

SoftWare Repository for Container

API Reference

Issue 13
Date 2023-01-03



Copyright © Huawei Cloud Computing Technologies Co., Ltd. 2024. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Cloud Computing Technologies Co., Ltd.

Trademarks and Permissions



HUAWEI and other Huawei trademarks are the property of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei Cloud and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Contents

1 Before You Start.....	1
1.1 Overview.....	1
1.2 API Calling.....	1
1.3 Endpoints.....	1
1.4 Constraints.....	1
1.5 Concepts.....	2
1.6 Calling APIs.....	3
1.6.1 Making an API Request.....	3
1.6.2 Authentication.....	8
1.6.3 Response.....	10
2 API Overview.....	12
3 API.....	17
3.1 Organization Management.....	17
3.1.1 Creating an Organization.....	17
3.1.2 Querying the List of Organizations.....	21
3.1.3 Deleting an Organization.....	26
3.1.4 Obtaining Organization Details.....	28
3.2 Managing Image Repositories.....	30
3.2.1 Creating an Image Repository in an Organization.....	31
3.2.2 Deleting an Image Repository in an Organization.....	35
3.2.3 Updating the Brief Information on an Image Repository.....	37
3.2.4 Querying the Brief Information on an Image Repository.....	42
3.2.5 Querying the Image Repository List.....	45
3.2.6 Querying the List of Shared Images.....	50
3.3 Image Tag Management.....	55
3.3.1 Querying the List of Image Tags.....	55
3.3.2 Deleting the Image with a Specified Tag.....	60
3.4 Shared Account Management.....	62
3.4.1 Creating a Shared Account.....	62
3.4.2 Obtaining the List of Shared Accounts.....	67
3.4.3 Deleting a Shared Account.....	70
3.4.4 Updating a Shared Account.....	72

3.4.5 Checking the Existence of a Shared Account.....	76
3.5 API Version.....	79
3.5.1 Querying All API Versions.....	79
3.5.2 Querying a Specified API Version.....	82
3.6 Organization Permission Management.....	84
3.6.1 Creating Organization Permissions.....	84
3.6.2 Deleting Organization Permissions.....	87
3.6.3 Updating Organization Permissions.....	91
3.6.4 Querying Organization Permissions.....	93
3.7 Image Permission Management.....	96
3.7.1 Creating Image Permissions.....	96
3.7.2 Deleting Image Permissions.....	101
3.7.3 Updating Image Permissions.....	105
3.7.4 Querying Image Permissions.....	110
3.8 Image Replication Management.....	113
3.8.1 Obtaining the List of Automatic Image Replication Tasks.....	113
3.8.2 Obtaining the List of Automatic Image Replication Tasks.....	117
3.8.3 Creating an Automatic Image Replication Task.....	122
3.8.4 Deleting an Automatic Image Replication Task.....	127
3.8.5 Manually Replicating Images.....	131
3.9 Trigger Management.....	134
3.9.1 Creating a Trigger.....	134
3.9.2 Obtaining the Trigger List of a Specific Image Repository.....	140
3.9.3 Deleting a Trigger.....	144
3.9.4 Obtaining Information About a Trigger.....	146
3.9.5 Updating Trigger Settings.....	150
3.10 Image Retention Policy Management.....	154
3.10.1 Adding an Image Retention Policy.....	154
3.10.2 Obtaining the List of Image Retention Policies.....	160
3.10.3 Deleting an Image Retention Policy.....	163
3.10.4 Obtaining an Image Retention Policy Record.....	165
3.10.5 Modifying an Image Retention Policy.....	168
3.10.6 Obtaining Image Retention Records.....	174
3.11 Temporary Login Command.....	178
3.11.1 Generating a Temporary Login Command.....	178
3.12 Quota Management.....	182
3.12.1 Obtaining Quota Information.....	182
4 Example Applications.....	187
4.1 Creating an Image Repository.....	187
4.2 Adding Image Permissions.....	189
4.3 Adding an Image Retention Policy.....	190
5 Appendixes.....	192

5.1 Status Codes.....	192
5.2 Error Code.....	193
5.3 Obtaining a Project ID.....	204
5.4 Obtaining the Username and User ID.....	205
6 Change History.....	206

1

Before You Start

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](#).

If you plan to access SWR through APIs, ensure that you are familiar with SWR concepts. For details, see [Introduction](#).

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 details about how to increase a quota, see [How Do I Apply for a Higher Quota?](#)

- 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 them permissions for routine management.

- User

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

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

- Region

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

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

- AZ

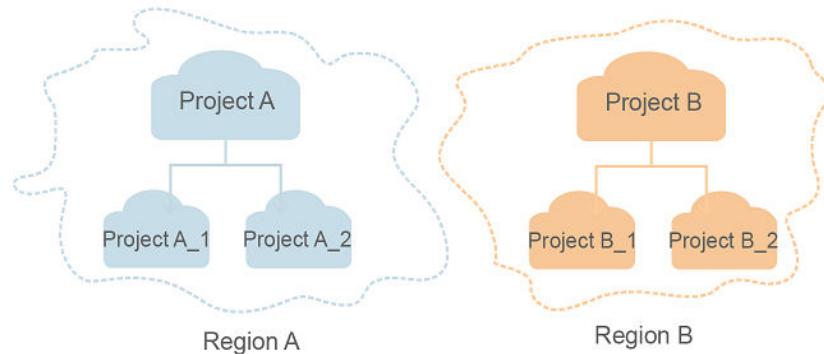
An AZ comprises of one or more physical data centers equipped with independent ventilation, fire, water, and electricity facilities. Computing, network, storage, and other resources in an AZ are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical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



- Enterprise project

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

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

1.6 Calling APIs

1.6.1 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 1-2 URI parameter description

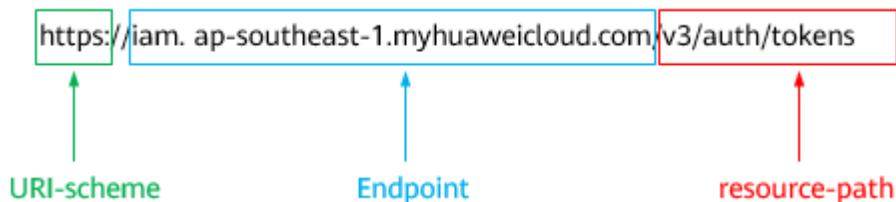
Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.

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

For example, to obtain an IAM token in the **CN-Hong Kong** region, obtain the endpoint of IAM (**iam.ap-southeast-1.myhuaweicloud.com**) for this region and the **resource-path** (**/v3/auth/tokens**) in the URI of the API used to [obtain a user token](#). Then, construct the URI as follows:

`https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens`

Figure 1-2 Example URI



NOTE

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

Request Methods

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

Table 1-3 HTTP methods

Method	Description
GET	Requests the server to return specified resources.

