Whether you have the delete permission
can_add_host	Boolean	Whether you have the permission to add hosts
can_copy	Boolean	Whether you have the permission to clone hosts

Example Requests

```
https://{endpoint}/v1/resources/host-groups/317aea99cf2944fcacf88b34ef771843/hosts?  
page_index=1&page_size=10&sort_key=host_name&sort_dir=ASC&as_proxy=false
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "result": [ {  
    "host_name": "100.101.28.203",  
    "ip": "100.101.28.203",  
    "port": 22,  
    "os": "linux",  
    "authorization": {  
      "username": "root",  
      "password": null,  
      "private_key": null,  
      "trusted_type": 0  
    },  
    "permission": {  
      "can_view": true,  
      "can_edit": true,  
      "can_delete": true,  
      "can_add_host": true,  
      "can_copy": true  
    },  
    "uuid": "2cc913cc9a494f09b7320801ebacad02",  
    "group_id": "ab7647b0863c4e969c8949d38d591339",  
  } ]  
}
```

```
{
  "as_proxy" : false,
  "proxy_host_id" : "",
  "owner_id" : "6baa7454109d47c192f22078fe6cda20",
  "owner_name" : "devcloud_devcloud_l00490255_01",
  "connection_status" : "success",
  "create_time" : "2021-04-15 11:01:51",
  "connection_result" : "Connection established",
  "lastest_connection_time" : "2021-04-15 11:02:00",
  "nick_name" : "A/B Side Account",
  "proxy_host" : null,
  "import_status" : null,
  "env_count" : 1
},
"total" : 1,
"status" : "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.2.3 Querying Host Details (Recommended)

Function

This API is used to query host details by ID.

Calling Method

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

URI

GET /v1/resources/host-groups/{group_id}/hosts/{host_id}

Table 4-44 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Host cluster ID
host_id	Yes	String	Host ID

Request Parameters

Table 4-45 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-46 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
result	HostInfoDetail object	Host details

Table 4-47 HostInfoDetail

Parameter	Type	Description
host_id	String	Host ID
ip	String	Host IP address
os	String	Host OS
port	Integer	Port number
authorization	HostAuthorizationBody object	Log in to the host for authentication by password or key.
permission	PermissionHostDetailNew object	Host-related permission details
group_id	String	Host cluster ID
host_name	String	Host name
as_proxy	Boolean	Proxy or not
proxy_host_id	String	Proxy ID
owner_name	String	Host owner name

Parameter	Type	Description
proxy_host	HostInfoDetail object	Proxy details
connection_status	String	Connectivity status
create_time	String	Creation time
update_time	String	Update time
lastest_connection_time	String	Last connection time
connection_result	String	Connectivity verification result
install_icagent	Boolean	Application Operations Management (AOM) is enabled for free to provide metric monitoring, log query, and alarm functions. (The ICAgent is automatically installed and supports only Huawei Cloud Linux hosts.)
nick_name	String	Creator alias

Table 4-48 HostAuthorizationBody

Parameter	Type	Description
username	String	Username. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.).
password	String	Password. When the authentication type is 0, the password is mandatory.
private_key	String	Key. When the authentication type is 1, the key is mandatory.
trusted_type	Integer	Authentication type. 0 indicates password authentication, and 1 indicates key authentication.

Table 4-49 PermissionHostDetailNew

Parameter	Type	Description
can_view	Boolean	Whether you have the view permission
can_edit	Boolean	Whether you have the edit permission
can_delete	Boolean	Whether you have the delete permission

Parameter	Type	Description
can_add_host	Boolean	Whether you have the permission to add hosts
can_copy	Boolean	Whether you have the permission to clone hosts

Example Requests

```
https://{endpoint}/v1/resources/host-groups/ab7647b0863c4e969c8949d38d591339/hosts/  
300d6d2e53624d0da08b182099ad10f7
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "result" : {  
    "host_id" : "300d6d2e53624d0da08b182099ad10f7",  
    "ip" : "100.101.28.215",  
    "port" : 22,  
    "os" : "linux",  
    "authorization" : {  
      "username" : "root",  
      "password" : null,  
      "private_key" : null,  
      "trusted_type" : 0  
    },  
    "permission" : {  
      "can_view" : true,  
      "can_edit" : true,  
      "can_delete" : true,  
      "can_add_host" : true,  
      "can_copy" : true  
    },  
    "group_id" : "ab7647b0863c4e969c8949d38d591339",  
    "host_name" : "100.101.28.215",  
    "as_proxy" : false,  
    "proxy_host_id" : null,  
    "owner_name" : "devcloud_devcloud_l00490255_01",  
    "proxy_host" : null,  
    "connection_status" : "success",  
    "install_icagent" : false,  
    "create_time" : "2021-05-13 09:35:41",  
    "update_time" : "2021-05-13 09:35:41",  
    "connection_result" : "Connection established",  
    "lastest_connection_time" : "2021-05-13 09:36:11",  
    "nick_name" : "A/B Side Account"  
  },  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.2.4 Editing Host Information in a Host Cluster

Function

This API is used to edit host information in a host cluster by ID.

Calling Method

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

URI

PUT /v1/resources/host-groups/{group_id}/hosts/{host_id}

Table 4-50 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Host cluster ID
host_id	Yes	String	Host ID

Request Parameters

Table 4-51 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-52 Request body parameters

Parameter	Mandatory	Type	Description
as_proxy	No	Boolean	Proxy host or not

Parameter	Mandatory	Type	Description
authorization	No	DeploymentHostAuthorizationBody object	Log in to the host for authentication by password or key.
host_name	Yes	String	Host name
ip	Yes	String	An IPv4 or IPv6 IP address.
port	Yes	Integer	SSH Port, for example, 22.
proxy_host_id	No	String	Proxy host ID
sync	No	Boolean	Whether to sync host information
install_icagent	No	Boolean	Whether to install ICAgent

Table 4-53 DeploymentHostAuthorizationBody

Parameter	Mandatory	Type	Description
username	Yes	String	Username. The value can contain letters, digits, hyphens (-), underscores (_), and periods (.).
password	No	String	Password. When the authentication type is 0, the password is mandatory.
private_key	No	String	Key. When the authentication type is 1, the key is mandatory.
trusted_type	Yes	Integer	Authentication type. 0 indicates password authentication, and 1 indicates key authentication.

Response Parameters

Status code: 200

Table 4-54 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status

Parameter	Type	Description
id	String	Host ID

Example Requests

```
https://{endpoint}/v1/resources/host-groups/6bec5f67ab9b4c34a21c7ffe0b0191c8/hosts/  
a94facdc4b1e40d799dbe6de91167072
```

```
{  
  "as_proxy" : false,  
  "host_name" : "hostName",  
  "install_icagent" : true,  
  "ip" : "100.101.28.215",  
  "port" : 22,  
  "proxy_host_id" : "",  
  "authorization" : {  
    "username" : "root",  
    "password" : "*****",  
    "private_key" : "",  
    "trusted_type" : 0  
  }  
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "status" : "success",  
  "id" : "a94facdc4b1e40d799dbe6de91167072"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.2.5 Deleting a Host from a Host Cluster

Function

This API is used to delete a host from a host cluster by ID.

Calling Method

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

URI

DELETE /v1/resources/host-groups/{group_id}/hosts/{host_id}

Table 4-55 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Host cluster ID
host_id	Yes	String	Host ID

Request Parameters

Table 4-56 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-57 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
id	String	Host ID

Example Requests

```
https://{endpoint}/v1/resources/host-groups/6bec5f67ab9b4c34a21c7ffe0b0191c8/hosts/a94facdc4b1e40d799dbe6de91167072
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "status": "success",
```

```
"id" : "a94facdc4b1e40d799dbe6de91167072"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.2.6 Cloning Hosts to the Target Host Cluster in Batches

Function

This API is used to clone hosts to the target host cluster in batches.

Calling Method

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

URI

POST /v1/resources/host-groups/{group_id}/hosts/replication

Table 4-58 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Source host cluster ID

Request Parameters

Table 4-59 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-60 Request body parameters

Parameter	Mandatory	Type	Description
host_uuids	Yes	Array of strings	Host ID list
target_group_id	Yes	String	Target host cluster ID

Response Parameters

Status code: 200

Table 4-61 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
result	Boolean	Returned result

Example Requests

```
https://{endpoint}/v1/resources/host-groups/8518ee4e95924495ae18addce39b2015/hosts/replication
{
  "host_uuids" : [ "5fd1c0334d7343338054af811fef8e4b" ],
  "target_group_id" : "849f425a74034fd2a4e60c367414efba"
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "status" : "success",
  "result" : true
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.2.7 Deleting Hosts from a Host Cluster in Batches

Function

This API is used to delete hosts from a host cluster in batches.

Calling Method

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

URI

POST /v1/resources/host-groups/{group_id}/hosts/batch-delete

Table 4-62 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Host cluster ID

Request Parameters

Table 4-63 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-64 Request body parameters

Parameter	Mandatory	Type	Description
host_id_list	No	Array of strings	Host ID list

Response Parameters

Status code: 200

Table 4-65 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
result	Array of strings	Returned result

Example Requests

```
https://{endpoint}/v1/resources/host-groups/2a8c2da888c04a5eaff10d0787c90ea4/hosts/batch-delete  
  
{  
  "host_id_list" : [ "5fd1c0334d734338054af811fef8e4b" ]  
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "status" : "success",  
  "result" : [ "450c2301c9ea4d82a6d9a06ce59ba6b4" ]  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3 Managing Applications

4.3.1 Obtaining an Application List

Function

This API is used to query an application list in a project. This API will not be maintained after September 30, 2024. You can use the ListAllApp API instead.

Calling Method

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

URI

GET /v2/{project_id}/tasks/list

Table 4-66 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining a Project ID .

Table 4-67 Query Parameters

Parameter	Mandatory	Type	Description
page	Yes	Integer	Page number, indicating that the query starts from this page. The value of page is no less than 1.
size	Yes	Integer	Number of items displayed on each page. The value of size is no more than 100.

Request Parameters

Table 4-68 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-69 Response body parameters

Parameter	Type	Description
total_num	Integer	Total number

Parameter	Type	Description
result	Array of TaskInfo objects	Returned result

Table 4-70 TaskInfo

Parameter	Type	Description
task_id	String	Deployment task ID
name	String	Application name
project_id	String	Project ID. For details, see Obtaining a Project ID .
project_name	String	Project name
deploy_system	String	Deployment type. Options: deployTemplate, ansible, and shell.
create_time	String	Creation time
update_time	String	Modification time
state	String	Application status: Draft and Available.
execution_time	String	Last deployment time
description	String	Description
is_default_permission	Boolean	Whether to use the default permission matrix
template_id	String	Template ID
owner	String	Username of the application creator
nick_name	String	Alias of the application creator
owner_id	String	ID of the application creator
tenant_id	String	Tenant ID of the application creator
tenant_name	String	Tenant name of the application creator
slave_cluster_id	String	Slave cluster ID. If the value is null, the default slave cluster is used. If slave is user-defined, the slave cluster ID is used.
is_care	Boolean	Whether you have favorited the application
can_modify	Boolean	Whether you have the edit permission

Parameter	Type	Description
can_delete	Boolean	Whether you have the delete permission
can_view	Boolean	Whether you have the view permission
can_execute	Boolean	Whether you have the deploy permission
can_copy	Boolean	Whether you have the clone permission
can_manage	Boolean	Whether you have permission to edit the application permission matrix
can_disable	Boolean	Whether you have permission to disable applications
app_component_list	Array of AppComponentDao objects	Mapping between applications and AOM application components
role_id	Integer	Role ID. 0: Application creator. -1: Project creator. 3: Project manager. 4: Developer. 5: Test manager. 6: Tester. 7: Participant. 8: Viewer.
id	String	Deployment task ID
release_id	Integer	Deployment record sequence number
is_disable	Boolean	Whether the application is disabled
duration	String	Deployment time
execution_state	String	Deployment status
executor_id	String	Deployer ID
executor_nick_name	String	Deployer name
steps	Map<String, Step >	Deployment procedure

Table 4-71 AppComponentDao

Parameter	Type	Description
task_id	String	Parameter description: Deployment application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.

Parameter	Type	Description
app_id	String	Parameter description: AOM application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
app_name	String	Parameter description: AOM application name. Value range: The value consists of letters and digits.
comp_id	String	Parameter description: AOM application component ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
comp_name	String	Parameter description: AOM application component name. Value range: The value consists of 0 to 128 characters.
domain_id	String	Parameter description: Tenant ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
region	String	Parameter description: Region information. Value range: The value consists of 1 to 256 characters.
state	String	Parameter description: Whether the AOM application component takes effect. Value range: • 0: Initialized. • 1: The operation is successful and takes effect.

Table 4-72 Step

Parameter	Type	Description
id	String	Parameter description: Action ID. Value range: N/A
name	String	Parameter description: Action name. Value range: N/A
params	Map<String,String>	Parameter description: Action parameter. Value range: N/A
enable	Boolean	Parameter description: Whether an action is enabled. Value range: - true: Enabled - false: Disabled

Example Requests

```
https://endpoint/v2/332f53cbabc44863a46ce6b4f82a9fe7/tasks/list?page=1&size=2
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result": [ {
    "id": "2c82ffe8d00d4968a4e5f7a36d87ae17",
    "name": "Message Notification",
    "state": "succeeded",
    "owner": "devcloud_devcloud_l00490255_01",
    "duration": "00:00:50",
    "project_id": "332f53cbabc44863a46ce6b4f82a9fe7",
    "project_name": "DeployMan-UI-L0",
    "deploy_system": "deployTemplate",
    "create_time": "2022-02-09 16:34:20",
    "update_time": "2022-03-05 09:04:39",
    "execution_time": "2022-04-11 15:50:23",
    "execution_state": "succeeded",
    "role_id": -1,
    "is_defaut_permission": false,
    "executor_id": "6baa7454109d47c192f22078fe6cda20",
    "executor_nick_name": "A/B Side Account",
    "nick_name": "A/B Side Account",
    "owner_id": "6baa7454109d47c192f22078fe6cda20",
  } ]
}
```

```
"is_care": true,
"can_modify": true,
"can_delete": true,
"can_view": true,
"can_execute": true,
"can_copy": true,
"can_manage": true,
"can_disable": false,
"release_id": 61640,
"is_disable": true
}, {
  "id": "a9c3ef27a1f34a1abf1dc84d927d7d39",
  "name": "412",
  "state": "failed",
  "owner": "paas_clouddeploy_h00472130_01",
  "duration": "00:02:36",
  "project_id": "332f53cbabc44863a46ce6b4f82a9fe7",
  "project_name": "DeployMan-UI-L0",
  "deploy_system": "deployTemplate",
  "create_time": "2022-04-12 17:26:07",
  "update_time": "2022-04-12 17:26:07",
  "execution_time": "2022-04-13 11:45:09",
  "execution_state": "failed",
  "role_id": -1,
  "is_default_permission": false,
  "executor_id": "04ec4661a8df4359b50980a9c958c86d",
  "executor_nick_name": "paas_clouddeploy_h00472130_01",
  "nick_name": "paas_clouddeploy_h00472130_01",
  "owner_id": "04ec4661a8df4359b50980a9c958c86d",
  "is_care": false,
  "can_modify": true,
  "can_delete": true,
  "can_view": true,
  "can_execute": true,
  "can_copy": true,
  "can_manage": true,
  "can_disable": false,
  "release_id": 29,
  "is_disable": true
}],
"total_num": 331
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3.2 Deploying an Application

Function

This API is used to deploy an application by deployment task ID.

Calling Method

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

URI

POST /v2/tasks/{task_id}/start

Table 4-73 Path Parameters

Parameter	Mandatory	Type	Description
task_id	Yes	String	Deployment task ID

Request Parameters

Table 4-74 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-75 Request body parameters

Parameter	Mandatory	Type	Description
params	No	Array of DynamicConfigInfo objects	Parameters transferred during application deployment
record_id	No	String	Deployment ID of an application. You can use record_id to roll back the application to the previous deployment status. Select the historical deployment record of the application and obtain the record ID from the URL.
trigger_source	No	String	Trigger source. 0: Deployment can be triggered through all requests. 1: Deployment can be triggered only through pipeline.

Table 4-76 DynamicConfigInfo

Parameter	Mandatory	Type	Description
key	No	String	Parameter name transferred when deploying application
value	No	String	Parameter value transferred during application deployment
type	No	String	Type. If a dynamic parameter is set, the type is mandatory.

Response Parameters

Status code: 200

Table 4-77 Response body parameters

Parameter	Type	Description
id	String	Deployment record ID
task_id	String	Deployment task ID
job_name	String	Name of the application to be executed
app_component_list	Array of AppComponentDao objects	Mapping between applications and AOM application components

Table 4-78 AppComponentDao

Parameter	Type	Description
task_id	String	Parameter description: Deployment application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
app_id	String	Parameter description: AOM application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.

Parameter	Type	Description
app_name	String	Parameter description: AOM application name. Value range: The value consists of letters and digits.
comp_id	String	Parameter description: AOM application component ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
comp_name	String	Parameter description: AOM application component name. Value range: The value consists of 0 to 128 characters.
domain_id	String	Parameter description: Tenant ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
region	String	Parameter description: Region information. Value range: The value consists of 1 to 256 characters.
state	String	Parameter description: Whether the AOM application component takes effect. Value range: • 0: Initialized. • 1: The operation is successful and takes effect.

Example Requests

This API is used to deploy an application by deployment task ID.

