

**Software Repository for Container**

# **API Reference (Paris Region)**

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# 1 Before You Start

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## 1.1 Overview

Welcome to use SoftWare Repository for Container (SWR). SWR provides easy, secure, and reliable management over container images throughout their lifecycles, facilitating the deployment of containerized applications.

This document describes how to use APIs to perform operations on SWR, such as creation, deletion, and query. For details about all supported operations, see [API Overview](#).

## 1.2 API Calling

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

## 1.3 Endpoints

An endpoint is the **request address** for calling an API. Endpoints vary depending on services and regions. For the endpoints of SWR, see [Regions and Endpoints](#).

## 1.4 Constraints

- The number of SWR organizations that you can create is determined by your quota, as shown in [Table 1-1](#).

**Table 1-1** Quota

Resource	Quota
Number of organizations	5

- For more constraints, see API description.

## 1.5 Concepts

- **Account**

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

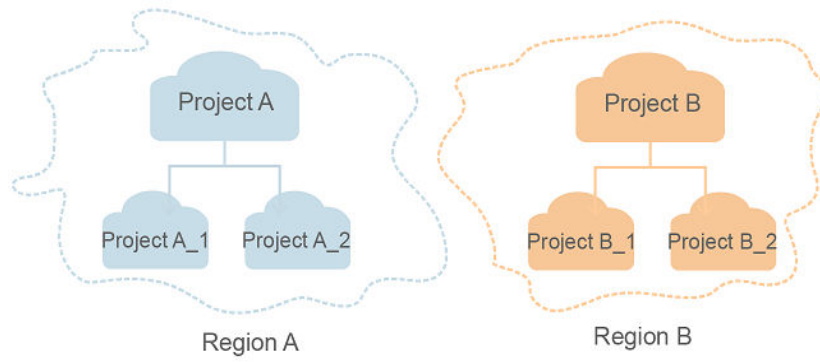
An IAM user is created by an account in IAM to use cloud services. Each IAM user has its own identity credentials (password and access keys).  
API authentication requires information such as the account name, username, and password.
- **Region**

A region is a geographic area in which cloud resources are deployed. Availability zones (AZs) in the same region can communicate with each other over an intranet, while AZs in different regions are isolated from each other. Deploying cloud resources in different regions can better suit certain user requirements or comply with local laws or regulations.
- **AZ**

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

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

**Figure 1-1** Project isolation model





# 2 API Overview

You can query information about organizations, image repositories, and images, and manage organizations, image repositories, and images by using interfaces provided by the container image service.

## Organization Management

API	Description
<a href="#">Creating an Organization</a>	Create an organization.
<a href="#">Deleting an Organization</a>	Delete an organization.
<a href="#">Querying the List of Organizations</a>	Query the list of organizations.
<a href="#">Querying the Details of an Organization</a>	Query the details of an organization, including its ID, name, creator, and user permissions.

## Image Repository Management

API	Description
<a href="#">Creating an Image Repository in an Organization</a>	Create an image repository in an organization.
<a href="#">Deleting an Image Repository in an Organization</a>	Delete an image repository in an organization.
<a href="#">Updating the Brief Information on an Image Repository</a>	Update the brief information on an image repository in an organization, including the <b>category</b> , <b>is_public</b> , and <b>description</b> .

<a href="#">Querying the Brief Information on an Image Repository</a>	Query the brief information on an image repository in an organization, including the image's repository ID, organization ID, repository name, description of the repository, the creator and capacity of the repository, and the image pull address.
<a href="#">Querying the Image Repository List</a>	Query the image repository list.
<a href="#">Viewing the List of Shared Images</a>	View the list of shared images.

## Image Tag Management

API	Description
<a href="#">Querying the List of Image Repository Tags</a>	Query all image tags of an image repository.
<a href="#">Deleting the Image with a Specified Tag</a>	Delete the image with a specified tag in an image repository.

## Shared Account Management

API	Description
<a href="#">Creating an Account Used for Image Sharing</a>	Create an account used for image sharing. You can share your private images with other users, granting them permissions to pull the images.
<a href="#">Deleting an Account Used for Image Sharing</a>	Delete an account used for image sharing.
<a href="#">Updating an Account Used for Image Sharing</a>	Update an account used for image sharing.
<a href="#">Checking the Existence of an Account Used for Image Sharing</a>	Check whether an account used for image sharing exists.
<a href="#">Obtaining the List of Accounts Used for Image Sharing</a>	Obtain the list of accounts used for image sharing.

## API Versions

API	Description
-----	-------------

<a href="#">Querying All API Versions</a>	Query all available API versions of SWR.
<a href="#">Querying a Specific API Version</a>	Query a specific API version of SWR.

## Organization Permission Management

API	Description
<a href="#">Creating Organization Permissions</a>	Grant permissions of an organization to certain users so that they can manage, edit, and read images from the organization.
<a href="#">Deleting Organization Permissions</a>	Delete the organization operation permissions of certain users.
<a href="#">Updating Organization Permissions</a>	Update the organization operation permission types for certain users.
<a href="#">Querying Organization Permissions</a>	Query organization permissions.

# 3 Calling APIs

## 3.1 Making an API Request

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

### Request URI

A request URI is in the following format:

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

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

**Table 3-1** URI parameter description

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

 **NOTE**

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

## Request Methods

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

**Table 3-2** HTTP methods

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

For example, in the case of the API used to obtain a user token, the request method is **POST**. The request is as follows:

```
POST https://{{endpoint}}/v3/auth/tokens
```

## Request Header

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

Common request header fields are as follows.

**Table 3-3** Common request header fields

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

Parameter	Description	Mandatory	Example Value
X-Auth-Token	<p>Specifies the user token.</p> <p>It is a response to the API for obtaining a user token (This is the only API that does not require authentication).</p> <p>After the request is processed, the value of <b>X-Subject-Token</b> in the response header is the token value.</p>	<p>No</p> <p>This field is mandatory for token authentication.</p>	<p>The following is part of an example token:</p> <p>MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ</p>

 **NOTE**

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

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

The 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://{{endpoint}}/v3/auth/tokens
Content-Type: application/json
```

### (Optional) Request Body

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

The request body varies between APIs. Some APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

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 provides an example request with a body included. Replace *username*, *domainname*, *\*\*\*\*\** (login password), and *xxxxxxxxxxxxxxxxxxxx* (project name) with the actual values. Obtain a project name 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://{{endpoint}}/v3/auth/tokens
Content-Type: application/json
```

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

If all data required for the API 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 authentication: Requests are authenticated using tokens.
- AK/SK authentication: Requests are encrypted using AK/SK pairs. AK/SK authentication is recommended because it is more secure than token authentication.

### Token Authentication

#### 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 used to obtain 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. You can obtain a token by calling the Obtaining User Token API.

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

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username", // IAM user name
        }
      }
    }
  }
}
```



```
"password": "*****", // IAM user password
"domain": {
  "name": "domainname" // Name of the account to which the IAM user belongs
}
},
"scope": {
  "project": {
    "name": "xxxxxxx" // Project name
  }
}
}
```

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

```
POST https://{{endpoint}}/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

## AK/SK Authentication

### NOTE

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

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

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

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

### NOTE

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

## 3.3 Response

### Status Code

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

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

For example, if status code **201** is returned for calling the API used to 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 3-1** 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.

### NOTE

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

**Figure 3-1** 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]
x-xss-protection → 1; mode=block
```

## (Optional) Response Body

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

The following 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": "az-01",
            .....

```

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

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

In the response body, **error\_code** is an error code, and **error\_msg** provides information about the error.

# 4 API

## 4.1 Organization Management

### 4.1.1 Creating an Organization

#### Function

Create an organization.

#### URI

POST /v2/manage/namespaces

#### Request Parameters

Table 4-1 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json;charset=utf-8</b> or <b>application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-2** Request body parameter

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name. Enter 1 to 64 characters, starting with a lowercase letter and ending with a lowercase letter or digit. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. Periods, underscores, and hyphens cannot be placed next to each other. A maximum of two consecutive underscores are allowed.

## Response Parameters

N/A

## Example Request

```
POST https://{endpoint}/v2/manage/namespaces
{
  "namespace": "group"
}
```

## Example Response

N/A

## Status Code

Status Code	Description
201	Creation successful.
400	The request is incorrect or the number of organizations exceeds the upper limit.
401	Authentication failed.
409	The resource already exists.
500	Internal error.

## 4.1.2 Deleting an Organization

### Function

Delete an organization.

### URI

DELETE /v2/manage/namespaces/{*namespace*}

For details about parameters, see [Table 4-3](#).

**Table 4-3** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name. Enter 1 to 64 characters, starting with a lowercase letter and ending with a lowercase letter or digit. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. Periods, underscores, and hyphens cannot be placed next to each other. A maximum of two consecutive underscores are allowed.