Method	Description
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://iam.ap-southeast-1.myhuaweicloud.com/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 1-4 Common request header fields

Parameter	Description	Mandatory	Example Value
Host	Specifies the server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. The value is in the format of <i>Hostname:Port number</i> . If the port number is not specified, the default port is used. The default port number for https is 443 .	No This field is mandatory for AK/SK authentication.	code.test.com or code.test.com:443
Content-Type	Specifies the type (or format) of the message body. The default value application/json is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Specifies the length of the request body. The unit is byte.	No	3495
X-Project-Id	Specifies the project ID. Obtain the project ID by following the instructions in Obtaining a Project ID .	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cb aa340f9c0f4

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 X-Subject-Token in the response header is the token value.</p>	No This field is mandatory for token authentication.	The following is part of an example token: MIIPAgYJKoZIhvcNAQc-Co...ggg1BBIINPXsidG9rZ

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://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

(Optional) Request Body

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

The request body varies 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 *xxxxxxxxxxxxxx* (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://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

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

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.

1.6.2 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 a User Token](#) API.

A cloud service can be deployed as either a project-level service or global service, where,

- For a project-level service, you need to obtain a project-level token. When you call the API, set **auth.scope** in the request body to **project**.
- For a global service, you need to obtain a global token. When you call the API, set **auth.scope** in the request body to **domain**.

SWR 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",  
          "password": "*****",  
          "domain": {  
            "name": "domainname"  
          }  
        }  
      }  
    },  
    "scope": {  
      "project": {  
        "name": "xxxxxxx"  
      }  
    }  
  }  
}
```

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

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens  
Content-Type: application/json  
X-Auth-Token: ABCDEFJ....
```

AK/SK Authentication



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. It is a unique identifier associated with an SK and is used together with an SK to sign requests cryptographically.
- SK: secret access key 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.

1.6.3 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 1-3 shows the response header fields for the API used to [obtain a user token](#). The **x-subject-token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.

Figure 1-3 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 → noopener
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token → MIIYXQVJKoZlIvcNAQcCoIYTjCCGEoCAQExDTALBglghkgBZQMEAgEwgharBqkqhkiG9w0BBwGgg hacBIIWmHsidG9rZW4iOnsiZXhwXJlc19hdCl6ijlwMTktMDItMTNUMCfj3Kls6YgKnpVNrbW2eZ5eb78SZOkqjACgklqO1wi4JIGzrpdl8LGK5bxldfq4lqHCYb8P4NaY0NYejcAgzVeFIYtLWT1GSO0zxKZmIQHQj82HBqHdgjZ09fuEbL5dMhdavj+33wElxHRCE9187o+k9-j+CMZSEB7buGd5Uj6eRASX1jipPEGA270g1Fruc0L6jqglFkNPQuFSOU8+uSsstVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUvHvpxk8pxiX1wTEboXRzT6MUbpvGw-oPNFYxJECKnoH3Rozv0vN--n5d6Nbvg==

x-xss-protection → 1; mode=block;
```

(Optional) Response Body

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

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

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

2 API Overview

You can query information about organizations, image repositories, and images, and manage organizations, image repositories, and images by using APIs provided by SWR.

Organization Management

API	Description
Creating an Organization	Creates an organization.
Deleting an Organization	Deletes an organization.
Querying the List of Organizations	Queries the list of organizations.
Obtaining Organization Details	Queries the details of an organization, including its ID, name, creator, and user permissions.

Image Repository Management

API	Description
Creating an Image Repository in an Organization	Creates an image repository in an organization.
Deleting an Image Repository in an Organization	Deletes an image repository in an organization.
Updating the Brief Information on an Image Repository	Updates the brief information on an image repository in an organization, including the category , is_public , and description .

Querying the Brief Information on an Image Repository	Queries 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.
Querying the Image Repository List	Queries the image repository list.
Viewing the List of Shared Images	Views the list of shared images.

Image Tag Management

API	Description
Querying the List of Image Repository Tags	Queries all image tags of an image repository.
Deleting the Image with a Specified Tag	Deletes the image with a specified tag in an image repository.

Shared Account Management

API	Description
Creating an Account Used for Image Sharing	Creates an account used for image sharing. You can share your private images with other users, granting them permissions to pull the images.
Deleting an Account Used for Image Sharing	Deletes an account used for image sharing.
Updating an Account Used for Image Sharing	Updates an account used for image sharing.
Checking the Existence of an Account Used for Image Sharing	Check whether an account used for image sharing exists.
Obtaining the List of Accounts Used for Image Sharing	Obtains the list of accounts used for image sharing.

API Version

API	Description

Querying All API Versions	Queries all available API versions of SWR.
Querying a Specific API Version	Query a specific API version of SWR.

Organization Permission Management

API	Description
Creating Organization Permissions	Grants permissions of an organization to certain users so that they can manage, edit, and read images from the organization.
Deleting Organization Permissions	Deletes the organization operation permissions of certain users.
Updating Organization Permissions	Updates the organization operation permission types for certain users.
Querying Organization Permissions	Queries organization permissions.

Image Permission Management

API	Description
Creating Image Permissions	Grants permissions of an image to certain users so that they can manage, edit, and read the image.
Deleting Image Permissions	Deletes the image operation permissions of certain users.
Updating Image Permissions	Updates the image operation permission types for certain users.
Querying Image Permissions	Queries image permissions.

Automatic Image Synchronization Task Management

API	Description
Obtaining Information About an Automatic Image Synchronization Task	Obtains information required for an image synchronization task.

Obtaining the List of Automatic Image Synchronization Tasks	Obtains all automatic image synchronization tasks of a repository.
Creating an Automatic Image Synchronization Task	Creates an automatic image synchronization task. New images and image updates can be automatically synchronized between regions. Existing images must be manually synchronized. For details, see Manually Replicating Images .
Deleting an Automatic Image Synchronization Task	Deletes a specified automatic image synchronization task based on the target region and organization.
Manually Synchronizing an Image	Existing images must be manually synchronized. Check whether image synchronization succeeded using the following two ways: <ul style="list-style-type: none"> If the response status code is 200 and no errors are reported, the image synchronization succeeded. Use the SWR console or call the API of querying the brief information on an image repository, if the synchronized image tag exists in the target organization of the target region, the image synchronization succeeded.

Trigger Management

API	Description
Creating a Trigger	Creates a trigger.
Obtaining the Trigger List of a Specific Image Repository	Obtains the trigger list of a specific image repository.
Deleting a Trigger	Deletes a trigger.
Obtaining Information About a Trigger	Obtains information about a trigger.
Updating Trigger Settings	Updates the status of a trigger.

Image Retention Policy Management

API	Description
Adding an Image Retention Policy	Adds an image retention policy.

Obtaining the List of Image Retention Policy	Obtains the list of image retention policies.
Deleting an Image Retention Policy	Deletes an image retention policy.
Obtaining an Image Retention Policy Record	Obtains the records of image retention policies.
Modifying an Image Retention Policy	Modifies an image retention policy.
Obtaining Image Retention Records	Obtains image retention records.

Temporary Login Command

API	Description
Generating a Temporary Login Command	Generates a temporary login command using the value of X-Swr-Dockerlogin in the response header and the value of host in the response body.

Quota Management

API	Description
Obtaining Quota Information	Obtains quota information.

3 API

3.1 Organization Management

3.1.1 Creating an Organization

Description

Create an organization.

Constraints

None

API Calling

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

URI

POST /v2/manage/namespaces

Request Parameters

Table 3-1 Request header parameters

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

Parameter	Mandatory	Type	Description
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 X-Subject-Token in the response header is the user token.

Table 3-2 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

None

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
```

```
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;

public class CreateNamespaceSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        SwrClient client = SwrClient.newBuilder()
            .withCredential(auth)
            .withRegion(SwrRegion.valueOf("cn-north-4"))
            .build();
        CreateNamespaceRequest request = new CreateNamespaceRequest();
        CreateNamespaceRequestBody body = new CreateNamespaceRequestBody();
        body.withNamespace("group");
        request.withBody(body);
        try {
            CreateNamespaceResponse response = client.createNamespace(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \
```

```
client = SwrClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(SwrRegion.value_of("cn-north-4")) \
    .build()

try:
    request = CreateNamespaceRequest()
    request.body = CreateNamespaceRequestBody(
        namespace="group"
    )
    response = client.create_namespace(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.CreateNamespaceRequest{}
    request.Body = &model.CreateNamespaceRequestBody{
        Namespace: "group",
    }
    response, err := client.CreateNamespace(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

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

Error Codes

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

3.1.2 Querying the List of Organizations

Description

Query the list of organizations.

Constraints

None

API Calling

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

URI

GET /v2/manage/namespaces

Table 3-3 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 and multiple consecutive hyphens are allowed.
filter	No	String	Enter namespace::{namespace} mode:{mode} . {namespace} indicates the organization name. If {mode} is not set, the list of authorized organizations is displayed. If {mode} is set to visible , the list of visible organizations is displayed. (Some organizations can be viewed by the repository, but cannot be viewed by the organization.)

Request Parameters

Table 3-4 Request header parameters

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

Parameter	Mandatory	Type	Description
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-5 Response body parameter

Parameter	Type	Description
namespaces	Array of ShowNamespace objects	Organization list.

Table 3-6 ShowNamespace

Parameter	Type	Description
id	Integer	id
name	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.
creator_name	String	IAM username.
auth	Integer	User role. 7: admin. 3: edit. 1: view.

Example Request