```
https://{endpoint}/v2/tasks/d2dc947ec2424d8789bb3984bb3adf45/start
```

```
{  
  "params" : [ ]  
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "id" : "0ee9c8e6a7dc44109541e53c6dccf47c",
  "task_id" : "d2dc947ec2424d8789bb3984bb3adf45",
  "job_name" : "job_0ee9c8e6a7dc44109541e53c6dccf47c_1620810492008",
  "app_component_list" : [ ]
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3.3 Querying the Historical Deployment Records of a Specified Application in a Project by the Start Time and End Time

Function

This API is used to query the historical deployment records of a specified application in a project by the start time and end time.

Calling Method

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

URI

GET /v2/{project_id}/task/{id}/history

Table 4-79 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see [Obtaining a Project ID] (CloudDeploy_api_0014.xml). Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Default value: N/A
id	Yes	String	Parameter description: Deployment application ID. Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Default value: N/A

Table 4-80 Query Parameters

Parameter	Mandatory	Type	Description
page	Yes	Integer	Parameter description: Page number, which means the query starts from this page. Constraints: N/A Value range: 1-99,999 Default value: N/A

Parameter	Mandatory	Type	Description
size	Yes	Integer	Parameter description: Number of items displayed on each page. Constraints: N/A Value range: 1-100 Default value: N/A
start_date	Yes	String	Parameter description: Start time. The value format is yyyy-MM-dd. For example, 2022-03-16. Constraints: This parameter is used together with end_date. The value of end_date must be later than or equal to the value of start_date. The time range cannot exceed 30 days. Value range: N/A Default value: N/A
end_date	Yes	String	Parameter description: End time. The value format is yyyy-MM-dd. For example, 2022-04-15. Constraints: This parameter is used together with start_date. The value of end_date must be later than or equal to the value of start_date. The time range cannot exceed 30 days. Value range: N/A Default value: N/A

Request Parameters

Table 4-81 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.
Content-Type	Yes	String	Message body type (format).

Response Parameters

Status code: 200

Table 4-82 Response body parameters

Parameter	Type	Description
result	Array of ExecuteRecordV2 Body objects	Parameter description: List of historical application deployment records.
total_num	Integer	Parameter description: Total number of historical application deployment records between the start time and end time. Value range: N/A

Table 4-83 ExecuteRecordV2Body

Parameter	Type	Description
duration	String	Parameter description: Deployment duration. Value range: N/A
state	String	Parameter description: Application status. Value range: N/A

Parameter	Type	Description
operator	String	Parameter description: Operator username. Value range: N/A
execution_id	String	Parameter description: Deployment record ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
start_time	String	Parameter description: Start time of application deployment. The value format is yyyy-MM-dd HH:mm:ss. For example, 2021-02-25 10:37:27. Value range: N/A
nickname	String	Parameter description: Operator nickname. Value range: N/A
end_time	String	Parameter description: End time of application deployment. The value format is yyyy-MM-dd HH:mm:ss. For example, 2021-02-25 10:37:27. Value range: N/A
release_id	Long	Parameter description: Deployment record sequence number. Value range: N/A
type	String	Parameter description: Deployment type. Value range: install: Installation and deployment.

Example Requests

```
https://{endpoint}/v2/5ab1363a143f46aa9959a4a8c2616589/task/ad9c1d60282544d2b5a380ea22539cf1/history?page=2&size=2&start_date=2022-03-16&end_date=2022-04-15
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result": [ {
    "duration": "00:16:53",
    "state": "succeeded",
    "type": "install",
    "operator": "devcloud_devcloud_l00490255_01",
    "execution_id": "50f18ce454a64ea5a62a33d56617b831",
    "start_time": "2022-04-15 15:03:24",
    "nickname": "A/B Side Account",
    "end_time": "2022-04-15 15:20:17",
    "release_id": 20
  }, {
    "duration": "00:15:31",
    "state": "failed",
    "type": "install",
    "operator": "devcloud_devcloud_l00490255_01",
    "execution_id": "f757fbe93d35494ba0ff73b34e2f79aa",
    "start_time": "2022-04-15 15:03:15",
    "nickname": "A/B Side Account",
    "end_time": "2022-04-15 15:18:46",
    "release_id": 19
  } ],
  "total_num": 20
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3.4 Obtaining an Application List (Recommended)

Function

This API is used to query an application list in a project.

Calling Method

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

URI

POST /v1/applications/list

Request Parameters

Table 4-84 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-85 Request body parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see [Obtaining a Project ID] (CloudDeploy_api_0014.xml). Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Default value: N/A
page	Yes	Integer	Parameter description: Page number, which means the query starts from this page. Constraints: N/A Value range: 1-99,999 Default value: N/A

Parameter	Mandatory	Type	Description
size	Yes	Integer	Parameter description: Number of items displayed on each page. Constraints: N/A Value range: 1-100 Default value: N/A
sort_name	No	String	Parameter description: Sort field name. Constraints: N/A Value range: • name: Application name. • startTime: Start time. Default value: N/A
sort_by	No	String	Parameter description: Sorting sequence. Constraints: N/A Value range: • ASC: Ascending • asc: Ascending • DESC: Descending • desc: Descending Default value: N/A

Parameter	Mandatory	Type	Description
states	No	Array of strings	Parameter description: Application status list. Constraints: N/A Value range: • abort: Deployment suspended • failed: Deployment failed • not_started: Execution canceled • pending: Queuing • running: Deployment in progress • succeeded: Deployment succeeded • timeout: Deployment times out • not_executed: Deployment not executed Default value: N/A
group_id	No	String	Parameter description: Application group ID. Enter no_grouped to query ungrouped applications. Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed or the no_grouped value is transferred. Default value: N/A

Response Parameters

Status code: 200

Table 4-86 Response body parameters

Parameter	Type	Description
total_num	Integer	Parameter description: Total number of applications. Value range: N/A
result	Array of AppExecutionInfo objects	Parameter description: Application list array.

Table 4-87 AppExecutionInfo

Parameter	Type	Description
id	String	Parameter description: Application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
name	String	Parameter description: Application name. Value range: The value consists of 3-128 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed.
duration	String	Parameter description: Deployment time. Value range: N/A
is_disable	Boolean	Parameter description: Whether the application is disabled. Value range: • true: Disabled • false: Not disabled
project_id	String	Parameter description: Project ID. Value range: The value consists of 32 characters. Letters and digits are allowed.

Parameter	Type	Description
project_name	String	Parameter description: Project name. Value range: The value consists of 3 to 128 characters.
is_care	Boolean	Parameter description: Whether a user has favorited the application. Value range: • true: Added to favorites • false: Not added to favorites
can_modify	Boolean	Parameter description: Whether a user has the edit permission. Value range: • true: With permission • false: Without permission
can_delete	Boolean	Parameter description: Whether a user has the delete permission. Value range: • true: With permission • false: Without permission
can_view	Boolean	Parameter description: Whether a user has the view permission. Value range: • true: With permission • false: Without permission
can_execute	Boolean	Parameter description: Whether a user has the deploy permission. Value range: • true: With permission • false: Without permission

Parameter	Type	Description
can_copy	Boolean	Parameter description: Whether a user has the clone permission. Value range: • true: With permission • false: Without permission
can_manage	Boolean	Parameter description: Whether a user has permission to edit the application permission matrix. Value range: • true: With permission • false: Without permission
can_create_env	Boolean	Parameter description: Whether a user has the permission to create environments. Value range: • true: With permission • false: Without permission
can_disable	Boolean	Parameter description: Whether a user has permission to disable applications. Value range: • true: With permission • false: Without permission
deploy_system	String	Parameter description: Deployment mode. Value range: • deployTemplate: Deployment template
create_user_id	String	Parameter description: ID of the application creator. Value range: The value consists of 1-32 characters. Letters and digits are allowed.

Parameter	Type	Description
create_tenant_id	String	Parameter description: Tenant ID of the application creator. Value range: The value consists of 1-32 characters. Letters and digits are allowed.
create_time	String	Parameter description: Creation time. The value format is yyyy-MM-dd HH:mm:ss. For example, 2021-02-25 10:37:27. Value range: N/A
update_time	String	Parameter description: Modification time. The value format is yyyy-MM-dd HH:mm:ss. For example, 2021-02-25 10:37:27. Value range: N/A
execution_time	String	Parameter description: Last deployment time. The value format is yyyy-MM-dd HH:mm:ss. For example, 2021-02-25 10:37:27. Value range: N/A
end_time	String	Parameter description: Deployment end time. The value format is yyyy-MM-dd HH:mm:ss. For example, 2021-02-25 10:37:27. Value range: N/A
execution_state	String	Parameter description: Deployment status. Value range: N/A
release_id	Integer	Parameter description: Deployment record sequence number. Value range: N/A

Parameter	Type	Description
executor_id	String	Parameter description: Deployer ID. Value range: The value consists of 1-32 characters. Letters and digits are allowed.
executor_nick_name	String	Parameter description: Deployer nickname. Value range: N/A
arrange_infos	Array of TaskBaseResponseBody objects	Parameter description: Deployment task information.

Table 4-88 TaskBaseResponseBody

Parameter	Type	Description
id	String	Parameter description: Deployment application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
state	String	Parameter description: Deployment task status. Value range: - Available: Executable state - Draft: Draft state
deploy_system	String	Parameter description: Deployment mode. Value range: deployTemplate: Deployment template

Example Requests

This API is used to obtain an application list.

```
https://{endpoint}/v1/applications/list
```

```
{  
  "project_id" : "6039d4480efc4dddb178abff98719913",  
}
```

```
{  
  "page" : 1,  
  "size" : 10  
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "result" : [ {  
    "id" : "cb439d016d8641c8a44c177a121fad15",  
    "name" : "Test",  
    "duration" : "00:00:17",  
    "is_disable" : true,  
    "project_id" : "1ff8aa6dda4643bd9cbdbb588fb24bde",  
    "project_name" : "Project 1",  
    "is_care" : false,  
    "can_modify" : true,  
    "can_delete" : true,  
    "can_view" : true,  
    "can_execute" : true,  
    "can_copy" : true,  
    "can_manage" : false,  
    "can_create_env" : false,  
    "can_disable" : false,  
    "create_user_id" : "04ec4661a8df4359b50980a9c958c86d",  
    "create_tenant_id" : "208fbb09068e4820b9209ef9ff4da73d",  
    "create_time" : "2023-07-05 20:34:40.0",  
    "update_time" : "2023-08-02 14:20:30.0",  
    "execution_time" : "2023-08-18 09:40:16",  
    "end_time" : "2023-08-18 09:40:33",  
    "execution_state" : "failed",  
    "release_id" : 4,  
    "executor_id" : "6baa7454109d47c192f22078fe6cda20",  
    "executor_nick_name" : "Test Account",  
    "arrange_infos" : [ {  
      "id" : "e700f15965694253940502911220d76b",  
      "state" : "failed",  
      "deploy_system" : "deployTemplate"  
    } ]  
  } ],  
  "total_num" : 1  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3.5 Creating an Application (Recommended)

Function

This API is used to create an application.

Calling Method

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

URI

POST /v1/applications

Request Parameters

Table 4-89 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-90 Request body parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
name	Yes	String	Application name
description	No	String	Description
group_id	No	String	Group ID
is_draft	Yes	Boolean	Whether the application is in draft status
create_type	Yes	String	Creation type. template: Create an application using a template.
slave_cluster_id	No	String	Custom slave resource pool ID
trigger	No	TaskTriggerVO object	Deployment task triggering scenarios

Parameter	Mandatory	Type	Description
arrange_infos	No	Array of TaskV2RequestBody objects	Deployment task list

Table 4-91 TaskTriggerVO

Parameter	Mandatory	Type	Description
trigger_source	No	String	Scenario where a deployment task can be executed. 0: All execution requests can be triggered. 1: Only pipeline can be triggered.
artifact_source_system	No	String	When a task can be triggered only by the pipeline, source information transferred by the pipeline only supports CodeArts Artifact.
artifact_type	No	String	When a task can be triggered only by the pipeline, the artifact type is generic and docker for the pipeline source.

Table 4-92 TaskV2RequestBody

Parameter	Mandatory	Type	Description
template_id	No	String	Template ID
operation_list	No	Array of DeployV2OperationsDO objects	Deployment orchestration list information

Table 4-93 DeployV2OperationsDO

Parameter	Mandatory	Type	Description
id	No	String	Step ID
name	No	String	Step name
description	No	String	Description

Parameter	Mandatory	Type	Description
code	No	String	Download URL
params	No	String	Detailed definition of step
entrance	No	String	Entry function
version	No	String	Version
module_id	No	String	Module ID

Response Parameters

Status code: 200

Table 4-94 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
result	AppBaseResponse object	Parameter description: Response body for creating or deleting an application.

Table 4-95 AppBaseResponse

Parameter	Type	Description
id	String	Parameter description: Application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
name	String	Parameter description: Application name. Value range: The value consists of 3-128 characters. Only letters, digits, hyphens (-) and underscores (_) are allowed.
region	String	Parameter description: Region to which the application belongs. Value range: N/A

Parameter	Type	Description
arrange_infos	Array of TaskBaseBody objects	Parameter description: Deployment task list.

Table 4-96 TaskBaseBody

Parameter	Type	Description
id	String	Parameter description: Deployment application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.