### Request Parameters

**Table 4-4** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json;charset=utf-8</b> or <b>application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response

N/A

## Status Code

Status Code	Description
204	Deleted successfully.
400	Request error.
401	Authentication failed.
404	The organization does not exist.
500	Internal error.

## 4.1.3 Querying the List of Organizations

### Function

Query the list of organizations.

### URI

GET /v2/manage/namespaces

**Table 4-5** Query parameters

Parameter	Mandatory	Type	Description
namespace	No	String	Organization name. Enter 1 to 64 characters, starting with a lowercase letter and ending with a lowercase letter or digit. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. Periods, underscores, and hyphens cannot be placed next to each other. A maximum of two consecutive underscores are allowed.

Parameter	Mandatory	Type	Description
filter	No	String	Enter <b>namespace::</b> <b>{namespace} mode::{mode}</b> . <b>{namespace}</b> indicates the organization name. If <b>{mode}</b> is not set, the list of authorized organizations is displayed. If <b>{mode}</b> is set to <b>visible</b> , the list of visible organizations is displayed. (Some organizations can be viewed by the repository, but cannot by the organization.)

## Request Parameters

**Table 4-6** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

**Table 4-7** Response body parameter description

Parameter	Type	Description
namespaces	Array of <b>objects</b>	Organization list



**Table 4-8** namespaces parameter description

Parameter	Type	Description
ID	Integer	Organization ID
name	String	Organization name
creator_name	String	IAM username
auth	Integer	User permission <ul style="list-style-type: none"> <li>• 7: Manage</li> <li>• 3: Write</li> <li>• 1: Read</li> </ul>

## Example Request

GET https://{Endpoint}/v2/manage/namespaces?filter=namespace::group

## Example Response

Status code: 200

The list of organizations is returned successfully.

```
{
  "namespaces": [
    {
      "id": 1343008,
      "name": "group",
      "creator_name": "username",
      "auth": 7
    }
  ]
}
```

## Status Code

Status Code	Description
200	Query succeeded.
400	Request error.
401	Authentication failed.
404	The organization does not exist.
500	Internal error.

## Error Codes

For details, see [Error Codes](#).

## 4.1.4 Querying the Details of an Organization

### Function

Query the details of an organization by its name.

### URI

GET /v2/manage/namespaces/{*namespace*}

For details about parameters, see [Table 4-9](#).

**Table 4-9** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name

### Request Parameters

**Table 4-10** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

### Response Parameters

Status code: 200

**Table 4-11** Response body parameter description

Parameter	Type	Description
id	Integer	Organization ID

Parameter	Type	Description
name	String	Organization name
creator_name	String	IAM username
auth	Integer	User permission <ul style="list-style-type: none"><li>• 7: Manage</li><li>• 3: Write</li><li>• 1: Read</li></ul>

## Example Request

```
GET https://{Endpoint}/v2/manage/namespaces/group
```

## Example Response

```
{  
  "id": 1422,  
  "name": "group",  
  "creator_name": "username",  
  "auth": 7  
}
```

## Status Code

Status Code	Description
200	Query succeeded.
400	Request error.
401	Authentication failed.
404	The organization does not exist.
500	Internal error.

## Error Codes

For details, see [Error Codes](#).

# 4.2 Image Repository Management

## 4.2.1 Creating an Image Repository

### Function

Create an image repository in an organization.

## URI

POST /v2/manage/namespaces/{*namespace*}/repos

For details about parameters, see [Table 4-12](#).

**Table 4-12** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name. Enter 1 to 64 characters, starting with a lowercase letter and ending with a lowercase letter or digit. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. Periods, underscores, and hyphens cannot be placed next to each other. A maximum of two consecutive underscores are allowed.

## Request Parameters

**Table 4-13** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-14** Request body parameters

Parameter	Mandatory	Type	Description
repository	Yes	String	Image repository name. An image repository name contains 1 to 128 characters. It must start and end with a lowercase letter or digit. Only lowercase letters, digits, periods (.), slashes (/), underscores (_), and hyphens (-) are allowed. Periods, slashes, underscores, and hyphens cannot be placed next to each other. A maximum of two consecutive underscores are allowed.
is_public	Yes	Boolean	Whether the repository is public. <b>true</b> indicates that the repository is public. <b>false</b> indicates that the repository is private.
category	No	String	Repository type. The value can be <b>app_server</b> , <b>linux</b> , <b>framework_app</b> , <b>database</b> , <b>lang</b> , <b>arm</b> , or <b>other</b> .
description	No	String	Brief description of the image repository.

## Response Parameters

None

## Example Request

```
POST https://{endpoint}/v2/manage/namespaces/{namespace}/repos
{
  "repository": "busybox",
  "category": "linux",
  "description": "this is a busybox repository",
  "is_public": true
}
```

## Example Response

None

## Status Code

Status Code	Description
201	Creation successful.
400	Request error. Error information is returned.
401	Authentication failed.
409	The repository already exists.
500	Internal error. Error information is returned.

## Error Codes

For details, see [Error Codes](#).

## 4.2.2 Deleting an Image Repository

### Function

Delete an image repository in an organization.

### URI

DELETE /v2/manage/namespaces/{*namespace*}/repos/{*repository*}

For details about parameters, see [Table 4-15](#).

**Table 4-15** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name.
repository	Yes	String	Image repository name.

## Request Parameters

**Table 4-16** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

None

## Example Request

```
DELETE https://{endpoint}/v2/manage/namespaces/{namespace}/repos/{repository}
```

## Example Response

None

## Status Code

Status Code	Description
204	The brief information about the image repository is successfully deleted.
400	Request error. Error information is returned.
401	Authentication failed.
404	The repository does not exist.
406	The repository cannot be deleted because it contains images.
500	Internal error. Error information is returned.

## Error Codes

For details, see [Error Codes](#).

## 4.2.3 Updating the Brief Information on an Image Repository

### Function

Update the brief information on an image repository in an organization, including the **category**, **is\_public**, and **description**.

### URI

PATCH /v2/manage/namespaces/{*namespace*}/repos/{*repository*}

For details about parameters, see [Table 4-17](#).

**Table 4-17** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name.
repository	Yes	String	Image repository name.

### Request Parameters

**Table 4-18** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.



**Table 4-19** Request body parameters

Parameter	Mandatory	Type	Description
is_public	Yes	Boolean	Whether the repository is public. <b>true</b> indicates that the repository is public. <b>false</b> indicates that the repository is private.
category	No	String	Repository type. The value can be <b>app_server</b> , <b>linux</b> , <b>framework_app</b> , <b>database</b> , <b>lang</b> , <b>arm</b> , or <b>other</b> .
description	No	String	Brief description of the image repository.

## Response Parameters

None

## Example Request

```
PATCH https://{endpoint}/v2/manage/namespaces/{namespace}/repos/{repository}
{
  "category": "database",
  "description": "this is a busybox repository",
  "is_public": false
}
```

## Example Response

None

## Status Code

Status Code	Description
201	The brief information about the image repository is successfully updated.
400	Request error. Error information is returned.
401	Authentication failed.
404	The repository does not exist.
500	Internal error. Error information is returned.

## Error Codes

For details, see [Error Codes](#).

## 4.2.4 Querying the Brief Information on an Image Repository

### Function

Query the brief information on an image repository in an organization.

### URI

GET `/v2/manage/namespaces/{namespace}/repos/{repository}`

For details about parameters, see [Table 4-20](#).

**Table 4-20** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name
repository	Yes	String	Image repository name

### Request

- Request parameters

N/A

- Example request

```
GET https://{Endpoint}/v2/manage/namespaces/group/repos/busybox
```

### Response

- Response parameters

**Table 4-21** Response body parameter description

Parameter	Type	Description
id	Integer	Image repository ID.
ns_id	Integer	Organization ID.
name	String	Image repository name.
category	String	Image repository type. The value can be <b>app_server</b> , <b>linux</b> , <b>framework_app</b> , <b>database</b> , <b>lang</b> , <b>arm</b> , or <b>other</b> .

Parameter	Type	Description
description	String	Brief description of the image repository.
creator_id	String	Image repository creator ID.
creator_name	String	Image repository creator.
size	Integer	Image repository size.
is_public	Boolean	Whether the image repository is a public repository. The value can be <b>true</b> or <b>false</b> .
num_images	Integer	Number of images in an image repository.
num_download	Integer	Download times of an image repository.
url	String	URL of the image repository logo image. This field has been discarded and is left empty by default.
path	String	External image pull address. The format is <i>{Repository address}/ {Namespace name}/ {Repository name}</i> .
internal_path	String	Internal image pull address. The format is <i>{Repository address}/ {Namespace name}/ {Repository name}</i> .
created	String	Time when an image repository is created. It is the UTC standard time.
updated	String	Time when an image repository is updated. It is the UTC standard time.
domain_id	String	Account ID.
priority	Integer	Image sorting priority.