```
GET https://{endpoint}/v2/manage/namespaces?filter=namespace::{namespace}
```

Example Response

Status code: 200

The list of organizations has been obtained.

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

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;  
import com.huaweicloud.sdk.swr.v2.*;  
import com.huaweicloud.sdk.swr.v2.model.*;  
  
public class ListNamespacesSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        SwrClient client = SwrClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(SwrRegion.valueOf("cn-north-4"))  
            .build();  
        ListNamespacesRequest request = new ListNamespacesRequest();  
        request.withNamespace("<namespace>");  
        request.withFilter("<filter>");  
        try {  
            ListNamespacesResponse response = client.listNamespaces(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = SwrClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(SwrRegion.value_of("cn-north-4")) \
        .build()

    try:
        request = ListNamespacesRequest()
        request.namespace = "<namespace>"
        request.filter = "<filter>"
        response = client.list_namespaces(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())
```

```
request := &model.ListNamespacesRequest{}
namespaceRequest:= "<namespace>"
request.Namespace = &namespaceRequest
filterRequest:= "<filter>"
request.Filter = &filterRequest
response, err := client.ListNamespaces(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
200	The list of organizations has been obtained.
400	Request error.
401	Authentication failed.
404	The organization does not exist.
500	Internal error.

Error Codes

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

3.1.3 Deleting an Organization

Description

Delete an organization.

Constraints

None

API Calling

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

URI

DELETE /v2/manage/namespaces/{namespace}

Table 3-7 Path 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.

Request Parameters

Table 3-8 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

N/A

Example Request

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

Example Response

N/A

Status Codes

Status Code	Description
204	Deletion succeeded.
400	Request error.
401	Authentication failed.
404	The organization does not exist.
406	The organization cannot be deleted because it contains images.
500	Internal error.

Error Codes

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

3.1.4 Obtaining Organization Details

Description

Obtain organization details.

Constraints

None

API Calling

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

URI

GET /v2/manage/namespaces/{namespace}

Table 3-9 Path 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.

Request Parameters

Table 3-10 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-11 Response body parameters

Parameter	Type	Description
id	Integer	id

Parameter	Type	Description
name	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.
creator_name	String	IAM username.
auth	Integer	User role. 7: admin. 3: edit. 1: view.

Example Request

```
GET https://{endpoint}/v2/manage/namespaces/{namespace}
```

Example Response

Status code: 200

Query succeeded.

```
{  
    "id": 1422,  
    "name": "huawei",  
    "creator_name": "liugenping",  
    "auth": 7  
}
```

Status Codes

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](#).

3.2 Managing Image Repositories

3.2.1 Creating an Image Repository in an Organization

Description

Create an image repository in an organization.

Constraints

None

API Calling

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

URI

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

Table 3-12 Path 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.

Request Parameters

Table 3-13 Request header parameters

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

Parameter	Mandatory	Type	Description
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 X-Subject-Token in the response header is the user token.

Table 3-14 Request body parameters

Parameter	Mandatory	Type	Description
repository	Yes	String	Image repository name. Enter 1 to 128 characters, starting and ending 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 a public repository. When the value is true , it indicates the repository is public. When the value is false , it indicates the repository is private.
category	No	String	Repository type. The value can be app_server , linux , framework_app , database , lang , other , windows , or arm .
description	No	String	Brief description of the image repository.

Response Parameters

N/A

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

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;

public class CreateRepoSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        SwrClient client = SwrClient.newBuilder()
            .withCredential(auth)
            .withRegion(SwrRegion.valueOf("cn-north-4"))
            .build();
        CreateRepoRequest request = new CreateRepoRequest();
        CreateRepoRequestBody body = new CreateRepoRequestBody();
        body.withDescription("this is a busybox repository");
        body.withCategory(CreateRepoRequestBody.CategoryEnum.fromValue("linux"));
        body.withIsPublic(true);
        body.withRepository("busybox");
        request.withBody(body);
        try {
            CreateRepoResponse response = client.createRepo(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

```
    }
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = SwrClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(SwrRegion.value_of("cn-north-4")) \
        .build()

    try:
        request = CreateRepoRequest()
        request.body = CreateRepoRequestBody(
            description="this is a busybox repository",
            category="linux",
            is_public=True,
            repository="busybox"
        )
        response = client.create_repo(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    "region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
```

```
Build()

client := swr.NewSwrClient(
    swr.SwrClientBuilder().
        WithRegion(region.ValueOf("cn-north-4")).
        WithCredential(auth).
        Build())

request := &model.CreateRepoRequest{}
descriptionCreateRepoRequestBody:= "this is a busybox repository"
categoryCreateRepoRequestBody:= model.GetCreateRepoRequestBodyCategoryEnum().LINUX
request.Body = &model.CreateRepoRequestBody{
    Description: &descriptionCreateRepoRequestBody,
    Category: &categoryCreateRepoRequestBody,
    IsPublic: true,
    Repository: "busybox",
}
response, err := client.CreateRepo(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
200	Creation succeeded.
400	Request error.
401	Authentication failed.
409	The image repository exists.
500	Internal error.