Example Requests

This API is used to create an application.

https://{endpoint}/v1/applications

```
{
  "name" : "deployenv20230822192953",
  "project_id" : "55837d272adf4eee90319800e2da6961",
  "description" : "This API is used to create an application using a blank template.",
  "trigger" : {
    "trigger_source" : 0,
    "artifact_source_system" : "",
    "artifact_type" : ""
  },
  "slave_cluster_id" : "",
  "create_type" : "template",
  "is_draft" : true,
  "arrange_infos" : [ ]
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result" : {
    "id" : "e700f15965694253940502911220d76b",
    "name" : "testApp",
    "region" : "example",
    "arrange_infos" : [ {
      "id" : "e700f15965694253940502911220d76b"
    } ]
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3.6 Updating an Application

Function

This API is used to update an application.

Calling Method

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

URI

PUT /v1/applications

Request Parameters

Table 4-97 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-98 Request body parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Application ID
project_id	Yes	String	Project ID
name	Yes	String	Application name
description	No	String	Description

Parameter	Mandatory	Type	Description
is_draft	Yes	Boolean	Whether the application is in draft status
create_type	Yes	String	Creation type. template: Create an application using a template.
slave_cluster_id	No	String	Custom slave resource pool ID
trigger	No	TaskTriggerVO object	Triggering settings for application deployment
arrange_infos	No	Array of UpdateTaskV2RequestBody objects	Deployment task list

Table 4-99 TaskTriggerVO

Parameter	Mandatory	Type	Description
trigger_source	No	String	Scenario where a deployment task can be executed. 0: All execution requests can be triggered. 1: Only pipeline can be triggered.
artifact_source_system	No	String	When a task can be triggered only by the pipeline, source information transferred by the pipeline only supports CodeArts Artifact.
artifact_type	No	String	When a task can be triggered only by the pipeline, the artifact type is generic and docker for the pipeline source.

Table 4-100 UpdateTaskV2RequestBody

Parameter	Mandatory	Type	Description
id	No	String	Deployment task ID
deploy_system	No	String	Deployment system. deployTemplate: Deployment template.
template_id	No	String	Template ID

Parameter	Mandatory	Type	Description
operation_list	No	Array of DeployV2OperationsDO objects	Deployment orchestration list information

Table 4-101 DeployV2OperationsDO

Parameter	Mandatory	Type	Description
id	No	String	Step ID
name	No	String	Step name
description	No	String	Description
code	No	String	Download URL
params	No	String	Detailed definition of step
entrance	No	String	Entry function
version	No	String	Version
module_id	No	String	Module ID

Response Parameters

Status code: 200

Table 4-102 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
result	AppBaseResponse object	Parameter description: Response body for creating or deleting an application.

Table 4-103 AppBaseResponse

Parameter	Type	Description
id	String	Parameter description: Application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
name	String	Parameter description: Application name. Value range: The value consists of 3-128 characters. Only letters, digits, hyphens (-) and underscores (_) are allowed.
region	String	Parameter description: Region to which the application belongs. Value range: N/A
arrange_infos	Array of TaskBaseBody objects	Parameter description: Deployment task list.

Table 4-104 TaskBaseBody

Parameter	Type	Description
id	String	Parameter description: Deployment application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.

Example Requests

Update an application.

https://{endpoint}/v1/applications

```
{
  "id" : "e700f15965694253940502911220d76b",
  "name" : "deployenv20230822192953",
  "project_id" : "55837d272adf4eee90319800e2da6961",
  "description" : "Update an application.",
  "trigger" : {
    "trigger_source" : 0,
```

```
{
  "artifact_source_system" : "",
  "artifact_type" : ""
},
"slave_cluster_id" : "",
"create_type" : "template",
"is_draft" : true,
"arrange_infos" : [ {
  "id" : "e700f15965694253940502911220d76b",
  "deploy_system" : "deployTemplate",
  "template_id" : "ec939bdf63194aca9fad45b3ba05643e",
  "operation_list" : [ ]
} ]
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result" : {
    "id" : "e700f15965694253940502911220d76b",
    "name" : "testApp",
    "region" : "example",
    "arrange_infos" : [ {
      "id" : "e700f15965694253940502911220d76b"
    } ]
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3.7 Obtaining Application Details (Recommended)

Function

This API is used to obtain application details by ID.

Calling Method

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

URI

GET /v1/applications/{app_id}/info

Table 4-105 Path Parameters

Parameter	Mandatory	Type	Description
app_id	Yes	String	Parameter description: Application ID. Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Default value: N/A

Request Parameters

Table 4-106 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-107 Response body parameters

Parameter	Type	Description
result	AppDetailInfo object	Parameter description: Application details.
status	String	Parameter description: Request success or failure status. Value range: • success: Request succeeded • error: Request failed

Table 4-108 AppDetailInfo

Parameter	Type	Description
id	String	Parameter description: Application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
name	String	Parameter description: Application name. Value range: The value consists of 3-128 characters. Only letters, digits, hyphens (-) and underscores (_) are allowed.
region	String	Parameter description: Region to which the application belongs. Value range: N/A
description	String	Parameter description: Description. Value range: The value consists of 0-1,024 characters.
is_disable	Boolean	Parameter description: Whether the application is disabled. Value range: • true: Disabled • false: Not disabled
create_type	String	Parameter description: Creation method. Value range: • template: Flexible application orchestration
project_id	String	Parameter description: Project ID. Value range: The value consists of 32 characters. Letters and digits are allowed.

Parameter	Type	Description
project_name	String	Parameter description: Project name. Value range: The value consists of 3 to 128 characters.
slave_cluster_id	String	Parameter description: Slave cluster ID. If the ID is left empty, the official resource pool is used by default. The self-hosted resource pool is used when the self-hosted resource pool slave cluster ID is transferred. Value range: The value consists of 1-32 characters. Letters and digits are allowed or the null value is transferred.
is_care	Boolean	Parameter description: Whether a user has favorited the application. Value range: • true: Added to favorites • false: Not added to favorites
can_modify	Boolean	Parameter description: Whether a user has the edit permission. Value range: • true: With permission • false: Without permission
can_delete	Boolean	Parameter description: Whether a user has the delete permission. Value range: • true: With permission • false: Without permission
can_view	Boolean	Parameter description: Whether a user has the view permission. Value range: • true: With permission • false: Without permission

Parameter	Type	Description
can_execute	Boolean	Parameter description: Whether a user has the deploy permission. Value range: • true: With permission • false: Without permission
can_copy	Boolean	Parameter description: Whether a user has the clone permission. Value range: • true: With permission • false: Without permission
can_manage	Boolean	Parameter description: Whether a user has permission to edit the application permission matrix. Value range: • true: With permission • false: Without permission
can_create_env	Boolean	Parameter description: Whether a user has the permission to create environments. Value range: • true: With permission • false: Without permission
can_disable	Boolean	Parameter description: Whether a user has permission to disable applications. Value range: • true: With permission • false: Without permission
owner_tenant_id	String	Parameter description: Tenant ID of the application owner. Value range: The value consists of 1-32 characters. Letters and digits are allowed.

Parameter	Type	Description
create_user_id	String	Parameter description: ID of the application creator. Value range: The value consists of 1-32 characters. Letters and digits are allowed.
create_tenant_id	String	Parameter description: Tenant ID of the application creator. Value range: The value consists of 1-32 characters. Letters and digits are allowed.
create_time	String	Parameter description: Creation time. The value format is yyyy-MM-dd HH:mm:ss. For example, 2021-02-25 10:37:27. Value range: N/A
update_time	String	Parameter description: Modification time. The value format is yyyy-MM-dd HH:mm:ss. For example, 2021-02-25 10:37:27. Value range: N/A
permission_level	String	Parameter description: Application authentication level. Value range: - project: Authentication at project level - instance: Authentication at instance level
arrange_infos	Array of TaskV2Info objects	Parameter description: Deployment task information.

Table 4-109 TaskV2Info

Parameter	Type	Description
id	String	Parameter description: Deployment application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
name	String	Parameter description: Deployment task name. Value range: The value consists of 3-128 characters. Only letters, digits, hyphens (-) and underscores (_) are allowed.
state	String	Parameter description: Deployment task status. Value range: - Available: Executable state - Draft: Draft state
description	String	Parameter description: Description. Value range: The value consists of 0-1,024 characters.
owner	String	Parameter description: Deployment application owner. Value range: N/A
steps	Map<String, Step >	Parameter description: Deployment action.
project_id	String	Parameter description: Project ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
project_name	String	Parameter description: Project name. Value range: The value consists of 3 to 128 characters.

Parameter	Type	Description
deploy_system	String	Parameter description: Deployment mode. Value range: deployTemplate: Deployment template
create_time	String	Parameter description: Creation time. The value format is yyyy-MM-dd HH:mm:ss. For example, 2021-02-25 10:37:27. Value range: N/A
update_time	String	Parameter description: Modification time. The value format is yyyy-MM-dd HH:mm:ss. For example, 2021-02-25 10:37:27. Value range: N/A
role_id	Integer	Parameter description: Role ID. Value range: N/A
is_default_permission	Boolean	Parameter description: Whether a role is the default role. Value range: - true: Yes - false: No
template_id	String	Parameter description: Template ID. Value range: The value consists of 1-32 characters. Letters and digits are allowed.
nick_name	String	Parameter description: Nickname of the application creator. Value range: The value consists of 0 to 128 characters.

Parameter	Type	Description
owner_id	String	Parameter description: ID of the application creator. Value range: The value consists of 1-32 characters. Letters and digits are allowed.
tenant_id	String	Parameter description: Tenant ID of the application creator. Value range: The value consists of 1-32 characters. Letters and digits are allowed.
tenant_name	String	Parameter description: Tenant name of the application creator. Value range: The value consists of 0 to 128 characters.
slave_cluster_id	String	Parameter description: Slave cluster ID. If the ID is left empty, the official resource pool is used by default. The self-hosted resource pool is used when the self-hosted resource pool slave cluster ID is transferred. Value range: The value consists of 1-32 characters. Letters and digits are allowed or the null value is transferred.
is_care	Boolean	Parameter description: Whether a user has favorited the application. Value range: • true: Added to favorites • false: Not added to favorites
can_modify	Boolean	Parameter description: Whether a user has the edit permission. Value range: • true: With permission • false: Without permission

Parameter	Type	Description
can_delete	Boolean	Parameter description: Whether a user has the delete permission. Value range: • true: With permission • false: Without permission
can_view	Boolean	Parameter description: Whether a user has the view permission. Value range: • true: With permission • false: Without permission
can_execute	Boolean	Parameter description: Whether a user has the deploy permission. Value range: • true: With permission • false: Without permission
can_copy	Boolean	Parameter description: Whether a user has the clone permission. Value range: • true: With permission • false: Without permission
can_manage	Boolean	Parameter description: Whether a user has permission to edit the application permission matrix. Value range: • true: With permission • false: Without permission
can_create_env	Boolean	Parameter description: Whether a user has the permission to create environments. Value range: • true: With permission • false: Without permission

Parameter	Type	Description
can_disable	Boolean	Parameter description: Whether a user has permission to disable applications. Value range: - true: With permission - false: Without permission
app_component_list	Array of AppComponentDao objects	Parameter description: Application component list.
release_id	Integer	Parameter description: Deployment record sequence number. Value range: N/A
app_id	String	Parameter description: Deployment task ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
is_disable	Boolean	Parameter description: Whether the application is disabled. Value range: - true: Disabled - false: Not disabled

Table 4-110 Step

Parameter	Type	Description
id	String	Parameter description: Action ID. Value range: N/A
name	String	Parameter description: Action name. Value range: N/A

Parameter	Type	Description
params	Map<String,String>	Parameter description: Action parameter. Value range: N/A
enable	Boolean	Parameter description: Whether an action is enabled. Value range: - true: Enabled - false: Disabled

Table 4-111 AppComponentDao

Parameter	Type	Description
task_id	String	Parameter description: Deployment application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
app_id	String	Parameter description: AOM application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
app_name	String	Parameter description: AOM application name. Value range: The value consists of letters and digits.
comp_id	String	Parameter description: AOM application component ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
comp_name	String	Parameter description: AOM application component name. Value range: The value consists of 0 to 128 characters.

Parameter	Type	Description
domain_id	String	Parameter description: Tenant ID. Value range: The value consists of 32 characters. Letters and digits are allowed.
region	String	Parameter description: Region information. Value range: The value consists of 1 to 256 characters.
state	String	Parameter description: Whether the AOM application component takes effect. Value range: 0: Initialized. 1: The operation is successful and takes effect.

Example Requests

https://{endpoint}/v1/applications/d2dc947ec2424d8789bb3984bb3adf45/info

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result" : {
    "id" : "d9e0532073e2475dbed64b22e64f3b26",
    "name" : "deployenv202308211530723",
    "region" : "example",
    "description" : "for_test",
    "is_disable" : true,
    "create_type" : "template",
    "project_id" : "1ff8aa6dda4643bd9cbdbb588fb24bde",
    "project_name" : "Test Item",
    "slave_cluster_id" : null,
    "is_care" : false,
    "can_modify" : true,
    "can_delete" : true,
    "can_view" : true,
    "can_execute" : true,
    "can_copy" : true,
    "can_manage" : true,
    "can_create_env" : true,
    "can_disable" : true,
    "owner_tenant_id" : "208fbb09068e4820b9209ef9ff4da73d",
    "create_user_id" : "6baa7454109d47c192f22078fe6cda20",
    "create_tenant_id" : "26a680dd72e7482eb60d2ef5513588bb",
    "create_time" : "2023-08-21 15:30:51.0",
```

```
"update_time" : "2023-08-21 15:30:51.0",
"permission_level" : "instance",
"arrange_infos" : [ {
  "id" : "685a6f3b80264e7d96f2ba308f8414e5",
  "name" : "deployenv202308211530723",
  "state" : "Draft",
  "description" : "for_test",
  "owner" : "devcloud_devcloud_l00490255_01",
  "steps" : {
    "step1" : {
      "id" : null,
      "name" : "Install Go",
      "params" : { },
      "enable" : true
    },
    "step2" : {
      "id" : null,
      "name" : "Download Software Package",
      "params" : { },
      "enable" : true
    },
    "step3" : {
      "id" : null,
      "name" : "Stop Go Service",
      "params" : { },
      "enable" : true
    },
    "step4" : {
      "id" : null,
      "name" : "Start Go Service",
      "params" : { },
      "enable" : true
    },
    "step5" : {
      "id" : null,
      "name" : "Test Service",
      "params" : { },
      "enable" : true
    }
  },
  "project_id" : "1ff8aa6dda4643bd9cbdbb588fb24bde",
  "project_name" : "Test Item",
  "deploy_system" : "deployTemplate",
  "create_time" : "2023-08-21 15:30:51",
  "update_time" : "2023-08-21 15:30:51",
  "role_id" : 0,
  "is_default_permission" : false,
  "template_id" : "681bd91f9d6e42cdb4cb84d6718de9fe",
  "nick_name" : "Alias",
  "owner_id" : "6baa7454109d47c192f22078fe6cda20",
  "tenant_id" : "26a680dd72e7482eb60d2ef5513588bb",
  "tenant_name" : "devcloud_devcloud_l00490255_01",
  "slave_cluster_id" : null,
  "is_care" : false,
  "can_modify" : true,
  "can_delete" : true,
  "can_view" : true,
  "can_execute" : true,
  "can_copy" : true,
  "can_manage" : true,
  "can_create_env" : false,
  "can_disable" : false,
  "app_component_list" : [ ],
  "release_id" : 0,
  "app_id" : "d9e0532073e2475dbed64b22e64f3b26",
  "is_disable" : true
} ]
},
```

```
"status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3.8 Deleting an Application (Recommended)

Function

This API is used to delete an application by ID.

Calling Method

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

URI

DELETE /v1/applications/{app_id}

Table 4-112 Path Parameters

Parameter	Mandatory	Type	Description
app_id	Yes	String	Parameter description: Application ID. Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Default value: N/A

Request Parameters

Table 4-113 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200**Table 4-114** Response body parameters

Parameter	Type	Description
status	String	Parameter description: Request success or failure status. Value range: • success: Request succeeded • error: Request failed
result	AppBaseResponse object	Parameter description: Response body for creating or deleting an application.

Table 4-115 AppBaseResponse

Parameter	Type	Description
id	String	Parameter description: Application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.