- Example response

```
{
  "id": 865151,
  "ns_id": 1334795,
  "name": "busybox",
  "category": "other",
  "description": "containerops",
  "creator_id": "050b12577f00269a1fcfc01f65239697",
  "creator_name": "admin",
  "size": 2099575,
  "is_public": false,
  "num_images": 1,
  "num_download": 0,
  "url": "",
  "path": "{Repository address}/group/busybox",
  "internal_path": "{Repository address}/group/busybox",
  "created": "2021-06-02T09:59:25.51307Z",
  "updated": "2021-06-02T17:59:25.538056Z",
  "domain_id": "da44776c316c4a99b3683bb174f8821b",
  "priority": 0
}
```

## Status Code

Status Code	Description
200	Request successful.
400	Request error. Error information is returned.
401	Authentication failed.
404	The repository does not exist.
500	Internal error. Error information is returned.

## Error Codes

For details, see [Error Codes](#).

## 4.2.5 Querying the Image Repository List

### Function

Query the image repository list.

### URI

GET /v2/manage/repos

**Table 4-22** Query parameters

Parameter	Mandatory	Type	Description
namespace	No	String	Organization name. An organization name contains 1 to 64 characters. It must start with a lowercase letter and end with a lowercase letter or digit. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. Periods, underscores, and hyphens cannot be placed next to each other. A maximum of two consecutive underscores are allowed.
name	No	String	Image repository name.
category	No	String	Repository type. The value can be <b>app_server</b> , <b>linux</b> , <b>framework_app</b> , <b>database</b> , <b>lang</b> , <b>arm</b> , or <b>other</b> .
limit	No	String	Number of returned records. Parameters <b>offset</b> and <b>limit</b> should always be used together.
offset	No	String	Start index. Parameters <b>offset</b> and <b>limit</b> should always be used together.
order_column	No	String	Sorting by column. You can set this parameter to <b>updated_at</b> (sorting by update time). Parameters <b>order_column</b> and <b>order_type</b> should always be used together.
order_type	No	String	Sorting type. You can set this parameter to <b>desc</b> (descending sort) or <b>asc</b> (ascending sort). Parameters <b>order_column</b> and <b>order_type</b> should always be used together.

Parameter	Mandatory	Type	Description
filter	No	String	<p>Pass at least one of the following filter parameters:</p> <p><b>namespace:</b> organization name. It supports fuzzy match.</p> <p><b>name:</b> image repository name. It supports fuzzy match.</p> <p><b>category:</b> image repository type. The value can be <b>app_server</b>, <b>linux</b>, <b>framework_app</b>, <b>database</b>, <b>lang</b>, <b>arm</b>, or <b>other</b>.</p> <p><b>limit:</b> number of returned records.</p> <p><b>offset:</b> the start index.</p> <p>Parameters <b>offset</b> and <b>limit</b> should always be used together.</p> <p><b>order_column:</b> sorting by column. It can be set to <b>name</b>, <b>updated_time</b>, or <b>tag_count</b>.</p> <p><b>order_type:</b> sorting type. It can be set to <b>desc</b> (descending order) or <b>asc</b> (ascending order).</p> <p>Parameters <b>order_column</b> and <b>order_type</b> should always be used together.</p>

## Request

- Request parameters  
N/A
- Example request  
GET <https://{Endpoint}/v2/manage/repos?filter=center::self|namespace::group|name::busybox>

## Response

- Response parameters

**Table 4-23** Response header parameter description

Parameter	Type	Description
Content-Range	String	<i>Offset</i> (Start index) – <i>Count</i> (Number of records on the current page) / <i>Total</i> (Total number of records)

 NOTE

If the **offset** and **limit** parameters are transferred in the request, **Content-Range** will be added to the response header.

**Table 4-24** Response body parameter description

Parameter	Type	Description
<i>[Array element]</i>	Array of <b>objects</b>	Image repository list.

**Table 4-25** *[Array element]* parameters description

Parameter	Type	Description
name	String	Image repository name.
category	String	Image repository type. The value can be <b>app_server</b> , <b>linux</b> , <b>framework_app</b> , <b>database</b> , <b>lang</b> , <b>arm</b> , or <b>other</b> .
description	String	Image repository description.
size	Integer	Total size of the images in an image repository.
is_public	Boolean	Whether the image is a public image. The value can be <b>true</b> or <b>false</b> .
num_images	Integer	Number of image tags in an image repository.
num_download	Integer	Download times.
created_at	String	Time when an image repository is created. It is the UTC standard time.
updated_at	String	Time when an image repository is updated. It is the UTC standard time.
logo	String	(Reserved field) Image repository logo address.
url	String	(Reserved field) URL of the image repository logo.

Parameter	Type	Description
path	String	External Docker pull address. The format is <i>{Repository address}/ {Namespace name}/ {Repository name}</i> .
internal_path	String	Internal Docker pull address. The format is <i>{Repository address}/ {Namespace name}/ {Repository name}</i> .
domain_name	String	Domain name.
namespace	String	Organization name.
tags	Array of strings	Image tag list.
status	Boolean	(Reserved field) Status.
total_range	Integer	Total number of records.

- Example response

```
[
  {
    "name": "busybox",
    "category": "linux",
    "description": "this is a busybox repository",
    "size": 200977474,
    "is_public": false,
    "num_images": 2,
    "num_download": 0,
    "created_at": "2021-06-10T03:24:44.784402Z",
    "updated_at": "2021-06-10T03:40:59.199352Z",
    "logo": "",
    "url": "",
    "path": "{Repository address}/group/busybox",
    "internal_path": "{Repository address}/group/busybox",
    "domain_name": "root",
    "namespace": "group",
    "tags": [
      "latest",
      "log"
    ],
    "status": false,
    "total_range": 1
  }
]
```

## Status Code

Status Code	Description
200	Request successful.
400	Request error. Error information is returned.



Status Code	Description
401	Authentication failed.
500	Internal error. Error information is returned.

## Error Codes

For details, see [Error Codes](#).

## 4.2.6 Viewing the List of Shared Images

### Function

View the list of shared images.

### URI

GET /v2/manage/shared-repositories

**Table 4-26** Query parameters

Parameter	Mandatory	Type	Description
namespace	No	String	Organization name. An organization name contains 1 to 64 characters. It must start with a lowercase letter and end with a lowercase letter or digit. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. Periods, underscores, and hyphens cannot be placed next to each other. A maximum of two consecutive underscores are allowed.
name	No	String	Image repository name.
center	No	String	<b>self</b> : images shared by you <b>thirdparty</b> : images shared with you by others.
limit	No	String	Number of returned records. Ensure that the <b>offset</b> and <b>limit</b> parameters are used together.

Parameter	Mandatory	Type	Description
offset	No	String	Start index. Parameters <b>offset</b> and <b>limit</b> should always be used together.
order_column	No	String	Sorting by column. You can set this parameter to <b>updated_at</b> (sorting by update time). Parameters <b>order_column</b> and <b>order_type</b> should always be used together.
order_type	No	String	Sorting type. You can set this parameter to <b>desc</b> (descending sort) or <b>asc</b> (ascending sort). Parameters <b>order_column</b> and <b>order_type</b> should always be used together.
filter	No	String	Set this parameter to <b>center::</b> {center} <b> name::</b> {name} <b> limit::</b> {limit} <b> offset::</b> {offset} <b> namespace::</b> {namespace} <b> order_column::</b> {order_column} <b> order_type::</b> {order_type}. <b>center</b> can be set to <b>self</b> (images shared by you). <b>thirdparty</b> indicates images shared by others. <b>namespace</b> indicates the organization name. <b>name</b> indicates the image repository name. <b>limit</b> indicates the number of returned records. <b>offset</b> indicates the start index. <b>order_column</b> indicates sorting by column, which can be <b>name</b> , <b>updated_time</b> , or <b>tag_count</b> . <b>order_type</b> indicates the sorting type, which can be <b>desc</b> (descending order) or <b>asc</b> (ascending order).

## Request

- Request parameters  
N/A
- Example request  
GET <https://{Endpoint}/v2/manage/shared-repositories?filter=center::self&name::busybox>

## Response

- Response parameters

**Table 4-27** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-28** Response body parameter description

Parameter	Type	Description
<i>[Array element]</i>	Array of <b>objects</b>	Viewing the list of shared images.

**Table 4-29** *[Array element]* parameters description

Parameter	Type	Description
name	String	Image repository name.
category	String	Image repository type. The value can be <b>app_server</b> , <b>linux</b> , <b>framework_app</b> , <b>database</b> , <b>lang</b> , <b>arm</b> , or <b>other</b> .
description	String	Image repository description.
size	Integer	Total size of the images in an image repository.
is_public	Boolean	Whether the image is a public image. The value can be <b>true</b> or <b>false</b> .
num_images	Integer	Number of image tags in an image repository.