Error Codes

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

3.2.2 Deleting an Image Repository in an Organization

Description

Delete an image repository in an organization.

Constraints

None

API Calling

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

URI

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

Table 3-15 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-16 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

N/A

Example Request

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

Example Response

N/A

Status Codes

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

Error Codes

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

3.2.3 Updating the Brief Information on an Image Repository

Description

Update the brief information on an image in an organization of a tenant, including the **category**, **is_public**, and **description**.

Constraints

None

API Calling

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

URI

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

Table 3-17 Path parameters

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.
repository	Yes	String	Image repository name. Enter 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. Replace a slash (/) with a dollar sign (\$) before you send the request.

Request Parameters

Table 3-18 Request header parameters

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

Parameter	Mandatory	Type	Description
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 X-Subject-Token in the response header is the user token.

Table 3-19 Request body parameters

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

Response Parameters

N/A

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

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;

public class UpdateRepoSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        SwrClient client = SwrClient.newBuilder()
            .withCredential(auth)
            .withRegion(SwrRegion.valueOf("cn-north-4"))
            .build();
        UpdateRepoRequest request = new UpdateRepoRequest();
        UpdateRepoRequestBody body = new UpdateRepoRequestBody();
        body.withDescription("this is a busybox repository");
        body.withCategory(UpdateRepoRequestBody.CategoryEnum.fromValue("database"));
        body.withIsPublic(false);
        request.withBody(body);
        try {
            UpdateRepoResponse response = client.updateRepo(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatus());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
```

```
# In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak = os.getenv("CLOUD_SDK_AK")
sk = os.getenv("CLOUD_SDK_SK")

credentials = BasicCredentials(ak, sk) \

client = SwrClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(SwrRegion.value_of("cn-north-4")) \
    .build()

try:
    request = UpdateRepoRequest()
    request.body = UpdateRepoRequestBody(
        description="this is a busybox repository",
        category="database",
        is_public=False
    )
    response = client.update_repo(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.UpdateRepoRequest{}
    descriptionUpdateRepoRequestBody:= "this is a busybox repository"
    categoryUpdateRepoRequestBody:= model.GetUpdateRepoRequestBodyCategoryEnum().DATABASE
    request.Body = &model.UpdateRepoRequestBody{
        Description: &descriptionUpdateRepoRequestBody,
        Category: &categoryUpdateRepoRequestBody,
        IsPublic: false,
    }
    response, err := client.UpdateRepo(request)
    if err == nil {
```

```
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

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

Error Codes

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

3.2.4 Querying the Brief Information on an Image Repository

Description

Query the brief information on an image repository.

Constraints

None

API Calling

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

URI

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

Table 3-20 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-21 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json . The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-22 Response body parameters

Parameter	Type	Description
id	Long	Repository ID.

Parameter	Type	Description
ns_id	Long	Organization ID.
name	String	Repository name.
category	String	Repository category (to be changed; one image will have multiple labels).
description	String	Repository description.
creator_id	String	Repository creator ID.
creator_name	String	Repository creator.
size	Long	Repository size.
is_public	Boolean	Whether the repository is public. When the value is true , it indicates the repository is public. When the value is false , it indicates the repository is private.
num_images	Long	Number of images in the repository, ranging from 0 to 9,223,372,036,854,775,807.
num_download	Long	Download times.
url	String	URL of the repository logo (not in use).
path	String	External image pull address, for example, swr.cn-north-1.myhuaweicloud.com/namespace/repository .
internal_path	String	Internal image pull address, for example, 10.125.0.198:20202/namespace/repository .
created	String	Time when a repository 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.
updated	String	Time when a repository 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.
domain_id	String	Account ID.
priority	Integer	Image sorting priority.

Example Request

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

Example Response

Status code: 200

Request succeeded.

```
{  
    "id" : 0,  
    "ns_id" : 0,  
    "name" : "busybox",  
    "category" : "other",  
    "description" : "containerops",  
    "creator_id" : "1",  
    "creator_name" : "admin",  
    "size" : 2099575,  
    "is_public" : false,  
    "num_images" : 0,  
    "num_download" : 0,  
    "url" : "",  
    "path" : "swr.cn-north-1.myhuaweicloud.com/namespace/repository",  
    "internal_path" : "10.125.0.198:20202/namespace/repository",  
    "created" : "2017-08-17T12:00:03.915153267Z",  
    "updated" : "2017-08-17T12:00:03.915153267Z",  
    "domain_id" : "da44776c316c4a99b3683bb174f8821b",  
    "priority" : 0  
}
```

Status Codes

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

Error Codes

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

3.2.5 Querying the Image Repository List

Description

Query the image repository list.

Constraints

None

URI

GET /v2/manage/repos

Table 3-23 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. Use this parameter and filter separately. If the two parameters are used at the same time, namespace becomes invalid and filter takes effect.
name	No	String	Image repository name. Use this parameter and filter separately. If the two parameters are used at the same time, namespace becomes invalid and filter takes effect.
category	No	String	Repository type. The value can be app_server , linux , framework_app , database , lang , other , windows , or arm . Use this parameter and filter separately. If the two parameters are used at the same time, namespace becomes invalid and filter takes effect.
limit	No	String	Number of returned records. Ensure that the offset and limit parameters are used together.
offset	No	String	Start index. Ensure that the offset and limit parameters are used together.

Parameter	Mandatory	Type	Description
order_column	No	String	Sorting by column. You can set this parameter to updated_at (sorting by update time). Ensure that the order_column and order_type parameters are used together.
order_type	No	String	Sorting type. You can set this parameter to desc (descending sort) and asc (ascending sort). Ensure that the order_column and order_type parameters are used together.
filter	No	String	Ensure that at least one of the following parameters is transferred if you use filter . Enter namespace:: {namespace} name::{name} limit::{limit} offset::{offset} order_column::{order_column} order_type::{order_type}, where {namespace} indicates the organization name. {name} indicates the image repository name, which supports fuzzy match. {category} indicates the image repository type. The value can be app_server , linux , framework_app , database , lang , other , windows , or arm . {limit} indicates the number of returned records, and {offset} indicates the start index. Parameters offset and limit should always be used together. {order_column} indicates sorting by column and can be set to name , updated_time , or tag_count . {order_type} indicates the sorting type and can be set to desc (descending order) or asc (ascending order). Parameters order_column and order_type should always be used together.