Parameter	Type	Description
name	String	Parameter description: Application name. Value range: The value consists of 3-128 characters. Only letters, digits, hyphens (-) and underscores (_) are allowed.
region	String	Parameter description: Region to which the application belongs. Value range: N/A
arrange_infos	Array of TaskBaseBody objects	Parameter description: Deployment task list.

Table 4-116 TaskBaseBody

Parameter	Type	Description
id	String	Parameter description: Deployment application ID. Value range: The value consists of 32 characters. Letters and digits are allowed.

Example Requests

```
https://{endpoint}/v1/applications/b024060ac00749178e72713ae82b0da2
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result": {
    "id": "20168cbc8504479d84f118ae72f87763",
    "name": "test_app",
    "region": "example",
    "arrange_infos": [ {
      "id": "5d55203938db46939cd41a66ef2c4a52"
    } ]
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3.9 Querying the Execution Parameters of a Deployment Record

Function

This API is used to query the execution parameters of a deployment record.

Calling Method

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

URI

GET /v2/history/tasks/{task_id}/params

Table 4-117 Path Parameters

Parameter	Mandatory	Type	Description
task_id	Yes	String	Parameter description: Deployment application ID. Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Default value: N/A

Table 4-118 Query Parameters

Parameter	Mandatory	Type	Description
record_id	No	String	Parameter description: Execution record ID. Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Default value: N/A

Request Parameters

Table 4-119 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-120 Response body parameters

Parameter	Type	Description
[items]	Array of ConfigInfo objects	Response body for querying deployment record execution parameters

Table 4-121 ConfigInfo

Parameter	Type	Description
name	String	Parameter description: Parameter name. Value range: N/A
type	String	Parameter description: Parameter type. Value range: N/A
value	String	Parameter description: Parameter value. Value range: N/A

Example Requests

```
https://{endpoint}/v1/history/tasks/8e1eb7f010d4442ca150e3a1a5d96d94/params?  
record_id=8bcfde0419bf4d62b4676de99bcc7403
```

Example Responses

Status code: 200

OK: The request is successful.

```
[ {  
  "name" : "service_port",  
  "type" : "text",  
  "value" : 8080  
}]
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3.10 Cloning an Application

Function

This API is used to clone an application.

Calling Method

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

URI

POST /v1/applications/{app_id}/duplicate

Table 4-122 Path Parameters

Parameter	Mandatory	Type	Description
app_id	Yes	String	Application ID

Request Parameters

Table 4-123 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-124 Response body parameters

Parameter	Type	Description
result	AppBaseInfo object	Basic application information
status	String	Request success or failure status

Table 4-125 AppBaseInfo

Parameter	Type	Description
id	String	Application ID
name	String	Application name
region	String	Region information
is_disable	Boolean	Whether the application is disabled

Example Requests

`https://{endpoint}/v1/applications/42cf463ae2ab4c2e9825a8932874782f/duplicate`

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result": {
    "id": "a21d1951433c47a9b72cb72933d27df8",
    "name": "Test_Copy_92131",
    "region": "example",
    "is_disable": false
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3.11 Deleting Applications from a Project in Batches

Function

This API is used to delete applications from a project in batches.

Calling Method

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

URI

POST /v2/applications/batch-delete

Request Parameters

Table 4-126 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-127 Request body parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
application_ids	Yes	Array of strings	Application ID list

Response Parameters

Status code: 200

Table 4-128 Response body parameters

Parameter	Type	Description
result	Array of AppDeleteResult objects	Result of deleting applications in batches
total_num	Integer	Total number of applications deleted in batches

Table 4-129 AppDeleteResult

Parameter	Type	Description
application_id	String	Application ID
application_name	String	Application name
status	String	Deletion result: success or error

Parameter	Type	Description
error_reason	String	Causes of deletion failures

Example Requests

```
https://{endpoint}/v2/applications/batch-delete

{
  "application_ids": [ "eac65c10c5c34df1824af96ec93a9eea", "3ba2ad194ff141e39b1d3d0749242858" ],
  "project_id": "0a38ce9ba3c740c199a0f872b6163661"
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result": [ {
    "application_id": "eac65c10c5c34df1824af96ec93a9eea",
    "application_name": "Application name 1",
    "error_reason": "",
    "status": "success"
  }, {
    "application_id": "eac65c10c5c34df1824af96ec93a9eeb",
    "application_name": "Application name 2",
    "error_reason": "No permissions.",
    "status": "error"
  } ],
  "total_num": 2
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3.12 Checking Whether an Application with the Same Name Exists in a Project

Function

This API is used to check whether an application with the same name exists in a project.

Calling Method

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

URI

GET /v1/applications/exist

Table 4-130 Query Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Application name
project_id	Yes	String	Project ID

Request Parameters

Table 4-131 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-132 Response body parameters

Parameter	Type	Description
result	Boolean	Whether an application with the same name exists in the project.
status	String	Request success or failure status

Example Requests

```
https://{endpoint}/v1/applications/exist?name=test&project_id=46e2dd65b123456798137caebae6fa6d
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "result" : false,  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.3.13 Disabling and Enabling an Application

Function

This API is used to disable or enable an application.

Calling Method

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

URI

PUT /v1/applications/{app_id}/disable

Table 4-133 Path Parameters

Parameter	Mandatory	Type	Description
app_id	Yes	String	Application ID

Request Parameters

Table 4-134 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-135 Request body parameters

Parameter	Mandatory	Type	Description
is_disable	Yes	Boolean	true: Disable. false: Enable.

Response Parameters

Status code: 200

Table 4-136 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status

Example Requests

```
https://{endpoint}/v1/applications/dbc0305b030f41ce866739c3331166ff/disable
{
  "is_disable" : true
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.4 Managing Application Groups

4.4.1 Querying a Group List

Function

This API is used to query a group list.

Calling Method

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

URI

GET /v1/projects/{project_id}/applications/groups

Table 4-137 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

Request Parameters

Table 4-138 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-139 Response body parameters

Parameter	Type	Description
result	Array of AppGroupsEntity objects	Group information list
status	String	Request success or failure status

Table 4-140 AppGroupsEntity

Parameter	Type	Description
id	String	Group ID
name	String	Group name
project_id	String	Project ID
path	String	Group path
parent_id	String	Parent group ID. The ID of the first level is null.
ordinal	Integer	Group sorting field
create_user_id	String	ID of the group creator
last_update_user_id	String	ID of the user who last updates the group
count	Integer	Total number of applications in the group
children	Array of AppGroupsEntity objects	Child group list

Example Requests

`https://{endpoint}/v1/projects/0a38ce9ba3c740c199a0f872b6163661/applications/groups`

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result" : [ {
    "project_id" : "0a38ce9ba3c740c199a0f872b6163661",
    "path" : "55ad749142fc405398aad372a1f9eff1",
    "parent_id" : null,
    "ordinal" : 1,
    "name" : "group_1",
    "last_update_user_id" : "057842a25b000f6b1fcbc014a9cccccc",
    "id" : "55ad749142fc405398aad372a1f9eff1",
    "create_user_id" : "057842a25b000f6b1fcbc014a9cccccc",
    "count" : 0,
    "children" : [ ]
  } ],
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.4.2 Creating a Group

Function

This API is used to create a group.

Calling Method

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

URI

POST /v1/projects/{project_id}/applications/groups

Table 4-141 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

Request Parameters

Table 4-142 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-143 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Group name
parent_id	No	String	Parent group ID

Response Parameters

Status code: 200

Table 4-144 Response body parameters

Parameter	Type	Description
result	String	Group ID
status	String	Request success or failure status

Example Requests

```
https://{endpoint}/v1/projects/0a38ce9ba3c740c199a0f872b6163661/applications/groups
{
  "name" : "Group Name",
  "parent_id" : "d26da1dc24314c63a253cbc452dabd96"
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result" : "2f1a73c269d14345aa0652a611b30c8e",
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.4.3 Modifying a Group

Function

This API is used to modify a group.

Calling Method

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

URI

PUT /v1/projects/{project_id}/applications/groups/{group_id}

Table 4-145 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
group_id	Yes	String	Group ID

Request Parameters

Table 4-146 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-147 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Group name

Response Parameters

Status code: 200

Table 4-148 Response body parameters

Parameter	Type	Description
result	String	Group ID
status	String	Request success or failure status

Example Requests

```
https://{endpoint}/v1/projects/0a38ce9ba3c740c199a0f872b6163661/applications/groups/  
a958794f9f4f4a24a96950c9cb279a4d  
  
{  
  "name" : "Group Name"  
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "result" : "a958794f9f4f4a24a96950c9cb279a4d",  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.4.4 Deleting a Group

Function

This API is used to delete a group.

Calling Method

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

URI

DELETE /v1/projects/{project_id}/applications/groups/{group_id}

Table 4-149 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
group_id	Yes	String	Group ID

Request Parameters

Table 4-150 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-151 Response body parameters

Parameter	Type	Description
result	String	Group ID
status	String	Request success or failure status

Example Requests

```
https://{endpoint}/v1/projects/0a38ce9ba3c740c199a0f872b6163661/applications/groups/  
a958794f9f4f4a24a96950c9cb279a4d
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "result" : "a958794f9f4f4a24a96950c9cb279a4d",  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.4.5 Moving a Group

Function

This API is used to move a group up or down to adjust the position of the group on the page.

Calling Method

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

URI

PUT /v1/projects/{project_id}/applications/groups/swap

Table 4-152 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

Request Parameters

Table 4-153 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-154 Request body parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Group ID
movement	Yes	Integer	Moving direction. 1: Upward. -1: Downward.

Response Parameters

Status code: 200

Table 4-155 Response body parameters

Parameter	Type	Description
result	String	Group ID
status	String	Request success or failure status

Example Requests

```
https://{endpoint}/v1/projects/0a38ce9ba3c740c199a0f872b6163661/applications/groups/swap
{
  "id" : "a958794f9f4f4a24a96950c9cb279a4d",
  "movement" : 1
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result" : "a958794f9f4f4a24a96950c9cb279a4d",
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.4.6 Moving an Application to a Specified Group

Function

This API is used to move applications to a specified group (batch operations are supported).

Calling Method

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

URI

PUT /v1/projects/{project_id}/applications/groups/move

Table 4-156 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

Request Parameters

Table 4-157 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-158 Request body parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Group ID
application_ids	Yes	Array of strings	Application ID list

Response Parameters

Status code: 200

Table 4-159 Response body parameters

Parameter	Type	Description
result	Array of MoveAppToGroupResult objects	Result of moving an application to a specified group. Only the list of applications that fail to be moved is returned.
status	String	Request success or failure status

Table 4-160 MoveAppToGroupResult

Parameter	Type	Description
code	String	Failed or not
application_id	String	Application ID
application_name	String	Application name
error_code	String	Error code
error_msg	String	Error message

Example Requests

```
https://{endpoint}/v1/projects/0a38ce9ba3c740c199a0f872b6163661/applications/groups/move
{
  "application_ids": [ "a958794f9f4f4a24a96950c9cb279a4d", "a958794f9f4f4a24a96950c9cb279a4f" ],
  "group_id": "ec3ccc617cf3405b8a6236f26223112b"
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result": [ ],
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.5 Managing Application Permissions

4.5.1 Querying the Instance-Level/Project-Level Permission Matrix of an Application

Function

This API is used to query the instance-level or project-level permission matrix of an application. If `app_id` is transferred, the instance-level permission matrix is queried. If `project_id` is transferred while `app_id` is not transferred, the project-level permission matrix is queried.

Calling Method

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

URI

GET /v3/applications/permissions

Table 4-161 Query Parameters

Parameter	Mandatory	Type	Description
<code>app_id</code>	No	String	Application ID
<code>project_id</code>	No	String	Project ID

Request Parameters

Table 4-162 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-163 Response body parameters

Parameter	Type	Description
result	Array of ApplicationPermissionVO objects	Role application permission
status	String	Request success or failure status

Table 4-164 ApplicationPermissionVO

Parameter	Type	Description
can_modify	Boolean	Whether you have the edit permission
can_delete	Boolean	Whether you have the delete permission
can_view	Boolean	Whether you have the view permission
can_execute	Boolean	Whether you have the execute permission
can_copy	Boolean	Whether you have the clone permission
can_manage	Boolean	Whether you have the manage permission, including adding, deleting, modifying, querying, executing, and modifying permissions.
can_create_env	Boolean	Whether you have the permission to create environments
can_disable	Boolean	Whether you have the disable permission
name	String	Role name
region	String	Region information
role_id	String	Role ID
role_type	String	Role type. app-creator: Application creator. project: Project administrator. template-customized-inst: System roles. template-project-customized and project-customized: Custom roles.

Example Requests

- This API is used to query the project-level permission matrix of an application.
`https://{endpoint}/v3/applications/permissions?project_id=0a38ce9ba3c740c199a0f872b6163661`
- This API is used to query the instance-level permission matrix of an application.
`https://{endpoint}/v3/applications/permissions?app_id=0a38ce9ba3c740c199a0f872b6163661`

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result": [ {
    "can_copy": true,
    "can_create_env": true,
    "can_delete": true,
    "can_disable": true,
    "can_execute": true,
    "can_manage": true,
    "can_modify": true,
    "can_view": true,
    "name": "App creator",
    "region": "example",
    "role_id": "0",
    "role_type": "app-creator"
  }, {
    "can_copy": true,
    "can_create_env": true,
    "can_delete": true,
    "can_disable": true,
    "can_execute": true,
    "can_manage": true,
    "can_modify": true,
    "can_view": true,
    "name": "Project Admin",
    "region": "example",
    "role_id": "2e510051361942a8b7ecea00144172b3",
    "role_type": "project"
  } ],
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.5.2 Modifying Application Permissions in Batches

Function

This API is used to modify application permissions in batches.

Calling Method

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

URI

PUT /v3/applications/permissions

Request Parameters

Table 4-165 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-166 Request body parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
application_ids	Yes	Array of strings	Application list
roles	Yes	Array of AppPermission objects	Role permissions

Table 4-167 AppPermission

Parameter	Mandatory	Type	Description
dev_role_id	Yes	String	Role ID
can_modify	Yes	Boolean	Whether you have the edit permission
can_delete	Yes	Boolean	Whether you have the delete permission

Parameter	Mandatory	Type	Description
can_view	Yes	Boolean	Whether you have the view permission
can_execute	Yes	Boolean	Whether you have the execute permission
can_copy	Yes	Boolean	Whether you have the clone permission
can_manage	Yes	Boolean	Whether you can manage permissions
can_create_env	Yes	Boolean	Whether you have the permission to create environments
can_disable	Yes	Boolean	Whether you have the disable permission

Response Parameters

Status code: 200

Table 4-168 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status

Example Requests

https://{endpoint}/v3/applications/permissions

```
{
  "application_ids": [ "eac65c10c5c34df1824af96ec93a9eea", "3ba2ad194ff141e39b1d3d0749242858" ],
  "project_id": "0a38ce9ba3c740c199a0f872b6163661",
  "roles": [ {
    "dev_role_id": "ba0d4b2e-f7e6-46a3-aece-3002ff640e73",
    "can_copy": true,
    "can_create_env": true,
    "can_delete": true,
    "can_disable": true,
    "can_execute": true,
    "can_manage": true,
    "can_modify": true,
    "can_view": true
  } ]
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.5.3 Configuring Authentication Levels for Applications in Batches

Function

This API is used to configure the authentication level to project-level or instance-level for applications in batches.

Calling Method

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

URI

PUT /v3/applications/permission-level

Request Parameters

Table 4-169 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-170 Request body parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

Parameter	Mandatory	Type	Description
permission_level	Yes	String	Application authentication level: instance and project.
application_ids	Yes	Array of strings	Application ID list

Response Parameters

Status code: 200

Table 4-171 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status

Example Requests

```
https://{endpoint}/v3/applications/permission-level
{
  "application_ids": [ "eac65c10c5c34df1824af96ec93a9eea", "3ba2ad194ff141e39b1d3d0749242858" ],
  "project_id": "0a38ce9ba3c740c199a0f872b6163661",
  "permission_level": "instance"
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.5.4 Checking whether the current user has the permission to create applications in a project.