Parameter	Type	Description
num_download	Integer	Download times.
created_at	String	Time when an image repository is created. It is the UTC standard time.
updated_at	String	Time when an image repository is updated. It is the UTC standard time.
logo	String	(Reserved field) Image repository logo address.
url	String	(Reserved field) URL of the image repository logo.
path	String	External Docker pull address. The format is <i>{Repository address}/{Namespace name}/{Repository name}</i> .
internal_path	String	Internal Docker pull address. The format is <i>{Repository address}/{Namespace name}/{Repository name}</i> .
domain_name	String	Domain name.
namespace	String	Organization name.
tags	Array of strings	Image tag list.
status	Boolean	<ul style="list-style-type: none"> <li>Query the images shared by a third party: Check whether the sharing is expired.</li> <li>Query the images shared by me: The default value is <b>false</b>, indicating that no images are shared.</li> </ul>
total_range	Integer	Total number of records.

- Example response

```
[
  {
    "name": "busybox",
    "category": "other",
    "description": "",
    "size": 115645792,
    "is_public": false,
    "num_images": 1,
    "num_download": 0,
    "created_at": "2021-06-02T09:23:01.751202Z",
    "updated_at": "2021-06-10T07:24:35.204517Z",
    "logo": "",
    "url": "",
    "path": "{Repository address}/group/busybox",
    "internal_path": "{Repository address}/group/busybox",
    "domain_name": "domain",
    "namespace": "namespace",
```

```
"tags": [  
  "v1",  
  "v2"  
],  
"status": true,  
"total_range": 1  
}
```

## Status Code

Status Code	Description
200	Request successful.
400	Request error. Error information is returned.
401	Authentication failed.
500	Internal error. Error information is returned.

## Error Codes

For details, see [Error Codes](#).

# 4.3 Image Tag Management

## 4.3.1 Querying the List of Image Repository Tags

### Function

Query all image tags of an image repository.

### URI

GET /v2/manage/namespaces/{*namespace*}/repos/{*repository*}/tags?filter=offset::{*offset*}|limit::{*limit*}|order\_column::{*order\_column*}|order\_type::{*order\_type*}|tag::{*tag*}

For details about parameters, see [Table 4-30](#).

**Table 4-30** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name
repository	Yes	String	Image repository name.

**Table 4-31** Query parameters

Parameter	Mandatory	Type	Description
limit	No	String	Number of returned records. Parameters <b>offset</b> and <b>limit</b> should always be used together.
offset	No	String	Start index. Parameters <b>offset</b> and <b>limit</b> should always be used together.
order_column	No	String	Sorting by column. You can set this parameter to <b>updated_at</b> (sorting by update time). Parameters <b>order_column</b> and <b>order_type</b> should always be used together.
order_type	No	String	Sorting type. You can set this parameter to <b>desc</b> (descending sort) or <b>asc</b> (ascending sort). Parameters <b>order_column</b> and <b>order_type</b> should always be used together.
tag	No	String	Image tag name.
filter	No	String	Set this parameter to <b>offset::</b> { <i>offset</i> }  <b>limit::</b> { <i>limit</i> }  <b>order_column::</b> { <i>order_column</i> }  <b>order_type::</b> { <i>order_type</i> }  <b>tag::</b> { <i>tag</i> }. <b>limit</b> indicates the number of returned records. <b>offset</b> indicates the start index. Parameters <b>offset</b> and <b>limit</b> should always be used together. <b>order_column</b> indicates sorting by column, which can be <b>updated_at</b> (sorting by update time). <b>order_type</b> indicates the sorting type, which can be <b>desc</b> (descending order) or <b>asc</b> (ascending order). <b>tag</b> indicates the image tag name.

## Request

- Request parameters

**Table 4-32** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

- Example request  
GET https://{Endpoint}/v2/manage/namespaces/*group*/repos/*busybox*/tags

## Response

- Response parameters  
Status code: 200

**Table 4-33** Response header parameters

Parameter	Type	Description
Content-Range	String	<i>Offset</i> (Start index) – <i>Count</i> (Number of records on the current page) / <i>Total</i> (Total number of records)

**Table 4-34** Response body parameters

Parameter	Type	Description
[ <i>Array</i> ]	Array of <b>ShowReposTagResp</b> objects	Image tags.

**Table 4-35** *[Array element]* parameters description

Parameter	Type	Description
id	Integer	ID
repo_id	Integer	Repository ID.
Tag	String	Image tag name.
image_id	String	Image ID.
manifest	String	Image manifest.
digest	String	SHA value of an image.
schema	Integer	Docker protocol version. The version can be <b>1</b> or <b>2</b> .
path	String	External image pull address. The format is <i>{Repository address}/ {Namespace name}/ {Repository name}:{Tag name}</i> .
internal_path	String	Internal image pull address. The format is <i>{Repository address}/ {Namespace name}/ {Repository name}:{Tag name}</i> .
size	Integer	Image size. Value range: 0 to 9223372036854775807 Unit: byte
is_trusted	Boolean	By default, the value is <b>false</b> .
created	String	Time when an image is created. It is the UTC standard time. Users need to calculate the offset based on the local time. For example, GMT +8 is 8 hours ahead the GMT time.



Parameter	Type	Description
updated	String	Time when an image is updated. It is the UTC standard time. Users need to calculate the offset based on the local time. For example, GMT +8 is 8 hours ahead the GMT time.
deleted	String	Time when an image was deleted.
domain_id	String	Account ID.
tag_type	Integer	0: manifest. 1: manifest list.

- Example response

```
[
  {
    "id": 0,
    "repo_id": 0,
    "Tag": "latest",
    "image_id": "741f24a795d6d93d7c6edd11780d63c13e16c39615dd9d223378a57a836f2ee6",
    "manifest": "{\"schemaVersion\":2,\"mediaType\":\"application/vnd.docker.distribution.manifest.v2+json\",\"config\":{\"mediaType\":\"application/vnd.docker.container.image.v1+json\",\"size\":1862,\"digest\":\"sha256:741f24a795d6d93d7c6edd11780d63c13e16c39615dd9d223378a57a836f2ee6\"},\"layers\": [{\"mediaType\":\"application/vnd.docker.image.rootfs.diff.tar.gzip\",\"size\":1292800,\"digest\":\"sha256:8ac8bfaff55af948c796026ee867448c5b5b5d9dd3549f4006d9759b25d4a893\"}, {\"mediaType\":\"application/vnd.docker.image.rootfs.diff.tar.gzip\",\"size\":10240,\"digest\":\"sha256:77dbf3a9fe11e81761a0f9df43a28e3e6f29bbb53c0c8cf71cd7efa69729aed\"}]}\",
    "digest": "sha256:57b605845a6367c34bfb6ea6477f16852f59aa1861a2b51d10ab77ae0a1dc9c3",
    "schema": 2,
    "path": "{Repository address}/group/busybox:latest",
    "internal_path": "10.125.0.198:20202/namespace/busybox:latest",
    "size": 1304902,
    "is_trusted": false,
    "created": "2018-07-06T06:18:55Z",
    "updated": "2018-07-06T06:18:55Z",
    "deleted": null,
    "domain_id": "0503dda878000fed0f75c0096d70a960",
    "tag_type": 0
  }
]
```

## Status Code

Status Code	Description
200	All tags in the image repository are successfully queried.
400	Request error. Error information is returned.
401	Authentication failed.

Status Code	Description
404	The repository does not exist.
500	Internal error. Error information is returned.

## Error Codes

For details, see [Error Codes](#).

### 4.3.2 Deleting the Image with a Specified Tag

#### Function

Delete the image with a specified tag in an image repository.

#### URI

DELETE /v2/manage/namespaces/{*namespace*}/repos/{*repository*}/tags/{*tag*}

For details about parameters, see [Table 4-36](#).

**Table 4-36** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name
repository	Yes	String	Image repository name
tag	Yes	String	Image tag name

## Request

- Request parameters

**Table 4-37** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .

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

- Example request  
DELETE https://{Endpoint}/v2/manage/namespaces/*group*/repos/*busybox*/tags/*v1*

## Response

N/A

## Status Code

Status Code	Description
204	The image with a specified tag is deleted successfully.
400	Request error. Error information is returned.
401	Authentication failed.
404	The repository or the image with a specified tag does not exist.
500	Internal error. Error information is returned.

## Error Codes

For details, see [Error Codes](#).

# 4.4 Shared Account Management

## 4.4.1 Creating an Account Used for Image Sharing

### Function

Create an account used for image sharing. You can share your private images with other users, granting them permissions to pull the images.

## URI

POST /v2/manage/namespaces/{*namespace*}/repositories/{*repository*}/access-domains

For details about parameters, see [Table 4-38](#).