Request Parameters

Table 3-24 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-25 Response header parameter

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 3-26 Response body parameter

Parameter	Type	Description
[Array]	Array of ShowReposResp objects	Request succeeded.

Table 3-27 ShowReposResp

Parameter	Type	Description
name	String	Repository name.

Parameter	Type	Description
category	String	Repository category (to be changed; one image will have multiple labels).
description	String	Repository description.
size	Long	Repository size.
is_public	Boolean	Whether the repository is public. When the value is true , it indicates the repository is public. When the value is false , it indicates the repository is private.
num_images	Long	Number of images in the repository, ranging from 0 to 9,223,372,036,854,775,807.
num_download	Long	Download times.
created_at	String	Time when a repository 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.
updated_at	String	Time when a repository 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.
logo	String	Repository logo address (not in use).
url	String	URL of the repository logo (not in use).
path	String	External image pull address, for example, swr.cn-north-1.myhuaweicloud.com/namespace/repository .
internal_path	String	Internal image pull address, for example, 10.125.0.198:20202/namespace/repository .
domain_name	String	Tenant name.
namespace	String	Tenant organization.
tags	Array of strings	Image tag list.
status	Boolean	Query images shared by others: specifies whether the shared images have expired. Query images shared by yourself: The default value is false , which is meaningless.
total_range	Long	Total number of records.

Example Request

Query images.

```
GET https://{endpoint}/v2/manage/repos
```

Example Response

Status code: 200

Request succeeded.

```
[ {  
    "name" : "nginx",  
    "category" : "linux",  
    "size" : 200977474,  
    "is_public" : false,  
    "num_images" : 2,  
    "num_download" : 0,  
    "created_at" : "2017-01-01T00:00:00Z",  
    "updated_at" : "2017-09-11T03:00:02.542841141Z",  
    "url" : "",  
    "path" : "swr.cn-north-1.myhuaweicloud.com/namespace/repository",  
    "internal_path" : "10.125.0.198:20202/namespace/repository",  
    "domain_name" : "root",  
    "namespace" : "root",  
    "tags" : [ "latest", "log" ],  
    "status" : "false \"total_ranage\" 4"  
} ]
```

Status Codes

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

Error Codes

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

3.2.6 Querying the List of Shared Images

Description

Query the list of shared images.

Constraints

None

URI

GET /v2/manage/shared-repositories

Table 3-28 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.
name	No	String	Image repository name.
center	No	String	self : images shared by you. thirdparty : images shared with you by others.
limit	No	String	Number of returned records. Ensure that the offset and limit parameters are used together.
offset	No	String	Start index. Ensure that the offset and limit parameters are used together.
order_column	No	String	Sorting by column. You can set this parameter to updated_at (sorting by update time). Ensure that the order_column and order_type parameters are used together.
order_type	No	String	Sorting type. You can set this parameter to desc (descending sort) and asc (ascending sort). Ensure that the order_column and order_type parameters are used together.

Parameter	Mandatory	Type	Description
filter	No	String	Set this parameter to center :: {center} :: name :: {name} :: limit :: {limit} :: offset :: {offset} :: namespace :: {namespace} :: order_column :: {order_column} :: order_type :: {order_type} . {center} can be set to self : images shared by you. thirdparty : images shared by others. namespace indicates the organization name, name indicates the image repository name, {limit} indicates the number of returned records, {offset} indicates the start index, and {order_column} indicates sorting by column. The value can be name , updated_time , or tag_count . {order_type} indicates the sorting type, which can be desc (descending order) or asc (ascending order).

Request Parameters

Table 3-29 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-30 Response header parameter

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

Table 3-31 Response body parameter

Parameter	Type	Description
[Array]	Array of ShowReposResp objects	Request succeeded.

Table 3-32 ShowReposResp

Parameter	Type	Description
name	String	Repository name.
category	String	Repository category (to be changed; one image will have multiple labels).
description	String	Repository description.
size	Long	Repository size.
is_public	Boolean	Whether the repository is public. When the value is true , it indicates the repository is public. When the value is false , it indicates the repository is private.
num_images	Long	Number of images in the repository, ranging from 0 to 9,223,372,036,854,775,807.
num_downloaded	Long	Download times.
created_at	String	Time when a repository 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_at	String	Time when a repository 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.
logo	String	Repository logo address (not in use).
url	String	URL of the repository logo (not in use).
path	String	External image pull address, for example, swr.cn-north-1.myhuaweicloud.com/nspace/repository .
internal_path	String	Internal image pull address, for example, 10.125.0.198:20202/nspace/repository .
domain_name	String	Tenant name.
namespace	String	Tenant organization.
tags	Array of strings	Image tag list.
status	Boolean	Query images shared by others: specifies whether the shared images have expired. Query images shared by yourself: The default value is false , which is meaningless.
total_range	Long	Total number of records.

Example Request

Querying the List of Shared Images

GET <https://{{endpoint}}/v2/manage/shared-repositories>

Example Response

Status code: 200

Request succeeded.

```
[ {
  "name" : "huawei",
  "category" : "other",
  "description" : "",
  "size" : 115645792,
  "is_public" : false,
  "num_images" : 1,
  "num_download" : 0,
  "created_at" : "2018-03-21T12:22:37Z",
  "updated_at" : "2018-03-21T12:22:37Z",
  "logo" : "",
  "url" : "",
  "path" : "swr.cn-north-1.myhuaweicloud.com/nspace/huawei",
  "internal_path" : "100.125.0.198:20202/nspace/huawei",
  "domain_name" : "domian",
```

```
"namespace" : "namespace",
"tags" : [ "latest" ],
"status" : true
} ]
```

Status Codes

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

Error Codes

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

3.3 Image Tag Management

3.3.1 Querying the List of Image Tags

Description

Query the list of image tags.

Constraints

None

URI

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

Table 3-33 Path parameters

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.
repository	Yes	String	Image repository name.

Table 3-34 Query parameters

Parameter	Mandatory	Type	Description
limit	No	String	Number of returned records. Ensure that the offset and limit parameters are used together.
offset	No	String	Start index. Ensure that the offset and limit parameters are used together.
order_column	No	String	Sorting by column. You can set this parameter to updated_at (sorting by update time). Ensure that the order_column and order_type parameters are used together.
order_type	No	String	Sorting type. You can set this parameter to desc (descending sort) and asc (ascending sort). Ensure that the order_column and order_type parameters are used together.
tag	No	String	Image tag name.