Function

This API is used to check whether the current user has the permission to create applications in a project.

Calling Method

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

URI

GET /v1/applications/creatable

Table 4-172 Query Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

Request Parameters

Table 4-173 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-174 Response body parameters

Parameter	Type	Description
result	result object	Result for whether the user has permissions to create applications
status	String	Request success or failure status

Table 4-175 result

Parameter	Type	Description
creatable	Boolean	Whether the user has permissions to create applications

Example Requests

`https://{endpoint}/v1/applications/creatable?project_id=46e2dd65b123456798137caebae6fa6d`

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "result" : {
    "creatable" : true
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.6 Measuring Deployment Record

4.6.1 Obtaining the Application Deployment Success Rate in a Specified Project

Function

This API is used to obtain the application deployment success rate in a specified project.

Calling Method

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

URI

GET /v2/{project_id}/metrics/success-rate

Table 4-176 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see [Obtaining a Project ID] (CloudDeploy_api_0014.xml). Constraints: N/A Value range: The value consists of 32 characters. Only letters and digits are allowed. Default value: N/A

Table 4-177 Query Parameters

Parameter	Mandatory	Type	Description
start_date	Yes	String	Parameter description: Left boundary (included) of the application deployment start time range. The value format is yyyy-MM-dd. For example, 2022-01-01. Constraints: This parameter is used together with end_date. The value of end_date must be later than or equal to the value of start_date. The maximum time range is one year. Value range: N/A Default value: N/A

Parameter	Mandatory	Type	Description
end_date	Yes	String	Parameter description: Right boundary (included) of the application deployment start time range. The value format is yyyy-MM-dd. For example, 2022-10-26. Constraints: This parameter is used together with start_date. The value of end_date must be later than or equal to the value of start_date. The maximum time range is one year. Value range: N/A Default value: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 4-178 Response body parameters

Parameter	Type	Description
success_rate	String	Parameter description: Success rate. Value range: N/A
project_id	String	Parameter description: Project ID. Value range: The value consists of 32 characters. Letters and digits are allowed.

Parameter	Type	Description
project_name	String	Parameter description: Project name. Value range: The value consists of 3 to 128 characters.
start_date	String	Parameter description: Left boundary (included) of the application deployment start time range. The value format is yyyy-MM-dd. For example, 2022-10-26. Value range: N/A
end_date	String	Parameter description: Right boundary (included) of the application deployment start time range. The value format is yyyy-MM-dd. For example, 2022-10-26. Value range: N/A
task_count	Integer	Parameter description: Number of queried applications. Value range: N/A
record_count	Integer	Parameter description: Number of queried application deployment records. Value range: N/A
success_record_count	Integer	Parameter description: Number of successful application deployment records. Value range: N/A

Example Requests

This API is used to obtain the deployment success rate of the target application in a specified period.

```
https://{endpoint}/v2/89931e210b214b5892ea833712f0f5e0/metrics/success-rate?  
start_date=2022-01-01&end_date=2022-10-26
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "success_rate" : "34.09",
  "project_id" : "89931e210b214b5892ea833712f0f5e0",
  "project_name" : "Happy",
  "start_date" : "2022-01-01",
  "end_date" : "2022-10-26",
  "task_count" : 8,
  "record_count" : 44,
  "success_record_count" : 15
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.6.2 Obtaining the Application Deployment Success Rate in a Specified Application

Function

This API is used to obtain the application deployment success rate in a specified application.

Calling Method

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

URI

POST /v2/{project_id}/tasks/metrics/success-rate

Table 4-179 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining a Project ID .

Request Parameters

Table 4-180 Request body parameters

Parameter	Mandatory	Type	Description
start_date	Yes	String	Left boundary (included) of the application deployment start time. Format: MMM DD, YYYY.
end_date	Yes	String	Right boundary (included) of the application deployment start time. The format is YYYY-MM-DD. The maximum range is one year.
task_ids	Yes	Array of strings	Application ID list

Response Parameters

Status code: 200**Table 4-181** Response body parameters

Parameter	Type	Description
project_id	String	Project ID. For details, see Obtaining a Project ID .
project_name	String	Project name
start_date	String	Left boundary (included) of the application deployment start time. Format: MMM DD, YYYY.
end_date	String	Right boundary (included) of the application deployment start time. The format is YYYY-MM-DD. The maximum range is one year.
tasks_success_rate	Array of TaskSuccessRate objects	Application success rate list

Table 4-182 TaskSuccessRate

Parameter	Type	Description
task_id	String	Application ID

Parameter	Type	Description
task_name	String	Application name
success_rate	String	Success rate
record_count	Integer	Number of deployment records
success_record_count	Integer	Number of successful deployment records

Example Requests

```
https://{endpoint}/v2/89931e210b214b5892ea833712f0f5e0/tasks/metrics/success-rate
{
  "start_date": "2022-01-01",
  "end_date": "2022-10-26",
  "task_ids": [ "5bf0a54f36b04ddda7b94470fee39307", "b6d20b703ffe4a04bc68790ddabf6ab7" ]
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "project_id": "89931e210b214b5892ea833712f0f5e0",
  "project_name": "Happy",
  "start_date": "2022-01-01",
  "end_date": "2022-10-26",
  "tasks_success_rate": [ {
    "task_id": "5bf0a54f36b04ddda7b94470fee39307",
    "task_name": "happy482 Health Test Through URLs",
    "success_rate": "0",
    "record_count": 8,
    "success_record_count": 0
  }, {
    "task_id": "b6d20b703ffe4a04bc68790ddabf6ab7",
    "task_name": "happy486 Start/Stop Tomcat",
    "success_rate": "14.29",
    "record_count": 14,
    "success_record_count": 2
  } ]
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7 Managing Environments

4.7.1 Creating an Environment for an Application

Function

This API is used to create an environment for an application.

Calling Method

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

URI

POST /v1/applications/{application_id}/environments

Table 4-183 Path Parameters

Parameter	Mandatory	Type	Description
application_id	Yes	String	Application ID

Request Parameters

Table 4-184 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-185 Request body parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining a Project ID .
name	Yes	String	Environment name
deploy_type	Yes	Integer	Deployment type. 0: Host. 1: Kubernetes.

Parameter	Mandatory	Type	Description
os	Yes	String	Operating system: Windows or Linux, which must be the same as that of the host cluster.
description	No	String	Environment description

Response Parameters

Status code: 200

Table 4-186 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
id	String	Environment ID

Example Requests

https://{endpoint}/v1/applications/43943381f7764c52baae8e697720873f/environments

```
{
  "project_id" : "55837d272adf4eee90319800e2da6961",
  "name" : "Environment name",
  "deploy_type" : 0,
  "description" : "Environment Description",
  "os" : "linux"
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "status" : "success",
  "id" : "140ca97e701d4c4c93c5932d5bdb32ec"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7.2 Querying an Environment List of an Application

Function

This API is used to query an environment list of an application.

Calling Method

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

URI

GET /v1/applications/{application_id}/environments

Table 4-187 Path Parameters

Parameter	Mandatory	Type	Description
application_id	Yes	String	Application ID

Table 4-188 Query Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining a Project ID .
page_index	No	Integer	Page number, indicating that the query starts from this page. The value of page is no less than 1.
page_size	No	Integer	Number of items displayed on each page. The value of size is no more than 100.
name	No	String	Name of the environment to be queried.
sort_key	No	String	Sorting field. Data can be sorted by environment name, username, creation time, or user alias.
sort_dir	No	String	Sorting order: DESC (descending order) and ASC (ascending order).

Request Parameters

Table 4-189 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-190 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
total	Integer	Total number of environments in an application
result	Array of EnvironmentDetail objects	Environment list information

Table 4-191 EnvironmentDetail

Parameter	Type	Description
id	String	Environment ID
name	String	Environment name
description	String	Environment description
os	String	OS
nick_name	String	Alias
deploy_type	Integer	Deployment type. 0: Host. 1: Kubernetes.
created_time	String	Creation time
instance_count	Integer	Number of host instances in the environment

Parameter	Type	Description
created_by	UserInfo object	Parameter description: User information, including user ID and username. Constraints: N/A
permission	EnvironmentPermissionDetail object	Environment permission details

Table 4-192 UserInfo

Parameter	Type	Description
user_id	String	Parameter description: User ID. Value range: The value consists of 32 characters. Only letters and digits are allowed.
user_name	String	Parameter description: Username. Value range: The value consists of 1-255 characters. Only letters and digits are allowed.

Table 4-193 EnvironmentPermissionDetail

Parameter	Type	Description
can_delete	Boolean	Whether you have the permission to delete environments
can_deploy	Boolean	Whether you have the deploy permission
can_edit	Boolean	Whether you have the permission to edit environments
can_manage	Boolean	Whether you have permission to edit the environment permission matrix.
can_view	Boolean	Whether you have the permission to check environments

Example Requests

```
https://{endpoint}/v1/applications/43943381f7764c52baae8e697720873f/environments?  
project_id=55837d272adf4eee90319800e2da6961
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "status": "success",  
  "total": 1,  
  "result": [ {  
    "created_by": {  
      "user_id": "6baa7454109d47c192f22078fe6cda20",  
      "user_name": "devcloud_devcloud_l00490255_01"  
    },  
    "created_time": "2023-06-20 16:53:29.0",  
    "deploy_type": 0,  
    "description": "",  
    "id": "a0a2274acc4f482bb2ecf49f865879fa",  
    "name": "casdasd",  
    "nick_name": "A/B Side Account",  
    "os": "linux",  
    "permission": {  
      "can_delete": true,  
      "can_deploy": true,  
      "can_edit": true,  
      "can_manage": true,  
      "can_view": true  
    }  
  } ]  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7.3 Editing an Environment in an Application

Function

This API is used to edit an environment in an application.

Calling Method

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

URI

PUT /v1/applications/{application_id}/environments/{environment_id}

Table 4-194 Path Parameters

Parameter	Mandatory	Type	Description
application_id	Yes	String	Application ID
environment_id	Yes	String	Environment ID

Request Parameters

Table 4-195 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-196 Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	Environment name
description	No	String	Environment description

Response Parameters

Status code: 200

Table 4-197 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
id	String	Environment ID

Example Requests

```
https://{endpoint}/v1/applications/8ddf0566c1784da29faac80516fa8425/environments/  
54e5b8b0d10148cc96142ac9d6c1c1f6  
  
{  
  "description" : "description",  
  "name" : "newEnvironmentName"  
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "status" : "success",  
  "id" : "54e5b8b0d10148cc96142ac9d6c1c1f6"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7.4 Deleting an Environment from an Application

Function

This API is used to delete an environment in an application.

Calling Method

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

URI

DELETE /v1/applications/{application_id}/environments/{environment_id}

Table 4-198 Path Parameters

Parameter	Mandatory	Type	Description
application_id	Yes	String	Application ID
environment_id	Yes	String	Environment ID

Request Parameters

Table 4-199 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-200 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
id	String	Environment ID

Example Requests

```
https://endpoint/v1/applications/43943381f7764c52baae8e697720873f/environments/  
140ca97e701d4c4c93c5932d5bdb32ec
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "status" : "success",  
  "id" : "140ca97e701d4c4c93c5932d5bdb32ec"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7.5 Querying Environment Details

Function

This API is used to query environment details.

Calling Method

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

URI

GET /v1/applications/{application_id}/environments/{environment_id}

Table 4-201 Path Parameters

Parameter	Mandatory	Type	Description
application_id	Yes	String	Application ID
environment_id	Yes	String	Environment ID

Request Parameters

Table 4-202 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-203 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status

Parameter	Type	Description
result	EnvironmentDetail object	Environment details

Table 4-204 EnvironmentDetail

Parameter	Type	Description
id	String	Environment ID
name	String	Environment name
description	String	Environment description
os	String	OS
nick_name	String	Alias
deploy_type	Integer	Deployment type. 0: Host. 1: Kubernetes.
created_time	String	Creation time
instance_count	Integer	Number of host instances in the environment
created_by	UserInfo object	Parameter description: User information, including user ID and username. Constraints: N/A
permission	EnvironmentPermissionDetail object	Environment permission details

Table 4-205 UserInfo

Parameter	Type	Description
user_id	String	Parameter description: User ID. Value range: The value consists of 32 characters. Only letters and digits are allowed.

Parameter	Type	Description
user_name	String	Parameter description: Username. Value range: The value consists of 1-255 characters. Only letters and digits are allowed.

Table 4-206 EnvironmentPermissionDetail

Parameter	Type	Description
can_delete	Boolean	Whether you have the permission to delete environments
can_deploy	Boolean	Whether you have the deploy permission
can_edit	Boolean	Whether you have the permission to edit environments
can_manage	Boolean	Whether you have permission to edit the environment permission matrix.
can_view	Boolean	Whether you have the permission to check environments

Example Requests

```
https://{endpoint}/v1/applications/43943381f7764c52baae8e697720873f/environments/  
140ca97e701d4c4c93c5932d5bdb32ec
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "status" : "success",  
  "result" : {  
    "created_by" : {  
      "user_id" : "6baa7454109d47c192f22078fe6cda20",  
      "user_name" : "devcloud_devcloud_l00490255_01"  
    },  
    "created_time" : "2023-06-20 16:53:29.0",  
    "deploy_type" : 0,  
    "description" : "",  
    "id" : "a0a2274acc4f482bb2ecf49f865879fa",  
    "name" : "casdasd",  
    "nick_name" : "A/B Side Account",  
    "os" : "linux",  
    "permission" : {  
      "can_delete" : true,  
      "can_deploy" : true,  
      "can_edit" : true,  

```

```
"can_manage" : true,  
"can_view" : true  
}  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7.6 Importing a Host to an Environment

Function

This API is used to import a host to an environment.

Calling Method

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

URI

POST /v1/applications/{application_id}/environments/{environment_id}/hosts/
import

Table 4-207 Path Parameters

Parameter	Mandatory	Type	Description
application_id	Yes	String	Application ID
environment_id	Yes	String	Environment ID

Request Parameters

Table 4-208 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-209 Request body parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Host cluster ID
host_ids	Yes	Array of strings	ID list of the hosts to be imported

Response Parameters

Status code: 200

Table 4-210 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
result	Array of strings	ID list of the imported hosts

Example Requests

```
https://{endpoint}/v1/applications/43943381f7764c52baae8e697720873f/environments/  
666ec038a53c4b9f899823747a7130e8/hosts/import  
  
{  
  "group_id" : "4b0cb2f098174d38b0c15645c13eae6f",  
  "host_ids" : [ "8e1eb7f010d4442ca150e3a1a5d96d94" ]  
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "status" : "success",  
  "result" : [ "c5fa45c92c0849229d003d98f52617eb" ]  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7.7 Deleting a Host from an Environment

Function

This API is used to delete a host from an environment.