**Table 4-38** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name. An organization name contains 1 to 64 characters. It must start with a lowercase letter and end with a lowercase letter or digit. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. Periods, underscores, and hyphens cannot be placed next to each other. A maximum of two consecutive underscores are allowed.
repository	Yes	String	Image repository name

## Request

- Request parameters

**Table 4-39** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-40** Request body parameter description

Parameter	Mandatory	Type	Description
access_domain	Yes	String	Name of the account used for image sharing.
permit	Yes	String	Currently, only the read permission is supported.
deadline	Yes	String	Valid until (UTC). If the sharing is permanent, the value is <b>forever</b> . Otherwise, the sharing is valid until 00:00:00 of the next day.
description	No	String	Description.

- Example request

POST `https://{Endpoint}/v2/manage/namespaces/group/repositories/busybox/access-domains`

Body:

```
{
  "access_domain": "domain_name",
  "permit": "read",
  "deadline": "2021-10-01T16:00:00.000Z",
  "description": "description"
}
```

## Response

- Response parameters

N/A

- Example response

None

## Status Code

Status Code	Description
201	Creation successful.
400	Request error.
401	Authentication failed.
409	The repository has been shared.
500	Internal error.

## Error Codes

For details, see [Error Codes](#).

## 4.4.2 Deleting an Account Used for Image Sharing

### Function

Delete an account used for image sharing.

### URI

DELETE /v2/manage/namespaces/{*namespace*}/repositories/{*repository*}/access-domains/{*access\_domain*}

For details about parameters, see [Table 4-41](#).

**Table 4-41** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name. An organization name contains 1 to 64 characters. It must start with a lowercase letter and end with a lowercase letter or digit. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. Periods, underscores, and hyphens cannot be placed next to each other. A maximum of two consecutive underscores are allowed.
repository	Yes	String	Image repository name.
access_domain	Yes	String	Name of the account used for image sharing.

### Request

- Request parameters

**Table 4-42** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .

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

- Example request  
DELETE `https://{Endpoint}/v2/manage/namespaces/group/repositories/busybox/access-domains/domain_name`

## Response

N/A

## Status Code

Status Code	Description
204	Deleted successfully.
400	Request error.
401	Authentication failed.
500	Failed to complete the request because of an internal service error.

## Error Codes

For details, see [Error Codes](#).

## 4.4.3 Updating an Account Used for Image Sharing

### Function

Update an account used for image sharing.

### URI

PATCH `/v2/manage/namespaces/{namespace}/repositories/{repository}/access-domains/{access_domain}`

For details about parameters, see [Table 4-43](#).

**Table 4-43** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name
repository	Yes	String	Image repository name
access_domain	Yes	String	Name of the account used for image sharing

## Request

- Request parameters

**Table 4-44** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-45** Request body parameter description

Parameter	Mandatory	Type	Description
permit	Yes	String	Currently, only the read permission is supported.
deadline	Yes	String	Valid until (UTC). If the sharing is permanent, the value is <b>forever</b> . Otherwise, the sharing is valid until 00:00:00 of the next day.
description	No	String	Description. This parameter is left blank by default.



- **Example request**  
PATCH `https://{Endpoint}/v2/manage/namespaces/group/repositories/busybox/access-domains/domain_name`  
Body:  

```
{  
  "permit": "read",  
  "deadline": "forever",  
  "description": "description"  
}
```

## Response

N/A

## Status Code

Status Code	Description
201	Modified successfully.
400	Request error.
401	Authentication failed.
500	Internal error.

## 4.4.4 Checking the Existence of an Account Used for Image Sharing

### Function

Check whether an account used for image sharing exists.

### URI

GET `/v2/manage/namespaces/{namespace}/repositories/{repository}/access-domains/{access_domain}`

For details about parameters, see [Table 4-46](#).

**Table 4-46** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name
repository	Yes	String	Image repository name
access_domain	Yes	String	Name of the account used for image sharing.

## Request

- Request parameters

**Table 4-47** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

- Example request

GET [https://{Endpoint}/v2/manage/namespaces/group/repositories/busybox/access-domains/domain\\_name](https://{Endpoint}/v2/manage/namespaces/group/repositories/busybox/access-domains/domain_name)

## Response

- Response parameters

Status code: 200

**Table 4-48** Response body parameter description

Parameter	Type	Description
exist	Boolean	<b>true</b> : Exist. <b>false</b> : Not exist.
namespace	String	Organization name.
repository	String	Image repository name.
access_domain	String	Name of the account used for image sharing.
permit	String	Permission.
deadline	String	Expiration time.
description	String	Description.
creator_id	String	Creator ID.
creator_name	String	Name of the creator.

Parameter	Type	Description
created	String	Time when an image is created. It is the UTC standard time.
updated	String	Time when an image is updated. It is the UTC standard time.
status	Boolean	Status. true: valid. false: expired.

- Example response

```
{
  "exist": true,
  "namespace": "group",
  "repository": "busybox",
  "access_domain": "xxx",
  "permit": "read",
  "deadline": "2021-10-01T16:00:00Z",
  "description": "description",
  "creator_id": "0504186e6a8010e01f3ec009a7279baa",
  "creator_name": "xxx",
  "created": "2021-06-10T08:14:42.56632Z",
  "updated": "2021-06-10T08:14:42.566325Z",
  "status": true
}
```

## Status Code

Status Code	Description
200	Query succeeded.
400	Request error.
401	Authentication failed.
500	Internal error.

## Error Codes

For details, see [Error Codes](#).

### 4.4.5 Obtaining the List of Accounts Used for Image Sharing

#### Function

Obtain the list of accounts used for image sharing.

#### URI

GET /v2/manage/namespaces/{*namespace*}/repositories/{*repository*}/access-domains

For details about parameters, see [Table 4-49](#).

**Table 4-49** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name. An organization name contains 1 to 64 characters. It must start with a lowercase letter and end with a lowercase letter or digit. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. Periods, underscores, and hyphens cannot be placed next to each other. A maximum of two consecutive underscores are allowed.
repository	Yes	String	Image repository name

## Request

- Request parameters

**Table 4-50** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

- Example request  
GET `https://{Endpoint}/v2/manage/namespaces/group/repositories/busybox/access-domains`

## Response

- Response parameters

**Table 4-51** Response body parameter description

Parameter	Type	Description
<i>[Array element]</i>	Array of <b>objects</b>	Shared accounts.

**Table 4-52** *[Array element]* parameter description

Parameter	Type	Description
namespace	String	Organization name.
repository	String	Image repository name.
access_domain	String	Name of the account used for image sharing.
permit	String	Permission.
deadline	String	Expiration time.
description	String	Description.
creator_id	String	Creator ID.
creator_name	String	Name of the creator.
created	String	Time when an image was created. It is the UTC standard time. You need to calculate the offset based on the local time. For example, GMT +8 is 8 hours ahead the GMT time.
updated	String	Time when an image was updated. It is the UTC standard time. You need to calculate the offset based on the local time. For example, GMT +8 is 8 hours ahead the GMT time.
status	Boolean	Status. <b>true</b> : valid; <b>false</b> : expired

- Example response

```
[
  {
    "namespace": "group",
    "repository": "busybox",
    "access_domain": "swr",
    "permit": "read",
    "deadline": "2021-10-01T16:00:00Z",
```

```
[{"description": "description",  
  "creator_id": "fb3f175c1fd146ab8cdae3272be6107b",  
  "creator_name": "group",  
  "created": "2021-06-10T08:14:42.56632Z",  
  "updated": "2021-06-10T08:14:42.566325Z",  
  "status": true  
}
```

## Status Code

Status Code	Description
200	The list of image sharing accounts is returned successfully.
400	Request error. Error information is returned.
401	Authentication failed.
500	Internal error. Error information is returned.

## Error Codes

For details, see [Error Codes](#).

## 4.5 API Versions

### 4.5.1 Querying All API Versions

#### Function

Query all available API versions of SWR.

#### URI

GET /

## Request Parameters

**Table 4-53** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response

- Response parameters  
Status code: 200

**Table 4-54** Response body parameter description

Parameter	Type	Description
versions	Array of <b>objects</b>	A list of objects related to the version.

**Table 4-55** versions parameter description

Parameter	Type	Description
id	String	Version ID (version number), for example, v2.
links	<b>Object</b>	API URL.
version	String	If the APIs of this version support microversions, set this parameter to the supported maximum microversion. If the microversion is not supported, leave this parameter blank.

Parameter	Type	Description
status	String	Version status. The options are as follows: <ul style="list-style-type: none"> <li>• <b>CURRENT</b>: The version is the primary version.</li> <li>• <b>SUPPORTED</b>: The version is an old version, but it is still supported.</li> <li>• <b>DEPRECATED</b>: The version is a deprecated version, which may be deleted later.</li> </ul>
updated	String	Version release time, which must be the UTC time. For example, the release time of v2 is <b>2014-06-28T12:20:21Z</b> .
min_version	String	If APIs of this version support microversions, set this parameter to the supported minimum microversion. If the microversion is not supported, leave this parameter blank.