Parameter	Mandatory	Type	Description
filter	No	String	Enter <code>offset:{offset} limit:{limit} order_column:{order_column} order_type:{order_type} tag:{tag}</code> . <code>{limit}</code> indicates the number of returned records. <code>{offset}</code> indicates the start index. Parameters <code>offset</code> and <code>limit</code> should be used together. <code>{order_column}</code> indicates sorting by column. The value can be <code>updated_at</code> (sorting by update time). <code>{order_type}</code> indicates the sorting type. The value can be <code>desc</code> (descending order) or <code>asc</code> (ascending order). <code>{tag}</code> indicates the image tag name.

Request Parameters

Table 3-35 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be <code>application/json; charset=utf-8</code> <code>application/json</code> . The default value is <code>application/json</code> .
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 <code>X-Subject-Token</code> in the response header is the user token.

Response Parameters

Status code: 200

Table 3-36 Response header parameter

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 3-37 Response body parameter

Parameter	Type	Description
[Array]	Array of ShowReposTagResp objects	Image tag list.

Table 3-38 ShowReposTagResp

Parameter	Type	Description
id	Long	Tag ID.
repo_id	Long	Repository ID.
Tag	String	Image tag name.
image_id	String	Image ID.
manifest	String	Image manifest.
digest	String	Hash value of an image.
schema	Long	Docker protocol version. The version can be 1 or 2 .
path	String	External image pull address, for example, swr.cn-north-1.myhuaweicloud.com/ namespace/repository:tag .
internal_path	String	Internal image pull path. For example, 10.125.0.198:20202/ namespace/repository:tag .
size	Long	Image size, ranging from 0 to 9,223,372,036,854,775,807.
is_trusted	Boolean	By default, the value is false . Default value: false

Parameter	Type	Description
created	String	Time when the 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.
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 is deleted. 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.
domain_id	String	Account ID.
scanned	Boolean	Whether the image has been scanned.
tag_type	Long	0: manifest; 1: manifest list.

Example Request

Querying the List of Image Tags

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

Example Response

Status code: 200

The list of image tags is queried successfully.

```
[ {  
    "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\":\"sha256:77ddbf3a9fe11e81761a0f9df43a28e3e6f29bbb53c0c8cf71cd7efa69729aed\"}]]",  
    "digest" : "sha256:57b605845a6367c34bfb6ea6477f16852f59aa1861a2b51d10ab77ae0a1dc9c3",  
    "schema" : 2,  
    "path" : "swr.cn-north-1.myhuaweicloud.com/namespace/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",  
    "scanned" : false,  
    "tag_type" : 0  
} ]
```

Status Codes

Status Code	Description
200	The list of image tags is queried successfully.
400	Request error.
401	Authentication failed.
404	The image repository does not exist.
500	Internal error.

Error Codes

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

3.3.2 Deleting the Image with a Specified Tag

Description

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

Constraints

None

API Calling

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

URI

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

Table 3-39 Path parameters

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.
repository	Yes	String	Image repository name.
tag	Yes	String	Image tag name.

Request Parameters

Table 3-40 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

N/A

Example Request

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

Example Response

N/A

Status Codes

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

Error Codes

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

3.4 Shared Account Management

3.4.1 Creating a Shared Account

Description

Create a shared account. After pushing a private image, you can share it with other users and grant them permissions to pull the image.

Constraints

None

API Calling

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

URI

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

Table 3-41 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-42 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-43 Request body parameters

Parameter	Mandatory	Type	Description
access_domain	Yes	String	Shared tenant name.
permit	Yes	String	Currently, only the read permission is supported.

Parameter	Mandatory	Type	Description
deadline	Yes	String	Valid until (UTC). forever indicates permanently valid.
description	No	String	Description

Response Parameters

N/A

Example Request

```
POST https://{endpoint}/v2/manage/namespaces/{namespace}/repositories/{repository}/access-domains
{
    "access_domain" : "huawei",
    "permit" : "read",
    "deadline" : "2018-10-01T16:00:00.000Z",
    "description" : "description"
}
```

Example Response

None

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;

public class CreateRepoDomainsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        SwrClient client = SwrClient.newBuilder()
            .withCredential(auth)
```

```
.withRegion(SwrRegion.valueOf("cn-north-4"))
.build();
CreateRepoDomainsRequest request = new CreateRepoDomainsRequest();
CreateRepoDomainsRequestBody body = new CreateRepoDomainsRequestBody();
body.withDescription("description");
body.withDeadline("2018-10-01T16:00:00.000Z");
body.withPermit("read");
body.withAccessDomain("huawei");
request.withBody(body);
try {
    CreateRepoDomainsResponse response = client.createRepoDomains(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = SwrClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(SwrRegion.value_of("cn-north-4")) \
        .build()

    try:
        request = CreateRepoDomainsRequest()
        request.body = CreateRepoDomainsRequestBody(
            description="description",
            deadline="2018-10-01T16:00:00.000Z",
            permit="read",
            access_domain="huawei"
        )
        response = client.create_repo_domains(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.CreateRepoDomainsRequest{}
    descriptionCreateRepoDomainsRequestBody:= "description"
    request.Body = &model.CreateRepoDomainsRequestBody{
        Description: &descriptionCreateRepoDomainsRequestBody,
        Deadline: "2018-10-01T16:00:00.000Z",
        Permit: "read",
        AccessDomain: "huawei",
    }
    response, err := client.CreateRepoDomains(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
201	Creation succeeded.
400	Request error.
401	Authentication failed.
409	The shared account already exists.

Status Code	Description
500	Internal error.

Error Codes

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

3.4.2 Obtaining the List of Shared Accounts

Description

Obtain the list of shared accounts.

Constraints

None

API Calling

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

URI

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

Table 3-44 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-45 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-46 Response body parameter

Parameter	Type	Description
[Array]	Array of ShowRepoDomainsResponse objects	The list of shared tenants.

Table 3-47 ShowRepoDomainsResponse

Parameter	Type	Description
namespace	String	Organization.
repository	String	Image repository.
access_domain	String	Shared tenant name.
permit	String	Permissions.
deadline	String	Expiration time.
description	String	Description.

Parameter	Type	Description
creator_id	String	Creator ID.
creator_name	String	Name of the creator.
created	String	Time when the 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.
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.
status	Boolean	Status. true : valid; false : expired.