Calling Method

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

URI

DELETE /v1/applications/{application_id}/environments/{environment_id}/{host_id}

Table 4-211 Path Parameters

Parameter	Mandatory	Type	Description
application_id	Yes	String	Application ID
environment_id	Yes	String	Environment ID
host_id	Yes	String	Host ID

Request Parameters

Table 4-212 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-213 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
result	String	Environment ID

Example Requests

```
https://{endpoint}/v1/applications/7de12f87232e46a79235f52d033b8688/environments/  
25e30c17f81042ba9a1a3383da39a7fc/c5fa45c92c0849229d003d98f52617eb
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "status" : "success",  
  "result" : "c5fa45c92c0849229d003d98f52617eb"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7.8 Querying a Host List in an Environment

Function

This API is used to query a host list in an environment.

Calling Method

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

URI

GET /v1/applications/{application_id}/environments/{environment_id}/hosts

Table 4-214 Path Parameters

Parameter	Mandatory	Type	Description
application_id	Yes	String	Application ID
environment_id	Yes	String	Environment ID

Table 4-215 Query Parameters

Parameter	Mandatory	Type	Description
key_field	No	String	Fuzzy search by host name and IP address
as_proxy	No	Boolean	Proxy or not. true: Proxy.
page_index	No	Integer	Page number
page_size	No	Integer	Number of records on each page

Request Parameters

Table 4-216 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-217 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
total	Integer	Total quantity

Parameter	Type	Description
result	Array of EnvironmentHostInfo objects	Host information list in the environment

Table 4-218 EnvironmentHostInfo

Parameter	Type	Description
host_id	String	Host ID
ip	String	Host IP address, for example, 161.17.101.12.
port	Integer	SSH Port, for example, 22.
permission	EnvironmentHostPermission object	Environment permission details
group_id	String	Host cluster ID
host_name	String	Host name
as_proxy	Boolean	Proxy or not
proxy_host_id	String	Proxy ID
proxy_host_name	String	Proxy name
owner_id	String	Host owner ID
owner_name	String	Host owner name
connection_status	String	Connectivity status
lastest_connection_time	String	Last connection time
connection_result	String	Connectivity verification result
nick_name	String	Creator alias

Table 4-219 EnvironmentHostPermission

Parameter	Type	Description
can_delete	Boolean	Whether you have the delete permission
can_deploy	Boolean	Whether you have the deploy permission
can_edit	Boolean	Whether you have the edit permission

Parameter	Type	Description
can_manage	Boolean	Whether you can manage permissions
can_view	Boolean	Whether you have the view permission

Example Requests

```
https://{endpoint}/v1/applications/e1d7b7388b4641e2a027f5673fd6093b/environments/82c4eb8c522d42969a3da30123e1ecba/hosts?page_index=1&page_size=10&key_field=
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "status": "success",
  "result": [ {
    "ip": "100.85.172.31",
    "port": 22,
    "permission": {
      "can_view": true,
      "can_edit": true,
      "can_delete": true,
      "can_deploy": true,
      "can_manage": true
    },
    "host_id": "13c208e61c9541ab9895f450fd1cbf7c",
    "host_name": "test",
    "as_proxy": false,
    "group_id": "2a8c2da888c04a5eaff10d0787c90ea4",
    "proxy_host_id": "",
    "proxy_host_name": null,
    "owner_id": "6baa7454109d47c192f22078fe6cda20",
    "owner_name": "devcloud_devcloud_l00490255_01",
    "nick_name": "devcloud_devcloud_l00490255_01",
    "connection_status": "failed",
    "connection_result": "Connection failed",
    "lastest_connection_time": "2024-05-31 14:47:52"
  } ],
  "total": 1
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.8 Managing Host Cluster Permissions

4.8.1 Querying the Host Cluster Permission Matrix

Function

This API is used to query the permission matrix of a host cluster by ID.

Calling Method

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

URI

GET /v2/host-groups/{group_id}/permissions

Table 4-220 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Host cluster ID

Request Parameters

Table 4-221 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-222 Response body parameters

Parameter	Type	Description
[items]	Array of DevUcClusterPermission objects	Host cluster permission matrix

Table 4-223 DevUcClusterPermission

Parameter	Type	Description
region	String	Region information
role_id	String	Role ID
devuc_role_id_list	Array of strings	Role ID list
name	String	Role name
group_id	String	Host cluster ID
can_view	Boolean	Whether you have the view permission
can_edit	Boolean	Whether you have the edit permission
can_delete	Boolean	Whether you have the delete permission
can_add_host	Boolean	Whether you have the permission to add hosts
can_manage	Boolean	Whether you can manage permissions
can_copy	Boolean	Whether you have the clone permission
create_time	String	Creation time
update_time	String	Modification time
role_type	String	Role type. project-customized: Custom roles. template-project-customized: System-defined roles. template-customized-inst: System roles. cluster-creator: Cluster creator. project_admin: Project creator.

Example Requests

`https://{endpoint}/v2/host-groups/2a8c2da888c04a5eaff10d0787c90ea4/permissions`

Example Responses

Status code: 200

OK: The request is successful.

```
[ {  
  "region" : "region",  
  "name" : "Host cluster creator",  
  "role_id" : "0",  
  "devuc_role_id_list" : null,  
  "group_id" : "2a8c2da888c04a5eaff10d0787c90ea4",  
  "can_view" : true,  
  "can_edit" : true,  
  "can_delete" : true,
```

```
"can_add_host" : true,
"can_manage" : true,
"can_copy" : true,
"create_time" : "2024-05-31 14:32:59.0",
"update_time" : "2024-05-31 14:32:59.0",
"role_type" : "cluster-creator"
}, {
  "region" : "region",
  "name" : "Project admin",
  "role_id" : "a2e65d2647574f8491cac659a0249d24",
  "devuc_role_id_list" : null,
  "group_id" : "2a8c2da888c04a5eaff10d0787c90ea4",
  "can_view" : true,
  "can_edit" : true,
  "can_delete" : true,
  "can_add_host" : true,
  "can_manage" : true,
  "can_copy" : true,
  "create_time" : "2024-05-31 14:32:59.0",
  "update_time" : "2024-05-31 14:32:59.0",
  "role_type" : "project"
}]
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.8.2 Modifying the Host Cluster Permission Matrix

Function

This API is used to modify the permission matrix of a host cluster by ID.

Calling Method

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

URI

PUT /v2/host-groups/{group_id}/permissions

Table 4-224 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Host cluster ID

Request Parameters

Table 4-225 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-226 Request body parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
role_id	Yes	String	Role ID
permission_name	Yes	String	Permission name: can_view, can_edit, can_delete, can_add_host, can_manage, and can_copy.
permission_value	Yes	Boolean	true: Authorized. false: Not authorized.

Response Parameters

Status code: 200

Table 4-227 Response body parameters

Parameter	Type	Description
region	String	Region information
role_id	String	Role ID
devuc_role_id_list	Array of strings	Role ID list
name	String	Role name
group_id	String	Host cluster ID
can_view	Boolean	Whether you have the view permission
can_edit	Boolean	Whether you have the edit permission

Parameter	Type	Description
can_delete	Boolean	Whether you have the delete permission
can_add_host	Boolean	Whether you have the permission to add hosts
can_manage	Boolean	Whether you can manage permissions
can_copy	Boolean	Whether you have the clone permission
create_time	String	Creation time
update_time	String	Modification time
role_type	String	Role type. project-customized: Custom roles. template-project-customized: System-defined roles. template-customized-inst: System roles. cluster-creator: Cluster creator. project_admin: Project creator.

Example Requests

```
https://{endpoint}/v2/host-groups/2a8c2da888c04a5eaff10d0787c90ea4/permissions
{
  "permission_name" : "can_delete",
  "permission_value" : true,
  "project_id" : "7e6caf3cd9a64d5b8ea451e38221892e",
  "role_id" : "c869ebc4000c4bb9a2605c4020450ab4"
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "region" : "region",
  "name" : null,
  "role_id" : "0",
  "devuc_role_id_list" : null,
  "group_id" : "2a8c2da888c04a5eaff10d0787c90ea4",
  "can_view" : true,
  "can_edit" : true,
  "can_delete" : true,
  "can_add_host" : true,
  "can_manage" : true,
  "can_copy" : true,
  "create_time" : null,
  "update_time" : null,
  "role_type" : "cluster-creator"
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.8.3 Checking Whether the Current User Has Permissions to Create a Host Cluster in a Project

Function

This API is used to check whether the current user has permissions to create a host cluster in a project.

Calling Method

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

URI

GET /v1/host-groups/creatable/{project_id}/permissions

Table 4-228 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

Request Parameters

None

Response Parameters

Status code: 200

Table 4-229 Response body parameters

Parameter	Type	Description
can_created	Boolean	Whether you have permissions to create a host cluster. true: Authorized. false: Not authorized.

Example Requests

```
https://{endpoint}/v1/host-groups/creatable/7e6caf3cd9a64d5b8ea451e38221892e/permissions
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "can_created" : true
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.9 Managing Environment Permissions

4.9.1 Querying Environment Permissions

Function

This API is used to query environment permissions.

Calling Method

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

URI

GET /v2/applications/{application_id}/environments/{environment_id}/permissions

Table 4-230 Path Parameters

Parameter	Mandatory	Type	Description
application_id	Yes	String	Application ID
environment_id	Yes	String	Environment ID

Request Parameters

Table 4-231 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-232 Response body parameters

Parameter	Type	Description
[items]	Array of DevUcEnvironmentPermission objects	Permission data, which is of the list type

Table 4-233 DevUcEnvironmentPermission

Parameter	Type	Description
id	Integer	Permission ID
role_id	String	Role ID
devuc_role_id_list	Array of strings	Role ID list
role_type	String	Role type. environment-creator: Environment creator. project: Project administrator. template-customized-inst: System roles. template-project-customized and project-customized: Custom roles.
name	String	Role name
region	String	Region information
environment_id	String	Environment ID
can_view	Boolean	Whether you have the view permission
can_edit	Boolean	Whether you have the edit permission

Parameter	Type	Description
can_delete	Boolean	Whether you have the delete permission
can_deploy	Boolean	Whether you have the deploy permission
can_manage	Boolean	Whether you can manage permissions
create_time	String	Creation time
update_time	String	Modification time

Example Requests

https://{endpoint}/v2/applications/8ddf0566c1784da29faac80516fa8425/environments/54e5b8b0d10148cc96142ac9d6c1c1f6/permissions

Example Responses

Status code: 200

Permission data, which is of the list type

```
[ {
  "region" : "region",
  "id" : 99213234,
  "name" : "Environment creator",
  "role_id" : "0",
  "devuc_role_id_list" : null,
  "environment_id" : "be3e9690d6f64b23b54e79cd02c4b156",
  "can_view" : true,
  "can_edit" : true,
  "can_delete" : true,
  "can_deploy" : true,
  "can_manage" : true,
  "create_time" : "2024-06-21 17:23:55.0",
  "update_time" : "2024-06-21 17:23:55.0",
  "role_type" : "environment-creator"
}, {
  "region" : "region",
  "id" : 99213235,
  "name" : "Project admin",
  "role_id" : "a2e65d2647574f8491cac659a0249d24",
  "devuc_role_id_list" : null,
  "environment_id" : "be3e9690d6f64b23b54e79cd02c4b156",
  "can_view" : true,
  "can_edit" : true,
  "can_delete" : true,
  "can_deploy" : true,
  "can_manage" : true,
  "create_time" : "2024-06-21 17:23:55.0",
  "update_time" : "2024-06-21 17:23:55.0",
  "role_type" : "project"
}]
```

Status Codes

Status Code	Description
200	Permission data, which is of the list type

Error Codes

See [Error Codes](#).

4.9.2 Editing Environment Permission

Function

This API is used to edit the environment permission.

Calling Method

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

URI

PUT /v2/applications/{application_id}/environments/{environment_id}/permissions

Table 4-234 Path Parameters

Parameter	Mandatory	Type	Description
application_id	Yes	String	Application ID
environment_id	Yes	String	Environment ID

Request Parameters

Table 4-235 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format).
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of X-Subject-Token in the response header is the user token.

Table 4-236 Request body parameters

Parameter	Mandatory	Type	Description
role_id	No	String	Role ID
permission_name	No	String	Permission name: can_view, can_edit, can_delete, can_deploy, and can_manage.
permission_value	No	Boolean	true: Authorized. false: Not authorized.

Response Parameters

Status code: 200

Table 4-237 Response body parameters

Parameter	Type	Description
status	String	Request success or failure status
result	DevUcEnvironmentPermission object	Updated environment permission information

Table 4-238 DevUcEnvironmentPermission

Parameter	Type	Description
id	Integer	Permission ID
role_id	String	Role ID
devuc_role_id_list	Array of strings	Role ID list
role_type	String	Role type. environment-creator: Environment creator. project: Project administrator. template-customized-inst: System roles. template-project-customized and project-customized: Custom roles.
name	String	Role name
region	String	Region information
environment_id	String	Environment ID
can_view	Boolean	Whether you have the view permission
can_edit	Boolean	Whether you have the edit permission

Parameter	Type	Description
can_delete	Boolean	Whether you have the delete permission
can_deploy	Boolean	Whether you have the deploy permission
can_manage	Boolean	Whether you can manage permissions
create_time	String	Creation time
update_time	String	Modification time

Example Requests

```
https://{endpoint}/v2/applications/8ddf0566c1784da29faac80516fa8425/environments/  
54e5b8b0d10148cc96142ac9d6c1c1f6/permissions  
  
{  
  "permission_name": "can_deploy",  
  "permission_value": true,  
  "role_id": "e72b8cebe2c6499db2b23276b3820736"  
}
```

Example Responses

Status code: 200

OK

```
{  
  "status": "success",  
  "result": {  
    "region": "region",  
    "id": null,  
    "name": null,  
    "role_id": "0",  
    "devuc_role_id_list": null,  
    "environment_id": "be3e9690d6f64b23b54e79cd02c4b156",  
    "can_view": true,  
    "can_edit": true,  
    "can_delete": true,  
    "can_deploy": true,  
    "can_manage": true,  
    "create_time": null,  
    "update_time": null,  
    "role_type": "environment-creator"  
  }  
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5 Application Examples

5.1 Example 1: Querying a Host Cluster List

Scenario

This section provides an example of using an API to query the host cluster list as a CodeArts user.

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

Prerequisite

You have created a CodeArts project.

Approach

Query the list of all host clusters of the current user based on the user token.

Querying the Host Cluster List

- API information:

URI: GET /v2/host-groups

- Request example:

```
GET https://{endpoint}/v2/host-groups?region_name=eu-west-101&project_id=6039d4480efc4dddb178abff98719913&offset=1&limit=10&sort_key=create_time&sort_dir=DESC
```

- Response example:

```
{
  "total" : 1,
  "host_groups" : [ {
    "name" : "testwyk",
    "description" : "11122211",
    "os" : "linux",
    "nick_name" : "A/B_side_account",
    "id" : 200001291,
    "group_id" : "ab7647b0863c4e969c8949d38d591339",
    "region_name" : "eu-west-101",
    "project_id" : "6039d4480efc4dddb178abff98719913",
```

```
{
  "permission" : {
    "can_view" : true,
    "can_edit" : true,
    "can_delete" : true,
    "can_add_host" : true,
    "can_manage" : true
  },
  "created_by" : {
    "user_id" : "6baa7454109d47c192f22078fe6cda20",
    "user_name" : "devcloud_devcloud_l00490255_01"
  },
  "updated_by" : {
    "user_id" : "6baa7454109d47c192f22078fe6cda20",
    "user_name" : "devcloud_devcloud_l00490255_01"
  },
  "auto_connection_test_switch" : 0,
  "slave_cluster_id" : "",
  "created_time" : "2021-04-01 17:05:53",
  "updated_time" : "2021-04-21 14:29:14",
  "host_count" : 1,
  "project_name" : null
} ]
}
```

5.2 Example 2: Querying Host Cluster Details by ID

Scenario

This section uses a CodeArts user as an example to guide you using an API to query details about a specified host cluster.

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

Prerequisite

You have created a CodeArts project, and host clusters exist in the project.