**Table 4-56** links parameter description

Parameter	Type	Description
href	String	Link
rel	String	Description

- Example response

```
{
  "versions": [
    {
      "id": "v2",
      "links": {
        "href": "https://xxx",
        "rel": "self"
      }
    }
  ],
  "min_version": "2.0",
  "status": "CURRENT",
  "updated": "2020-07-09T00:00:00Z",
  "version": "2.26",
}
```

## Status Code

Status Code	Description
200	Request successful.



Status Code	Description
500	Failed to complete the request because of an internal service error.

## Error Codes

For details, see [Error Codes](#).

## 4.5.2 Querying a Specific API Version

### Function

Query a specific API version of SWR.

### URI

GET */*{*api\_version*}

For details about parameters, see [Table 4-57](#).

**Table 4-57** Parameter description

Parameter	Mandatory	Type	Description
api_version	Yes	String	API version

### Request

- Request parameters

**Table 4-58** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .

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

- Example request  
GET https://{Endpoint}/v2

## Response

- Response parameters

**Table 4-59** Response body parameter description

Parameter	Type	Description
version	<b>Object</b>	A list of objects related to the version.

**Table 4-60** version parameter description

Parameter	Type	Description
id	String	Version ID (version number), for example, v2.
links	<b>Object</b>	API URL.
version	String	If the APIs of this version support microversions, set this parameter to the supported maximum microversion. If the microversion is not supported, leave this parameter blank.
status	String	Version status. The options are as follows: <ul style="list-style-type: none"> <li>• <b>CURRENT</b>: The version is the primary version.</li> <li>• <b>SUPPORTED</b>: The version is an old version, but it is still supported.</li> <li>• <b>DEPRECATED</b>: The version is a deprecated version, which may be deleted later.</li> </ul>
updated	String	Version release time, which must be the UTC time. For example, the release time of v2 is <b>2018-06-28T12:20:21Z</b> .

Parameter	Type	Description
min_version	String	If APIs of this version support microversions, set this parameter to the supported minimum microversion. If the microversion is not supported, leave this parameter blank.

**Table 4-61** links parameter description

Parameter	Type	Description
href	String	Link
rel	String	Description

- Example response

```
{
  "version": {
    "id": "v2",
    "links": {
      {
        "href": "https://xxx",
        "rel": "self"
      }
    }
    "min_version": "2.0",
    "status": "CURRENT",
    "updated": "2017-12-09T00:00:00Z",
    "version": "2.26"
  }
}
```

## Status Code

Status Code	Description
200	Request successful.
500	Failed to complete the request because of an internal service error.

## Error Codes

For details, see [Error Codes](#).

# 4.6 Organization Permission Management

## 4.6.1 Creating Organization Permissions

### Function

Grant permissions of an organization to certain users so that they can manage, edit, and read images from the organization.

### Constraints

None

### URI

POST /v2/manage/namespaces/{*namespace*}/access

[Table 4-62](#) describes the parameters.

**Table 4-62** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name.

### Request

- Request parameters

**Table 4-63** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-64** Request body parameters

Parameter	Mandatory	Type	Description
[Array element]	Yes	Array of <a href="#">objects</a>	Information required for creating organization permissions.

**Table 4-65** [Array element]

Parameter	Mandatory	Type	Description
user_id	Yes	String	User ID. Obtain it from IAM.
user_name	Yes	String	Username. Obtain it from IAM.
auth	Yes	Integer	User permission <ul style="list-style-type: none"> <li>• 7: Manage</li> <li>• 3: Write</li> <li>• 1: Read</li> </ul>

- Example request

POST <https://{endpoint}/v2/manage/namespaces/{namespace}/access>

```
[ {
  "user_id" : "fb3f175c1fd146ab8cdae3272be6107b",
  "user_name" : "user01",
  "auth" : 1
} ]
```

## Response

- Response parameters

N/A

- Example response

None

## Status Code

Status Code	Description
201	Creation successful.
400	Request error.
401	Authentication failed.
404	The organization does not exist.
409	The organization permission already exists.

Status Code	Description
500	Internal error.

## Error Codes

For details, see [Error Codes](#).

## 4.6.2 Deleting Organization Permissions

### Function

Delete the organization operation permissions of certain users.

### URI

DELETE /v2/manage/namespaces/{*namespace*}/access

[Table 4-66](#) describes the parameters.

**Table 4-66** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name.

### Request

- Request parameters

**Table 4-67** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-68** Request body parameter description

Parameter	Mandatory	Type	Description
[Array element]	Yes	Array of strings	ID list of users whose permissions need to be deleted. Obtain the list from IAM.

- Example request  
DELETE https://{Endpoint}/v2/manage/namespaces/group/access  
["fb3f175c1fd146ab8cdae3272be6107b"]

## Response

N/A

## Status Code

Status Code	Description
204	Deleted successfully.
400	Request error.
401	Authentication failed.
404	The organization does not exist.
500	Internal error.

## Error Codes

For details, see [Error Codes](#).

## 4.6.3 Updating Organization Permissions

### Function

Update the organization operation permissions for certain users.

### URI

PATCH /v2/manage/namespaces/{namespace}/access

For details about parameters, see [Table 4-69](#).

**Table 4-69** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name.

## Request

- Request parameters

**Table 4-70** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-71** Request body parameter description

Parameter	Mandatory	Type	Description
[Array element]	Yes	Array of <b>objects</b>	Information required for updating organization permissions

**Table 4-72** [Array element]

Parameter	Mandatory	Type	Description
user_id	Yes	String	User ID. Obtain it from IAM.
user_name	Yes	String	Username. Obtain it from IAM.



Parameter	Mandatory	Type	Description
auth	Yes	Integer	User permission <ul style="list-style-type: none"> <li>• 7: Manage</li> <li>• 3: Write</li> <li>• 1: Read</li> </ul>

- Example request  
PATCH https://{endpoint}/v2/manage/namespaces/{namespace}/access  

```
[ {
  "user_id" : "fb3f175c1fd146ab8cdae3272be6107b",
  "user_name" : "user01",
  "auth" : 7
}]
```

## Response

- Response parameters  
N/A
- Example response  

```
{}
```

## Status Code

Status Code	Description
201	Updated successfully.
400	Request error.
401	Authentication failed.
404	The organization does not exist.
500	Internal error.

## Error Codes

For details, see [Error Codes](#).

## 4.6.4 Querying Organization Permissions

### Function

Query organization permissions.

### URI

GET /v2/manage/namespaces/{namespace}/access

For details about parameters, see [Table 4-73](#).

**Table 4-73** Parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Organization name.

## Request

- Request parameters

**Table 4-74** Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <b>application/json</b> or <b>charset=utf-8 application/json</b> . The default value is <b>application/json</b> .
X-Auth-Token	Yes	String	User token. The token can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

- Example request  
GET `https://{Endpoint}/v2/manage/namespaces/group/access`

## Response

- Response parameters  
Status code: 200

**Table 4-75** Response body parameters

Parameter	Type	Description
id	Integer	Permission ID.
name	String	Organization name.
creator_name	String	Organization creator.
self_auth	<b>Object</b>	Permissions of the current user.

Parameter	Type	Description
others_auths	Array of objects	Permissions of other users.

**Table 4-76** self\_auth parameter description

Parameter	Type	Description
user_id	String	User ID.
user_name	String	Username.
auth	Integer	User permission <ul style="list-style-type: none"> <li>• 7: Manage</li> <li>• 3: Write</li> <li>• 1: Read</li> </ul>

- Example response

```
{
  "id": 1334795,
  "name": "group",
  "creator_name": "user",
  "self_auth": {
    "user_id": "050b12577f00269a1fcfc01f65239697",
    "user_name": "user",
    "auth": 7
  },
  "others_auths": [
    {
      "user_id": "06d89c3b6d800f2d1f28c01f0d882285",
      "user_name": "user_01",
      "auth": 1
    },
    {
      "user_id": "050b12577f00269a1fcfc01f65239697",
      "user_name": "user",
      "auth": 7
    }
  ]
}
```

## Status Code

Status Code	Description
200	Request successful.
400	Request error.
401	Authentication failed.
404	The organization does not exist.
500	Internal error.

## Error Codes

For details, see [Error Codes](#).

# 5 Appendixes

## 5.1 Status Codes

- Normal

Returned Value	Description
200 OK	The results of GET and PUT operations are returned as expected.
201 Created	The results of the POST operation are returned as expected.
202 Accepted	The request has been accepted for processing.
204 No Content	The results of the DELETE operation are returned as expected.