Example Request

```
GET https://{endpoint}/v2/manage/namespaces/{namespace}/repositories/{repository}/access-domains
```

Example Response

Status code: 200

The list of shared accounts is queried successfully.

```
[ {
  "namespace" : "huawei",
  "repository" : "paas",
  "access_domain" : "swr",
  "permit" : "read",
  "deadline" : "2018-10-01T16:00:00.000Z",
  "description" : "description",
  "creator_id" : "fb3f175c1fd146ab8cdbe3272be6107b",
  "creator_name" : "huawei",
  "created" : "2017-04-08T14:12:23Z",
  "updated" : "2017-04-13T21:01:11Z",
  "status" : false
} ]
```

Status Codes

Status Code	Description
200	The list of shared accounts is queried successfully.
400	Request error.
401	Authentication failed.
500	Internal error.

Error Codes

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

3.4.3 Deleting a Shared Account

Description

Delete a shared account.

Constraints

None

API Calling

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

URI

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

Table 3-48 Path parameters

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.
repository	Yes	String	Image repository name.
access_domain	Yes	String	Shared tenant name.

Request Parameters

Table 3-49 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

N/A

Example Request

```
DELETE https://{{endpoint}}/v2/manage/namespaces/{{namespace}}/repositories/{{repository}}/access-domains/{{access_domain}}
```

Example Response

N/A

Status Codes

Status Code	Description
204	Deletion succeeded.
400	Request error.
401	Authentication failed.
500	Internal error.

Error Codes

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

3.4.4 Updating a Shared Account

Description

Update a shared account.

Constraints

None

API Calling

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

URI

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

Table 3-50 Path parameters

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.
repository	Yes	String	Image repository name.
access_domain	Yes	String	Shared account name.

Request Parameters

Table 3-51 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-52 Request body parameters

Parameter	Mandatory	Type	Description
permit	Yes	String	Currently, only the read permission is supported.
deadline	Yes	String	Valid until (UTC). forever indicates permanently valid.
description	No	String	Description. This parameter is left blank by default.

Response Parameters

N/A

Example Request

```
PATCH https://{endpoint}/v2/manage/namespaces/{namespace}/repositories/{repository}/access-domains
{
  "permit" : "read",
  "deadline" : "2018-10-01T16:00:00.000Z",
  "description" : "description"
}
```

Example Response

None

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;

public class UpdateRepoDomainsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        SwrClient client = SwrClient.newBuilder()
            .withCredential(auth)
            .withRegion(SwrRegion.valueOf("cn-north-4"))
            .build();
        UpdateRepoDomainsRequest request = new UpdateRepoDomainsRequest();
        UpdateRepoDomainsRequestBody body = new UpdateRepoDomainsRequestBody();
        body.withDescription("description");
        body.withDeadline("2018-10-01T16:00:00.000Z");
        body.withPermit("read");
        request.withBody(body);
        try {
            UpdateRepoDomainsResponse response = client.updateRepoDomains(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *
```

```

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = SwrClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(SwrRegion.value_of("cn-north-4")) \
        .build()

    try:
        request = UpdateRepoDomainsRequest()
        request.body = UpdateRepoDomainsRequestBody(
            description="description",
            deadline="2018-10-01T16:00:00.000Z",
            permit="read"
        )
        response = client.update_repo_domains(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)

```

Go

```

package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.UpdateRepoDomainsRequest{}
    descriptionUpdateRepoDomainsRequestBody:= "description"
    request.Body = &model.UpdateRepoDomainsRequestBody{
        Description: &descriptionUpdateRepoDomainsRequestBody,
        Deadline: "2018-10-01T16:00:00.000Z",

```

```
        Permit: "read",
    }
    response, err := client.UpdateRepoDomains(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
201	The modification succeeded.
400	Request error.
401	Authentication failed.
500	Internal error.

Error Codes

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

3.4.5 Checking the Existence of a Shared Account

Description

Check the existence of a shared tenant.

Constraints

None

API Calling

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

URI

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

Table 3-53 Path parameters

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.
repository	Yes	String	Image repository name.
access_domain	Yes	String	Shared account name.

Request Parameters

Table 3-54 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-55 Response body parameters

Parameter	Type	Description
exist	Boolean	true: Exist. false: Not exist.
namespace	String	Organization name.
repository	String	Image repository name.
access_domain	String	Shared account name.
permit	String	Permissions.
deadline	String	Expiration time.
description	String	Description.
creator_id	String	Creator ID.
creator_name	String	Name of the creator.
created	String	Time when the 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 Request

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

Example Response

Status code: 200

Query succeeded.

```
{
  "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 Codes

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

Error Codes

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

3.5 API Version

3.5.1 Querying All API Versions

Description

Query all API versions.

Constraints

None

API Calling

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

URI

GET /

Request Parameters

Table 3-56 Request header parameters

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

Parameter	Mandatory	Type	Description
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-57 Response body parameter

Parameter	Type	Description
versions	Array of VersionDetail objects	List of all versions.

Table 3-58 VersionDetail

Parameter	Type	Description
id	String	Version ID.
links	Link object	API URL.
version	String	If microversions are supported, set this parameter to the maximum microversion supported. Otherwise, leave this parameter empty.
status	String	Version status: CURRENT: The version is the primary version. SUPPORTED: The version is an earlier version, but it is still supported. DEPRECATED: The version is a deprecated version, which may be deleted later.
updated	String	The version release time in UTC. For example, the release time of v1 is 2014-06-28T12:20:21Z .

Parameter	Type	Description
min_version	String	If microversions are supported, set this parameter to the minimum microversion supported. Otherwise, leave this parameter empty.

Table 3-59 Link

Parameter	Type	Description
href	String	Link.
rel	String	Description.

Example Request

GET https://{endpoint}

Example Response

Status code: 200

Query succeeded.

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

Status Codes

Status Code	Description
200	Query succeeded.
500	Internal error.

Error Codes

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

3.5.2 Querying a Specified API Version

Description

Query a specified API version.

Constraints

None

URI

GET /{api_version}

Table 3-60 Path parameter

Parameter	Mandatory	Type	Description
api_version	Yes	String	API version.

Request Parameters

Table 3-61 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-62 Response body parameter

Parameter	Type	Description
version	VersionDetail object	A list of objects related to the version.

Table 3-63 VersionDetail

Parameter	Type	Description
id	String	Version ID.
links	Link object	API URL.
version	String	If microversions are supported, set this parameter to the maximum microversion supported. Otherwise, leave this parameter empty.
status	String	Version status: CURRENT: The version is the primary version. SUPPORTED: The version is an earlier version, but it is still supported. DEPRECATED: The version is a deprecated version, which may be deleted later.
updated	String	The version release time in UTC. For example, the release time of v1 is 2014-06-28T12:20:21Z .
min_version	String	If microversions are supported, set this parameter to the minimum microversion supported. Otherwise, leave this parameter empty.

Table 3-64 Link

Parameter	Type	Description
href	String	Link.
rel	String	Description.

Example Request

Querying a Specified API Version

GET https://{endpoint}/{api_version}

Example Response

Status code: 200

Query succeeded.

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

Status Codes

Status Code	Description
200	Query succeeded.
500	Internal error.

Error Codes

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

3.6 Organization Permission Management

3.6.1 Creating Organization Permissions

Description

Create organization permissions.

Constraints

None

URI

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

Table 3-65 Path 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.

Request Parameters

Table 3-66 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-67 Request body parameter

Parameter	Mandatory	Type	Description
[Array]	Yes	Array of UserAuth objects	Information required for creating organization permissions.

Table 3-68 UserAuth

Parameter	Mandatory	Type	Description
user_id	Yes	String	User ID, which needs to be obtained from IAM.
user_name	Yes	String	Username, which needs to be obtained from IAM.
auth	Yes	Long	User permission. 7: Manage. 3: Write. 1: Read.

Response Parameters

N/A

Example Request

Create an organization with only the read permission.

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

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

Example Response

N/A

Status Codes

Status Code	Description
200	Creation succeeded.
400	Request error.
401	Authentication failed.
404	The organization does not exist.
409	The organization permission already exists.
500	Internal error.

Error Codes

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

3.6.2 Deleting Organization Permissions

Description

Delete organization permissions.

Constraints

None

API Calling

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

URI

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

Table 3-69 Path 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.

Request Parameters

Table 3-70 Request header parameters

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

Parameter	Mandatory	Type	Description
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 X-Subject-Token in the response header is the user token.

Table 3-71 Request body parameter

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

Response Parameters

N/A

Example Request