Approach

Use an API to query the list of all host clusters, obtain *group_id* of the target host cluster, and use *group_id* to query details about the host cluster details. The procedure is as follows:

1. Query all host clusters of a user.
2. Query details about a host cluster.

Step 1: Querying All Host Clusters of a User

- API information:
URI: GET /v2/host-groups

- Request example:

```
GET https://{endpoint}/v2/host-groups?region_name=eu-west-101&project_id=6039d4480efc4dddb178abff98719913&offset=1&limit=10&sort_key=create_time&sort_dir=DESC
```

- Response example:

```
{
  "total" : 1,
  "host_groups" : [ {
```

```
{
  "name": "testwyk",
  "description": "11122211",
  "os": "linux",
  "nick_name": "A/B_side_account",
  "id": 200001291,
  "group_id": "ab7647b0863c4e969c8949d38d591339",
  "region_name": "eu-west-101",
  "project_id": "6039d4480efc4dddb178abff98719913",
  "permission": {
    "can_view": true,
    "can_edit": true,
    "can_delete": true,
    "can_add_host": true,
    "can_manage": true
  },
  "created_by": {
    "user_id": "6baa7454109d47c192f22078fe6cda20",
    "user_name": "devcloud_devcloud_l00490255_01"
  },
  "updated_by": {
    "user_id": "6baa7454109d47c192f22078fe6cda20",
    "user_name": "devcloud_devcloud_l00490255_01"
  },
  "auto_connection_test_switch": 0,
  "slave_cluster_id": "",
  "created_time": "2021-04-01 17:05:53",
  "updated_time": "2021-04-21 14:29:14",
  "host_count": 1,
  "project_name": null
}]
}
```

Step 2: Querying Details About a Host Cluster

- API information:

URI: GET /v2/host-groups/{group_id}

- Request example:

GET https://{endpoint}/v2/host-groups/ab7647b0863c4e969c8949d38d591339

- Response example:

```
{
  "name": "test",
  "description": "11122211",
  "os": "linux",
  "region_name": "eu-west-101",
  "project_id": "6039d4480efc4dddb178abff98719913",
  "created_by": {
    "user_id": "6baa7454109d47c192f22078fe6cda20",
    "user_name": "devcloud_devcloud_l00490255_01"
  },
  "updated_by": {
    "user_id": "6baa7454109d47c192f22078fe6cda20",
    "user_name": "devcloud_devcloud_l00490255_01"
  },
  "permission": {
    "can_view": true,
    "can_edit": true,
    "can_delete": true,
    "can_add_host": true,
    "can_manage": true
  },
  "auto_connection_test_switch": 0,
  "slave_cluster_id": "",
  "nick_name": "A/B_side_account",
  "group_id": "ab7647b0863c4e969c8949d38d591339",
  "created_time": "2021-04-01 17:05:53",
  "updated_time": "2021-04-21 14:29:14",
  "host_count": 1
}
```

5.3 Example 3: Querying the Host List of a Specified Host Cluster

Scenario

This section provides an example of a CodeArts user on how to use an API to query hosts in a specified host cluster.

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

Prerequisite

You have created a CodeArts project, and host clusters exist in the project.

Approach

Use a user token to query the host group cluster, and use group_id to query the host list of the specified host cluster. The procedure is as follows:

1. Query all host clusters of a user.
2. Query the host list of a host cluster.

Step 1: Querying All Host Clusters of a User

- API information:
URI: GET /v2/host-groups

- Request example:

```
GET https://{endpoint}/v2/host-groups?region_name=eu-west-101&project_id=6039d4480efc4dddb178abff98719913&offset=1&limit=10&sort_key=create_time&sort_dir=DESC
```

- Response example:

```
{
  "total" : 1,
  "host_groups" : [ {
    "name" : "testwyk",
    "description" : "11122211",
    "os" : "linux",
    "nick_name" : "A/B_side_account",
    "id" : 200001291,
    "group_id" : "ab7647b0863c4e969c8949d38d591339",
    "region_name" : "eu-west-101",
    "project_id" : "6039d4480efc4dddb178abff98719913",
    "permission" : {
      "can_view" : true,
      "can_edit" : true,
      "can_delete" : true,
      "can_add_host" : true,
      "can_manage" : true
    },
    "created_by" : {
      "user_id" : "6baa7454109d47c192f22078fe6cda20",
      "user_name" : "devcloud_devcloud_l00490255_01"
    },
    "updated_by" : {
      "user_id" : "6baa7454109d47c192f22078fe6cda20",
      "user_name" : "devcloud_devcloud_l00490255_01"
    }
  }
]
```

```
},
"auto_connection_test_switch" : 0,
"slave_cluster_id" : "",
"created_time" : "2021-04-01 17:05:53",
"updated_time" : "2021-04-21 14:29:14",
"host_count" : 1,
"project_name" : null
}]
}
```

Step 2: Querying the Host List

- API information:

URI: GET /v2/host-groups/{group_id}/hosts

- Request example:

GET https://{endpoint}/v2/host-groups/ab7647b0863c4e969c8949d38d591339/hosts?offset=0&limit=10&sort_key=AS_PROXY&sort_dir=asc&with_auth=false

- Response example:

```
{
  "hosts" : [ {
    "hostname" : "100.101.28.203",
    "ip" : "100.101.28.203",
    "port" : 22,
    "os" : "linux",
    "authorization" : {
      "username" : "root",
      "password" : null,
      "private_key" : null,
      "trusted_type" : 0
    },
    "permission" : {
      "can_view" : true,
      "can_edit" : true,
      "can_delete" : true,
      "can_add_host" : true,
      "can_connection_test" : true
    },
    "nickName" : "A/B_side_account",
    "id" : 200001149,
    "host_id" : "2cc913cc9a494f09b7320801ebacad02",
    "group_id" : "ab7647b0863c4e969c8949d38d591339",
    "as_proxy" : false,
    "proxy_host_id" : null,
    "owner_id" : "6baa7454109d47c192f22078fe6cda20",
    "owner_name" : "devcloud_devcloud_l00490255_01",
    "updater_id" : "6baa7454109d47c192f22078fe6cda20",
    "updater_name" : "devcloud_devcloud_l00490255_01",
    "connection_status" : "success",
    "install_icagent" : false,
    "create_time" : "2021-04-15 11:01:51",
    "update_time" : "2021-04-21 15:04:24",
    "connection_result" : "Connected",
    "lastest_connection_time" : "2021-04-15 11:02:00",
    "nick_name" : "A/B_side_account",
    "proxy_host" : null,
    "group_name" : null,
    "project_id" : "6039d4480efc4dddb178abff98719913",
    "project_name" : null
  } ],
  "total" : 1,
  "group_name" : "test"
}
```

6 Appendixes

6.1 Status Codes

Table 6-1 Status codes

Status Code	Message	Error Code Description
100	Continue	The client should continue with its request. This interim response is used to inform the client that the initial part of the request has been received and has not yet been rejected by the server.
101	Switching Protocols	Switch protocols. A protocol can only be switched to a more advanced protocol. For example, the protocol in use is switched to a later version of HTTP.
201	Created	The request has been fulfilled and resulted in a new resource being created.
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 response. The status code is returned in response to an HTTP OPTIONS request.
205	Reset Content	The server has fulfilled the request, but the requester is required to reset the content.

Status Code	Message	Error Code Description
206	Partial Content	The server has fulfilled the partial GET request for the resource.
300	Multiple Choices	There are multiple choices for a requested resource. A list of resource characteristics and addresses is returned for the client such as a browser to choose from.
301	Moved Permanently	This and all future requests have been permanently moved to the given URI indicated in this response.
302	Found	The requested resource has been temporarily moved.
303	See Other	Retrieve another URL, using a GET or POST method.
304	Not Modified	The requested resource has not been modified. When the server returns this status code, no resource is returned.
305	Use Proxy	The requested resource is available only through a proxy.
306	Unused	This HTTP status code is no longer used.
400	BadRequest	Invalid request. The client should not repeat the request without modifications.
401	Unauthorized	The authentication information provided by the client is incorrect or invalid.
402	Payment Required	Reserved request.
403	Forbidden	Request rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
404	NotFound	The requested resource cannot be found. The client should not repeat the request without modifications.
405	MethodNotAllowed	The method specified in the request is not allowed for the requested resource. The client should not repeat the request without modifications.

Status Code	Message	Error Code Description
406	Not Acceptable	The server cannot implement 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 time later.
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. This 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.
413	Request Entity Too Large	The server refuses to process a request because the request 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 request URI is 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 respond due to semantic errors.

Status Code	Message	Error Code Description
429	TooManyRequests	The client sends too many requests to the server within a given time, exceeding the client's access frequency limit or beyond the server's 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 cannot understand the request.
501	Not Implemented	The server does not support the requested function, and therefore cannot implement the request.
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 not repeat the request without modifications.
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.

6.2 Error Codes

If an error occurs during API calling, no result will be returned. Identify the error cause based on the error codes of each API. The returned message body contains the specific error code and information.

Error Response Body Format

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

```
{
  "error": {
    "code": "DEV.CH.10001",
    "message": "Param invalid"
  },
  "status": "failed"
}
```

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

If an error code starting with **APIGW** is returned after you call an API, rectify the fault by referring to the instructions provided in [API Gateway Error Codes](#).

Status Code	Error Codes	Error Message	Description	Solution
403	Deploy.00011154	Insufficient permissions.	Insufficient permissions.	Check whether you have the permission to perform this operation.
400	Deploy.00011001	Duplicate application.	Duplicate application.	Ensure that the application name is correct and try again.
404	Deploy.00011020	This application does not exist.	This application does not exist.	Ensure that the application exists and try again.
400	Deploy.00011027	The application is being deployed.	The application is being deployed.	Try again later.
400	Deploy.00011042	The draft application cannot be executed.	The draft application cannot be executed.	Save the draft as a formal application and try again.
400	Deploy.00011129	Too many applications for the tenant.	Too many applications for the tenant.	Delete some applications and try again.
403	Deploy.00011155	Real-time authentication incomplete.	Real-time authentication incomplete.	Please perform real-name authentication before access.
400	Deploy.00011156	No atomic operations enabled.	No atomic operations enabled.	Ensure that the atomic operation is correct and try again later.
400	Deploy.00011161	The application is being deployed.	The application is being deployed.	Stop deploying the application and try again.
404	Deploy.00011602	No templates found.	No templates found.	Ensure that the template exists and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	Deploy.00015002	One or more request parameters are invalid.	One or more request parameters are invalid.	Ensure that the parameters are correct and try again.
400	Deploy.00015829	The application is being deployed.	The application is being deployed.	Try again after the application deployment is complete.
400	Deploy.00015901	Invalid time range: \$ {start_date} - \$ {end_date}	Invalid time range: \$ {start_date} - \$ {end_date}	Check the time range. For example, the start time cannot be later than the end time.
400	Deploy.00015902	Exceeds \$ {max_time_range}.	Exceeds \$ {max_time_range}.	Check whether the time span exceeds the maximum range.
403	Deploy.00015903	Non-project member.	Non-project member.	Check whether the current user is a project member.
400	Deploy.00015904	Invalid date format: \$ {invalid_input_date}	Invalid date format: \$ {invalid_input_date}	Check the input date format.
400	Deploy.00015905	Non-static parameters of host clusters and enumeration types cannot be empty.	Non-static parameters of host clusters and enumeration types cannot be empty.	Check whether the non-static parameters of host clusters and enumeration types are empty.
404	Deploy.00016902	Project not found.	Project not found.	Check the project ID and try again.
400	Deploy.00016903	Invalid project name.	Invalid project name.	Check the project name and try again.
400	Deploy.00016905	Parameter type required with parameter name.	Parameter type required with parameter name.	Check whether the parameter type is correct.

Status Code	Error Codes	Error Message	Description	Solution
400	Deploy.0001 6906	Incorrect enumerated value.	Incorrect enumerated value.	Check whether the entered enumerated value exists.
400	Deploy.0002 1008	Invalid password input.	Invalid password input.	Enter a correct password.
400	Deploy.0001 5158	Role not found.	Role not found.	Confirm the role before performing the operation.
404	Deploy.0001 1303	No execution records.	No execution records.	Perform the operation after confirmation.
403	Deploy.0006 0221	Insufficient permissions for this self-hosted resource pool.	Insufficient permissions for this self-hosted resource pool.	Apply for the permission first.
403	Deploy.0001 5834	Not enough time for deployment. Upgrade the package.	Not enough time for deployment. Upgrade the package.	Upgrade the package.
409	Deploy.0001 5840	Free trial unavailable. CodeArts package already exists.	Free trial unavailable. CodeArts package already exists.	Trial already enabled.
400	Deploy.0001 5841	Free trial unavailable. No single service package enabled yet.	Free trial unavailable. No single service package enabled yet.	Enable a package first.
400	Deploy.0001 5842	Trial has expired.	Trial has expired.	Contact customer service.

Status Code	Error Codes	Error Message	Description	Solution
403	Deploy.00015853	The tenant account is frozen and its functions are unavailable. To restore functionality, contact the tenant administrator to unfreeze it.	The tenant account is frozen and its functions are unavailable. To restore functionality, contact the tenant administrator to unfreeze it.	Contact the tenant administrator to unfreeze it.
400	Deploy.00016901	Max. 500 characters.	Max. 500 characters.	Confirm the custom parameter description first.
400	Deploy.00060013	Query permissions failed.	Query permissions failed.	Check whether you have the permission to perform this operation.
400	Deploy.00060014	Maintain permissions failed.	Maintain permissions failed.	Contact customer service.
400	Deploy.00060015	Query role information failed.	Query role information failed.	Perform the operation after confirmation.
403	Deploy.00060016	DevUC authentication failed.	DevUC authentication failed.	Contact customer service.
400	Deploy.00060017	Operation type not found.	Operation type not found.	Perform the operation after confirmation.
404	Deploy.00060021	No basic application information.	No basic application information.	Check whether the application exists.
404	Deploy.00060022	No deployed application.	No deployed application.	Check whether the application information is correct.
404	Deploy.00060023	No application orchestration information.	No application orchestration information.	Check whether the application information is correct.

Status Code	Error Codes	Error Message	Description	Solution
403	Deploy.0006 0031	No modify permission.	No modify permission.	Disable the project permissions of the application first.
409	Deploy.0006 0032	Project-level permission not changed.	Project-level permission not changed.	Perform the operation after confirmation.
400	Deploy.0006 0103	Max. 128 characters.	Max. 128 characters.	Reduce the length of the application name.
400	Deploy.0006 0104	Max. 128 characters.	Max. 128 characters.	Reduce the length of the template name.
400	Deploy.0006 0108	Select an environment first.	Select an environment first.	Select an environment first.
400	Deploy.0006 0109	Select an application first.	Select an application first.	Select an application first.
400	Deploy.0006 0110	Select a component first.	Select a component first.	Select a component first.
400	Deploy.0006 0111	Select a component instance first.	Select a component instance first.	Select a component instance first.
400	Deploy.0006 0203	Duplicate name.	Duplicate name.	Check whether the name already exists.
400	Deploy.0006 0204	Too many groups (Max. 200)	Too many groups (Max. 200)	Delete unnecessary groups and try again.
400	Deploy.0006 0205	Max. 3 group layers.	Max. 3 group layers.	Delete unnecessary layers and try again.
404	Deploy.0006 0207	No such group.	No such group.	Confirm and then try again.
400	Deploy.0006 0209	Group cannot be moved.	Group cannot be moved.	Confirm and then try again.