- Abnormal

Returned Value	Description
400 Bad Request	The server failed to process the request.
401 Unauthorized	You must enter a username and password to access the requested page.
403 Forbidden	You are forbidden to access the requested page.
404 Not Found	The server cannot find the requested page.
405 Method Not Allowed	You are not allowed to use the method specified in the request.
406 Not Acceptable	The response generated by the server cannot be accepted by the client.

Returned Value	Description
407 Proxy Authentication Required	You must use the proxy server for authentication so that the request can be processed.
408 Request Timeout	The request timed out.
409 Conflict	The request could not be processed due to a conflict.
500 Internal Server Error	Failed to complete the request because of a service error.
501 Not Implemented	Failed to complete the request because the server does not support the requested function.
502 Bad Gateway	Failed to complete the request because the request is invalid.
503 Service Unavailable	Failed to complete the request. The service is unavailable.
504 Gateway Timeout	A gateway timeout error occurred.

## 5.2 Error Codes

If an error occurs in API calling, no result is returned. Identify the causes of errors based on the error codes of each API. If an error occurs in API calling, HTTP status code 4xx or 5xx is returned. The response body contains the specific error code and information.

### Format of an Error Response Body

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

```
[
  {
    "errorCode": "SVCSTG.SWR.4001048",
    "errorMessage": "Failed to get Token from Context",
    "detail": ""
  }
]
```

In the preceding information, **errorCode** indicates error code, **errorMessage** indicates error description, and **detail** provides error details.

### Error Code Description

Status Code	Error Code	Description
401	SVCSTG.SWR.401000	Authentication failed. Obtain a new token and try again.

Status Code	Error Code	Description
500	SVCSTG.SWR.50000 01	Internal server error: Failed to obtain the application description.
500	SVCSTG.SWR.50000 02	Internal server error: Failed to obtain the image information.
500	SVCSTG.SWR.50000 03	Internal server error: Failed to obtain the image list.
404	SVCSTG.SWR.40400 04	The software package does not exist.
500	SVCSTG.SWR.50000 05	Internal server error: Deletion fails.
409	SVCSTG.SWR.40900 06	The image already exists.
500	SVCSTG.SWR.50000 07	Internal server error: Operation fails.
500	SVCSTG.SWR.50000 08	Internal server error: Failed to obtain the list.
404	SVCSTG.SWR.40400 09	The image list cannot be found.
404	SVCSTG.SWR.40400 10	The image does not exist.
500	SVCSTG.SWR.50000 11	Internal server error: Update fails.
406	SVCSTG.SWR.40600 12	Failed to delete the image repository because it contains images.
400	SVCSTG.SWR.40000 13	Invalid digest.
400	SVCSTG.SWR.40000 14	Invalid API parameter. Modify the request body based on the returned message and the SWR API documentation, or contact technical support.
400	SVCSTG.SWR.40000 15	Invalid package name.
400	SVCSTG.SWR.40000 16	Invalid version number.
500	SVCSTG.SWR.50000 17	Internal server error: The application signature function is disabled.
500	SVCSTG.SWR.50000 18	Internal server error: Failed to read public keys.

Status Code	Error Code	Description
500	SVCSTG.SWR.50000 19	Internal server error: Failed to find local files.
500	SVCSTG.SWR.50000 20	Internal server error: Failed to obtain session locks.
500	SVCSTG.SWR.50000 21	Internal server error: Failed to synchronize files.
500	SVCSTG.SWR.50000 22	Internal server error: Failed to synchronize meta files.
409	SVCSTG.SWR.40900 23	The system is busy.
500	SVCSTG.SWR.50000 24	Internal server error: Failed to generate the SHA value.
413	SVCSTG.SWR.41300 25	The file exceeds the maximum size allowed.
500	SVCSTG.SWR.50000 27	Internal server error: Failed to decompress the package.
400	SVCSTG.SWR.40000 28	Incorrect image format.
400	SVCSTG.SWR.40000 29	Incorrect image format: The image name is inconsistent.
500	SVCSTG.SWR.50000 30	Internal server error: Failed to locate the file pointer.
400	SVCSTG.SWR.40000 31	Invalid AK/SK.
500	SVCSTG.SWR.50000 32	Internal server error: JSON conversion fails.
500	SVCSTG.SWR.50000 33	Internal server error: Failed to save the application file.
500	SVCSTG.SWR.50000 34	Internal server error: Failed to delete the application.
500	SVCSTG.SWR.50000 35	Internal server error: Failed to save the application to the database.
500	SVCSTG.SWR.50000 36	Internal server error: Failed to update the application database.
500	SVCSTG.SWR.50000 37	Internal server error: Failed to create the signature.
500	SVCSTG.SWR.50000 38	Internal server error: Failed to delete the signature.



Status Code	Error Code	Description
400	SVCSTG.SWR.40000 39	Invalid session ID.
500	SVCSTG.SWR.50000 40	Failed to update status.
500	SVCSTG.SWR.50000 41	Internal server error: Failed to read the session.
500	SVCSTG.SWR.50000 42	Internal server error: Failed to reclaim the session.
404	SVCSTG.SWR.40400 43	The session does not exist.
500	SVCSTG.SWR.50000 44	Internal server error: Failed to generate the session.
400	SVCSTG.SWR.40000 45	Internal server error: Failed to bind the session.
500	SVCSTG.SWR.50000 46	Internal server error: Creation fails.
400	SVCSTG.SWR.40000 47	This version is not supported.
404	SVCSTG.SWR.40400 48	The image tag does not exist.
500	SVCSTG.SWR.50000 49	Internal server error: Failed to delete the image.
500	SVCSTG.SWR.50000 50	Internal server error: Failed to generate the digest.
500	SVCSTG.SWR.50000 51	Internal server error: Failed to obtain the SHA list.
500	SVCSTG.SWR.50000 52	Internal server error: Failed to reduce image references.
406	SVCSTG.SWR.40600 53	Deletion fails. Please first delete the software package.
500	SVCSTG.SWR.50000 54	Internal server error: Saving fails.
400	SVCSTG.SWR.40000 55	No search content.
400	SVCSTG.SWR.40000 56	Invalid page size.
500	SVCSTG.SWR.50000 57	Internal server error: Failed to obtain the organization.

Status Code	Error Code	Description
404	SVCSTG.SWR.4040058	The organization does not exist.
500	SVCSTG.SWR.5000059	Internal server error: Failed to create the organization.
409	SVCSTG.SWR.4090060	The organization already exists.
500	SVCSTG.SWR.5000061	Failed to obtain the IP address of the software instance.
500	SVCSTG.SWR.5000062	Failed to obtain the local IP address of the software.
500	SVCSTG.SWR.5000063	Failed to obtain the tag list.
400	SVCSTG.SWR.4000064	Invalid image: The manifest file contains empty RepoTags.
400	SVCSTG.SWR.4000065	Invalid image: The manifest file does not have layer information.
400	SVCSTG.SWR.4000066	Invalid image: The manifest file does not have configuration information.
400	SVCSTG.SWR.4000067	Invalid image package: The image package does not have a manifest file.
400	SVCSTG.SWR.4000068	Invalid image: Failed to parse the manifest file.
400	SVCSTG.SWR.4000069	Invalid image: The image format is incorrect or not supported.
507	SVCSTG.SWR.5070070	Your OBS service is disabled or incorrect. Please first check your OBS service.
500	SVCSTG.SWR.5000071	Internal server error: Failed to obtain the user list.
500	SVCSTG.SWR.5000073	Internal server error: Restoration fails.
500	SVCSTG.SWR.5000075	Internal server error: Failed to update the organization.
409	SVCSTG.SWR.4090076	The organization permission already exists.
500	SVCSTG.SWR.5000077	Internal server error: Failed to obtain the organization permission.
404	SVCSTG.SWR.4040078	The organization permission does not exist.

Status Code	Error Code	Description
500	SVCSTG.SWR.5000079	Internal server error: Failed to update the organization permission.
500	SVCSTG.SWR.5000080	Internal server error: Failed to create the organization permission.
500	SVCSTG.SWR.5000081	Internal server error: Failed to delete the organization permission.
500	SVCSTG.SWR.5000082	Internal server error: Failed to parse the JSON file.
404	SVCSTG.SWR.4040083	The requested URL cannot be found.
500	SVCSTG.SWR.5000084	Internal server error: Failed to obtain the service.
500	SVCSTG.SWR.5000085	Internal server error: Failed to create the tag.
500	SVCSTG.SWR.5000086	Internal server error: Failed to update the tag.
500	SVCSTG.SWR.5000087	Internal server error: Failed to obtain the image layer.
500	SVCSTG.SWR.5000088	Internal server error: Failed to delete the image layer from UDS.
409	SVCSTG.SWR.4090089	The permission already exists.
500	SVCSTG.SWR.5000090	Internal server error: Failed to obtain the permission.
404	SVCSTG.SWR.4040091	The permission does not exist.
500	SVCSTG.SWR.5000092	Internal server error: Failed to update the permission.
500	SVCSTG.SWR.5000093	Internal server error: Failed to create the permission.
400	SVCSTG.SWR.4000097	The maximum number of organizations has been exceeded.
400	SVCSTG.SWR.4000098	The maximum number of images has been exceeded.
400	SVCSTG.SWR.4000099	The maximum number of image tags has been exceeded.
500	SVCSTG.SWR.5000112	Internal server error. Failed to obtain the image.