Status Code	Error Codes	Error Message	Description	Solution
403	Deploy.0006 0211	Insufficient permissions.	Insufficient permissions.	Contact your administrator.
400	Deploy.0006 0212	Invalid project ID.	Invalid project ID.	Check the project ID and try again.
404	Deploy.0006 0217	Requested path not found	Requested path not found	Confirm and then try again.
400	Deploy.0006 0218	The environment is being deployed. Stop this deployment or try again later.	The environment is being deployed. Stop this deployment or try again later.	Stop the deployment task that is being executed and try again.
403	Deploy.0006 0220	Application disabled.	Application disabled.	Check the application permission and try again.
400	Deploy.0006 0222	Some application permissions in this project are being updated. Try again later.	Some application permissions in this project are being updated. Try again later.	Try again later.
400	Deploy.0002 1102	Duplicate host cluster name.	Duplicate host cluster name.	Change the host cluster name and try again.
400	Deploy.0002 1106	Duplicate host name.	Duplicate host name.	Change the host name and try again.
404	Deploy.0002 1108	Host not found.	Host not found.	Ensure that the host to be queried exists in the host cluster.
400	Deploy.0002 1111	Delete host cluster failed. Host cluster contains host.	Delete host cluster failed. Host cluster contains host.	Delete host from host cluster first.

Status Code	Error Codes	Error Message	Description	Solution
400	Deploy.0002 1112	Only host in this host cluster can be selected.	Only host in this host cluster can be selected.	Select host in this host cluster and try again.
400	Deploy.0002 1113	Too many host clusters are deployed in the project.	Too many host clusters are deployed in the project.	Delete unnecessary host clusters and try again.
400	Deploy.0002 1114	Inconsistent host OS and cluster OS.	Inconsistent host OS and cluster OS.	Ensure that the host and host cluster use the same OS and try again.
400	Deploy.0002 1115	Max. hosts in host cluster: 1,000	Max. hosts in host cluster: 1,000	Delete unnecessary hosts and try again.
400	Deploy.0002 1116	Duplicate IP addresses and port numbers in the host cluster.	Duplicate IP addresses and port numbers in the host cluster.	Ensure that the IP address is correct and try again.
400	Deploy.0002 1117	Host of this proxy not deleted.	Host of this proxy not deleted.	Delete the host of this proxy first.
404	Deploy.0002 1119	The proxies of some hosts do not exist.	The proxies of some hosts do not exist.	Ensure that the agent exists and try again.
404	Deploy.0002 1123	Host selected not found in current cluster.	Host selected not found in current cluster.	Ensure that the host to be modified is in the current host cluster and try again.
400	Deploy.0002 1124	Duplicate IP address.	Duplicate IP address.	Ensure that all hosts have unique IP addresses in the host cluster and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	Deploy.0002 1132	Test up to 100 hosts at a time.	Test up to 100 hosts at a time.	Ensure that the number of hosts in a connectivity test does not exceed 100 and try again.
400	Deploy.0002 1135	The value of auth_region is inconsistent with the transferred region information.	The value of auth_region is inconsistent with the transferred region information.	Ensure that the transferred region information is correct.
403	Deploy.0002 1200	Insufficient permissions to create a host cluster.	Insufficient permissions to create a host cluster.	Confirm the permission and try again.
403	Deploy.0002 1201	Insufficient permissions to delete a host cluster.	Insufficient permissions to delete a host cluster.	Add the permission and try again.
403	Deploy.0002 1202	Insufficient permissions to modify host cluster.	Insufficient permissions to modify host cluster.	Add the permission and try again.
403	Deploy.0002 1203	Insufficient permissions.	Insufficient permissions.	Apply for the permission and try again.
401	Deploy.0002 1204	Real-time authentication incomplete.	Real-time authentication incomplete.	Authenticate your real name and try again.
403	Deploy.0002 1205	Insufficient permissions to create a host.	Insufficient permissions to create a host.	Apply for the permission and try again.
403	Deploy.0002 1206	Insufficient permissions to delete a host.	Insufficient permissions to delete a host.	Add the permission and try again.
403	Deploy.0002 1207	Insufficient permissions to update a host.	Insufficient permissions to update a host.	Add the permission and try again.

Status Code	Error Codes	Error Message	Description	Solution
403	Deploy.0002 1209	Insufficient permissions to copy a host.	Insufficient permissions to copy a host.	Add the permission and try again.
403	Deploy.0002 1404	Insufficient permissions.	Insufficient permissions.	Add the permission and try again.
400	Deploy.0002 1412	Current host cluster not associated with any application.	Current host cluster not associated with any application.	Associate applications and try again.
400	Deploy.0002 1413	Duplicate host under the application.	Duplicate host under the application.	Ensure that no duplicate host exists in the application and try again.
404	Deploy.0002 1414	Query application information failed.	Query application information failed.	Ensure that the application exists and try again.
404	Deploy.0002 1415	Proxy host not found.	Proxy host not found.	Ensure that the proxy host exists and try again.
400	Deploy.0002 1419	Host cluster type and application resource pool type do not match.	Host cluster type and application resource pool type do not match.	Ensure that the type of the host cluster is the same as that of the application resource pool and try again.
404	Deploy.0002 1420	No application.	No application.	Ensure that the application exists and try again.
400	Deploy.0002 1421	Host cluster associated with applications.	Host cluster associated with applications.	Ensure that the host cluster is not associated with any application and try again.
400	Deploy.0002 1422	Duplicate host cluster name.	Duplicate host cluster name.	Change the host cluster name and try again.

Status Code	Error Codes	Error Message	Description	Solution
404	Deploy.0002 1423	Host cluster not found.	Host cluster not found.	Ensure that the host cluster exists and try again.
403	Deploy.0002 1426	Insufficient permissions to update the host cluster.	Insufficient permissions to update the host cluster.	Add the permission and try again.
403	Deploy.0002 1427	Insufficient permissions to delete the host cluster.	Insufficient permissions to delete the host cluster.	Add the permission and try again.
400	Deploy.0002 1429	Only create proxy servers and bind hosts to proxy servers in a host cluster for proxy mode.	Only create proxy servers and bind hosts to proxy servers in a host cluster for proxy mode.	Ensure that the host type meets the requirements and try again.
400	Deploy.0002 1430	Cannot create proxy servers or bind hosts to proxy servers in a host cluster for non-proxy mode.	Cannot create proxy servers or bind hosts to proxy servers in a host cluster for non-proxy mode.	Ensure that the host type meets the requirements and try again.
400	Deploy.0002 1431	Delete host cluster failed. The host cluster is associated with environments.	Delete host cluster failed. The host cluster is associated with environments.	Ensure that the host cluster is not associated with any environment and try again.
400	Deploy.0002 1432	Delete host cluster failed. Host cluster contains host.	Delete host cluster failed. Host cluster contains host.	Delete all hosts from the host cluster and try again.
403	Deploy.0002 1435	Insufficient permissions to create an environment.	Insufficient permissions to create an environment.	Add the permission and try again.

Status Code	Error Codes	Error Message	Description	Solution
403	Deploy.0002 1436	Insufficient permissions to edit an environment.	Insufficient permissions to edit an environment.	Add the permission and try again.
403	Deploy.0002 1437	Insufficient permissions to delete an environment.	Insufficient permissions to delete an environment.	Add the permission and try again.
404	Deploy.0002 1438	No environment.	No environment.	Ensure that the environment exists and try again.
400	Deploy.0002 1442	Max. 100 environments in application.	Max. 100 environments in application.	Ensure that the number of environments in the app does not exceed the upper limit and try again.
400	Deploy.0002 1443	Duplicate environment name.	Duplicate environment name.	Change the environment name and try again.
403	Deploy.0002 1445	Insufficient permissions to query an environment.	Insufficient permissions to query an environment.	Add the permission and try again.
400	Deploy.0002 1447	Host of this proxy not deleted.	Host of this proxy not deleted.	Delete the proxied host and try again.
403	Deploy.0002 1448	Insufficient permissions to import a host.	Insufficient permissions to import a host.	Add the permission and try again.
403	Deploy.0002 1452	Insufficient permissions to check an imported host.	Insufficient permissions to check an imported host.	Add the permission and try again.
400	Deploy.0002 1454	Duplicate data in imported host.	Duplicate data in imported host.	Ensure that no duplicate data exists and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	Deploy.0002 1455	Duplicate host in application.	Duplicate host in application.	Do not import data repeatedly.
400	Deploy.0002 1456	Import proxy failed.	Import proxy failed.	Import a non-proxy.
404	Deploy.0002 1457	Imported host not found.	Imported host not found.	Ensure that the host to be imported exists and try again.
400	Deploy.0002 1458	Max. 200 imported hosts in environment.	Max. 200 imported hosts in environment.	Ensure that the number of hosts in the environment does not reach the upper limit and try again.
400	Deploy.0002 1459	Different environment OS and the host cluster OS.	Different environment OS and the host cluster OS.	Ensure that the environment OS is the same as that of the host cluster and try again.
400	Deploy.0002 1461	The proxy is being used.	The proxy is being used.	Ensure that the proxy is not in use and try again.
400	Deploy.0002 1462	Proxy and host IP addresses must be different.	Proxy and host IP addresses must be different.	Ensure that the IP address of the proxy is different from that of the target host and try again.
403	Deploy.0002 1463	Insufficient permissions to create host in target cluster.	Insufficient permissions to create host in target cluster.	Add the permission and try again.
404	Deploy.0002 1464	Host selected not found in current cluster.	Host selected not found in current cluster.	Ensure that the host cluster contains hosts and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	Deploy.0002 1465	Duplicate hosts exist in the hosts (IP & port) to be copied.	Duplicate hosts exist in the hosts (IP & port) to be copied.	Ensure that the IP address and port number of the host to be copied are unique and try again.
400	Deploy.0002 1466	Inconsistent host OS and cluster OS.	Inconsistent host OS and cluster OS.	Ensure that the host OS is the same as that of the host cluster and try again.
400	Deploy.0002 1467	Duplicate host (same IP address, port number, and login user).	Duplicate host (same IP address, port number, and login user).	Ensure that the same host does not exist in the host cluster and try again.
400	Deploy.0002 1468	Hosts to be cloned do not meet requirements.	Hosts to be cloned do not meet requirements.	Ensure that the host to be cloned meets the requirements and try again.
400	Deploy.0002 1469	Host cluster has too many hosts.	Host cluster has too many hosts.	Ensure that the number of hosts in the host cluster does not exceed 200 and try again.
400	Deploy.0002 1470	Project's host cluster has too many (>1000) hosts.	Project's host cluster has too many (>1000) hosts.	Ensure that the number of host clusters in the project does not exceed 1,000 and try again.
403	Deploy.0002 1471	Insufficient permissions to check an application.	Insufficient permissions to check an application.	Add the permission and try again.
404	Deploy.0002 1472	Invalid region.	Invalid region.	Ensure that the region is normal and try again.

Status Code	Error Codes	Error Message	Description	Solution
403	Deploy.0002 1473	Target project and current project do not belong to same tenant.	Target project and current project do not belong to same tenant.	Ensure that the target project and the current project belong to the same tenant and try again.
400	Deploy.0002 1474	Duplicate proxy name.	Duplicate proxy name.	Use a unique proxy name and try again.
403	Deploy.0002 1476	Intranet secure access enabled. Use executor from self-hosted resource pool.	Intranet secure access enabled. Use executor from self-hosted resource pool.	Use executor from self-hosted resource pool to try again.
404	Deploy.0002 1478	Project not found.	Project not found.	Use an existing project and try again.
404	Deploy.0002 1479	Role not found.	Role not found.	Use a normal role and try again.
409	Deploy.0002 1481	Cloning target hosts to the target cluster. Try again later.	Cloning target hosts to the target cluster. Try again later.	Try again later.
403	Deploy.0002 1482	Application disabled.	Application disabled.	Cancel the disabling and try again.
403	Deploy.0002 1484	Insufficient permissions for this self-hosted resource pool.	Insufficient permissions for this self-hosted resource pool.	Add the permission and try again.
403	Deploy.0001 5835	Your package is frozen since expiring.	Your package is frozen since expiring.	Renew it to restore functionality.
403	Deploy.0001 5836	Frozen resource for legal reasons. Related functions are unavailable.	Frozen resource for legal reasons. Related functions are unavailable.	Contact customer service.

Status Code	Error Codes	Error Message	Description	Solution
403	Deploy.00015837	Frozen resource for security reasons. Related functions are unavailable.	Frozen resource for security reasons. Related functions are unavailable.	Contact customer service.
403	Deploy.00015838	Frozen tenant of this project. Related functions are unavailable.	Frozen tenant of this project. Related functions are unavailable.	Contact the tenant administrator to unfreeze the tenant and try again.
403	Deploy.00015839	Expired tenant package of current project. Related functions have been frozen.	Expired tenant package of current project. Related functions have been frozen.	Contact the tenant administrator to renew the subscription and try again.
403	Deploy.00015850	Frozen account for legal reasons. Related functions are unavailable.	Frozen account for legal reasons. Related functions are unavailable.	Contact customer service.
403	Deploy.00015851	Frozen account for security reasons. Related functions are unavailable.	Frozen account for security reasons. Related functions are unavailable.	Contact customer service.
403	Deploy.00015852	Frozen account due to no real-name authentication. Related functions are unavailable.	Frozen account due to no real-name authentication. Related functions are unavailable.	Authenticate your real name and try again.

Status Code	Error Codes	Error Message	Description	Solution
404	Deploy.0002 1141	Target cluster not found.	Target cluster not found.	Ensure that the target host cluster exists and try again.
403	Deploy.0002 1485	IAM authentication failed.	IAM authentication failed.	Check whether you have the required IAM permissions.

6.3 Obtaining a Project ID

6.3.1 Obtaining an IAM Project ID

Obtaining a Project ID by Calling an API

You can obtain the project ID by calling the APIs used to [query the project information based on the specified criteria](#).

The API used to obtain a project ID is **GET https://{Endpoint}/v4/projects/**, where *{Endpoint}* indicates the Req endpoint. You can obtain the Req endpoint from [Regions and Endpoints](#). For details about API authentication, see [Authentication](#).

In the following example, **project_id** indicates a project ID.

```
{
  "projects": [ {
    "project_num_id": 3183801,
    "project_id": "41bd3eab86544863b8fc92ffcd35e3c8",
    "project_name": "demo_project",
    "description": "demo",
    "created_time": 1576114296000,
    "updated_time": 1576114296000,
    "project_type": "xboard",
    "creator": {
      "user_num_id": 4097,
      "user_id": "c4bd39f0573a436589714bedbcca8536",
      "user_name": "modile_user",
      "domain_id": "2489d8cbba804db8bcd35384685ff3ac",
      "domain_name": "modile_user",
      "nick_name": "Tom.M.Riddle"
    }
  } ],
  "total": 10
}
```

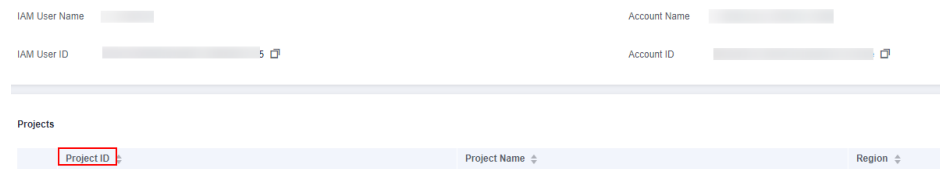
Obtaining a Project ID from the Console

A project ID is required for some URLs when an API is called. To obtain a project ID, perform the following operations:

1. Log in to the management console.

2. Hover over your username in the upper right corner and select **My Credentials** from the drop-down list.
On the **API Credentials** page, view the project ID in the project list.

Figure 6-1 Viewing a project ID



6.4 Obtaining an Account ID

An account 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. Hover over the username and choose **My Credentials** from the drop-down list.

On the displayed **API Credentials** page, view **Account ID**.