Status Code	Error Code	Description
404	SVCSTG.SWR.4040113	The image does not exist.
500	SVCSTG.SWR.5000114	Internal server error. Failed to obtain the image tag.
404	SVCSTG.SWR.4040115	The image tag does not exist.
400	SVCSTG.SWR.4001000	<b>Content-Type</b> must be set to <b>multipart/form-data</b> .
413	SVCSTG.SWR.4131001	The request exceeds the maximum size allowed.
500	SVCSTG.SWR.5001002	Internal server error: The external address is disabled.
400	SVCSTG.SWR.4001003	Failed to obtain the form file.
400	SVCSTG.SWR.4001004	<b>Type</b> must be set to <b>app</b> .
400	SVCSTG.SWR.4001005	Failed to parse the form.
400	SVCSTG.SWR.4001006	Invalid meta file format.
400	SVCSTG.SWR.4001008	Invalid organization or name.
400	SVCSTG.SWR.4001009	<b>is_public</b> must be set to <b>true</b> or <b>false</b> .
400	SVCSTG.SWR.4001010	<b>Type</b> must be set to <b>app</b> or <b>image</b> .
400	SVCSTG.SWR.4001011	<b>Type</b> must be set to <b>app</b> , <b>image</b> or left blank.
413	SVCSTG.SWR.4131012	The description exceeds the maximum length allowed.
400	SVCSTG.SWR.4001013	<b>ak</b> or <b>sk</b> cannot be left blank.
400	SVCSTG.SWR.4001014	Mandatory parameters must be set.
400	SVCSTG.SWR.4001015	The form file cannot be found.
400	SVCSTG.SWR.4001016	At least <b>is_public</b> and <b>manifests</b> must be set.

Status Code	Error Code	Description
400	SVCSTG.SWR.4001018	Incorrect request body type.
400	SVCSTG.SWR.4001019	Failed to parse the form file.
500	SVCSTG.SWR.5001020	Internal server error: Failed to read the form file.
400	SVCSTG.SWR.4001021	The version number cannot be left blank.
400	SVCSTG.SWR.4001022	Incorrect file type.
400	SVCSTG.SWR.4001023	Unsupported file type.
400	SVCSTG.SWR.4001024	Failed to query parameters.
400	SVCSTG.SWR.4001025	Invalid parameter.
500	SVCSTG.SWR.5001026	Failed to obtain the manifest file.
400	SVCSTG.SWR.4001027	<b>Status</b> must be set to <b>done</b> or <b>error</b> .
400	SVCSTG.SWR.4001028	Invalid organization name.
400	SVCSTG.SWR.4001029	Invalid image name.
400	SVCSTG.SWR.4001030	Invalid package.
403	SVCSTG.SWR.4031032	The number of requests exceeds the maximum number allowed.
403	SVCSTG.SWR.4031033	Unavailable request.
400	SVCSTG.SWR.4001035	Invalid filtering criteria.
400	SVCSTG.SWR.4001036	Parameters are lost.
400	SVCSTG.SWR.4001037	The registration center type is not supported.
500	SVCSTG.SWR.5001038	The registration center is unavailable.

Status Code	Error Code	Description
500	SVCSTG.SWR.5001039	Search fails.
400	SVCSTG.SWR.4001041	Invalid <b>domain</b> .
403	SVCSTG.SWR.4031042	There are too many requests.
403	SVCSTG.SWR.4031043	Invalid JWT token request.
401	SVCSTG.SWR.4011044	The image to be uploaded has been created by another user. You do not have the permission to upload the image.
400	SVCSTG.SWR.4001045	The <b>SWRServer</b> parameter is missing.
500	SVCSTG.SWR.5001046	Internal server error: Failed to check the organization.
500	SVCSTG.SWR.5001047	Internal server error: Failed to save the organization.
400	SVCSTG.SWR.4001048	Failed to obtain the token.
500	SVCSTG.SWR.5001049	Internal server error: Failed to delete the organization.
500	SVCSTG.SWR.5001050	Internal server error: Failed to obtain the image layer.
404	SVCSTG.SWR.4041051	The image layer does not exist.
500	SVCSTG.SWR.5001052	Internal server error: Invalid image layer.
500	SVCSTG.SWR.5001053	Internal server error: Invalid upload of an image layer.
500	SVCSTG.SWR.5001054	Internal server error: Failed to create the image layer path.
500	SVCSTG.SWR.5001055	Internal server error: Failed to save the image layer.
404	SVCSTG.SWR.4041056	The image tag does not exist.
500	SVCSTG.SWR.5001056	Internal server error: Failed to obtain the tag list.

Status Code	Error Code	Description
404	SVCSTG.SWR.4041057	The tag list does not exist.
500	SVCSTG.SWR.5001058	Internal server error: Failed to save the image.
500	SVCSTG.SWR.5001059	Internal server error: Failed to obtain the image.
404	SVCSTG.SWR.4041060	The manifest file does not exist.
404	SVCSTG.SWR.4041061	The organization does not exist.
500	SVCSTG.SWR.5001062	Internal server error: Failed to update the organization.
500	SVCSTG.SWR.5001063	Internal server error: Failed to delete the image layer.
401	SVCSTG.SWR.4011064	Insufficient permissions.
400	SVCSTG.SWR.4001065	Invalid organization permissions.
400	SVCSTG.SWR.4001066	Invalid permissions.
400	SVCSTG.SWR.4001067	Invalid username.
500	SVCSTG.SWR.5001076	Failed to obtain the service token.
401	SVCSTG.S2I.4019000	Authentication error: No user token or user AK/SK information found.
403	SVCSTG.SWR.4039001	You cannot apply for or operate the resources that do not belong to you.
403	SVCSTG.SWR.4039002	You do not have the permission to perform this operation.
400	SVCSTG.SWR.4009010	Invalid organization.
400	SVCSTG.SWR.4009011	Invalid image name.
400	SVCSTG.SWR.4009012	Invalid code source type.
400	SVCSTG.SWR.4009013	Invalid ID.

Status Code	Error Code	Description
400	SVCSTG.SWR.40090 14	Invalid filtering criteria.
400	SVCSTG.SWR.40090 15	Failed to parse the build task.
400	SVCSTG.SWR.40090 16	Invalid file path.
400	SVCSTG.SWR.40090 17	Invalid source code owner.
400	SVCSTG.SWR.40090 18	Invalid source code repository.
400	SVCSTG.SWR.40090 19	Invalid source code repository ID.
400	SVCSTG.SWR.40090 20	Invalid source code branch.
400	SVCSTG.SWR.40090 21	Invalid image label.
400	SVCSTG.SWR.40090 22	Invalid source code username.
400	SVCSTG.SWR.40090 23	Invalid commit ID.
400	SVCSTG.SWR.40060 30	Failed to execute the build task.
400	SVCSTG.SWR.40060 31	The build record already exists.
404	SVCSTG.SWR.40460 32	The build record does not exist.
500	SVCSTG.SWR.50060 33	Failed to obtain the build record from the database.
403	SVCSTG.SWR.40370 17	You do not have the permission to edit or manage any organization. Please first create an organization or obtain the edit/management permission of the organization.
403	SVCSTG.SWR.40370 18	You do not have the permission to edit or manage any image in the image repository. Please first create an image or obtain an editable/manageable image.



Status Code	Error Code	Description
500	SVCSTG.SWR.50070 19	Failed to create the image. The maximum number of images have been reached.
403	SVCSTG.SWR.40370 20	You do not have the permission to operate the image repository resource. Please improve your organization permissions.

## 5.3 Obtaining a Project ID

A project ID is required for some URLs when an API is called. Therefore, you need to obtain a project ID in advance. The steps are as follows:

1. Obtain the token.

For details, see [Token Authentication](#).

2. Obtain a project ID.

The API for obtaining the project ID is **GET https://iam.eu-west-0.myhuaweicloud.com/v3/projects**.

Add **X-Auth-Token** to the request header and set its value to the token obtained in the preceding step.

The following is an example response. The value of **id** is the project ID to be obtained.

```
{
  "links": {},
  "projects": [
    {
      "is_domain": ,
      "description": "",
      "links": {},
      "enabled": true,
      "id": "", // Project ID
      "parent_id": "",
      "domain_id": "",
      "name": ""
    },
    ...
  ]
}
```

# 6 Change History

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Release Date	Description
2021-07-23	This issue is the first official release.