```
DELETE https://{endpoint}/v2/manage/namespaces/{namespace}/access
[ "fb3f175c1fd146ab8cd8e3272be6107b" ]
```

Example Response

None

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class DeleteNamespaceAuthSolution {
```

```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running
    // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");

    ICredential auth = new BasicCredentials()
        .withAk(ak)
        .withSk(sk);

    SwrClient client = SwrClient.newBuilder()
        .withCredential(auth)
        .withRegion(SwrRegion.valueOf("cn-north-4"))
        .build();
    DeleteNamespaceAuthRequest request = new DeleteNamespaceAuthRequest();
    List<String> listbodyBody = new ArrayList<>();
    listbodyBody.add("fb3f175c1fd146ab8cd83272be6107b");
    request.withBody(listbodyBody);
    try {
        DeleteNamespaceAuthResponse response = client.deleteNamespaceAuth(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = SwrClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(SwrRegion.value_of("cn-north-4")) \
        .build()

    try:
        request = DeleteNamespaceAuthRequest()
        listBodybody = [
            "fb3f175c1fd146ab8cd83272be6107b"
        ]
```

```

request.body = listBodybody
response = client.delete_namespace_auth(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)

```

Go

```

package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())
}

request := &model.DeleteNamespaceAuthRequest{}
var listBodybody = []string{
    "fb3f175c1fd146ab8cdae3272be6107b",
}
request.Body = &listBodybody
response, err := client.DeleteNamespaceAuth(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
204	Deletion succeeded.

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

Error Codes

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

3.6.3 Updating Organization Permissions

Description

Update organization permissions.

Constraints

None

URI

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

Table 3-72 Path 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.

Request Parameters

Table 3-73 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-74 Request body parameter

Parameter	Mandatory	Type	Description
[Array]	Yes	Array of UserAuth objects	Permissions required for updating organization permissions

Table 3-75 UserAuth

Parameter	Mandatory	Type	Description
user_id	Yes	String	User ID, which needs to be obtained from IAM.
user_name	Yes	String	Username, which needs to be obtained from IAM.
auth	Yes	Long	User permission. 7 : Manage. 3 : Write. 1 : Read.

Response Parameters

N/A

Example Request

Grant the management permission to the organization with only the read permission.

```
PATCH https://{endpoint}/v2/manage/namespaces/{namespace}/access
```

```
[ {  
    "user_id" : "fb3f175c1fd146ab8cdbe3272be6107b",  
    "user_name" : "user01",  
    "auth" : 7  
} ]
```

Example Response

N/A

Status Codes

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

Error Codes

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

3.6.4 Querying Organization Permissions

Description

Query organization permissions.

Constraints

None

URI

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

Table 3-76 Path 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.

Request Parameters

Table 3-77 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-78 Response body parameters

Parameter	Type	Description
id	Integer	id

Parameter	Type	Description
name	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.
creator_name	String	Organization creator.
self_auth	UserAuth object	Permissions of the current user.
others_auths	Array of UserAuth objects	Permissions of other users.

Table 3-79 UserAuth

Parameter	Type	Description
user_id	String	User ID, which needs to be obtained from IAM.
user_name	String	Username, which needs to be obtained from IAM.
auth	Long	User permission. 7 : Manage. 3 : Write. 1 : Read.

Example Request

Querying Organization Permissions

```
GET https://{endpoint}/v2/manage/namespaces/{namespace}/access
```

Example Response

Status code: 200

Query succeeded.

```
{
  "id" : 1422,
  "name" : "test",
  "creator_name" : "user01",
  "self_auth" : {
    "user_id" : "3059e6b5562241fda3fa441cca6f228b",
    "user_name" : "user",
    "auth" : 7
  },
  "others_auths" : [ {
    "user_id" : "fb3f175c1fd146ab8cd83272be6107b",
    "user_name" : "user01",
    "auth" : 7
  }
]
```

```
    } ]
```

Status Codes

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](#).

3.7 Image Permission Management

3.7.1 Creating Image Permissions

Description

Create image permissions.

Constraints

You can grant permissions to other users (excluding yourself) only when the organization permission is **Edit** or higher or the image repository permission is **Manage**.

API Calling

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

URI

POST /v2/manage/namespaces/{namespace}/repos/{repository}/access

Table 3-80 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-81 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-82 Request body parameter

Parameter	Mandatory	Type	Description
[Array]	Yes	Array of UserAuth objects	Information required for creating image permissions.

Table 3-83 UserAuth

Parameter	Mandatory	Type	Description
user_id	Yes	String	User ID, which needs to be obtained from IAM.
user_name	Yes	String	Username, which needs to be obtained from IAM.
auth	Yes	Long	User permissions. 7 : Manage. 3 : Write. 1 : Read.

Response Parameters

N/A

Example Request

```
POST https://{endpoint}/v2/manage/namespaces/{namespace}/repos/{repository}/access
[ {
  "user_id" : "fb3f175c1fd146ab8cd8e3272be6107b",
  "user_name" : "user01",
  "auth" : 1
} ]
```

Example Response

None

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateUserRepositoryAuthSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
```

```
String sk = System.getenv("CLOUD_SDK_SK");

ICredential auth = new BasicCredentials()
    .withAk(ak)
    .withSk(sk);

SwrClient client = SwrClient.newBuilder()
    .withCredential(auth)
    .withRegion(SwrRegion.valueOf("cn-north-4"))
    .build();
CreateUserRepositoryAuthRequest request = new CreateUserRepositoryAuthRequest();
List<UserAuth> listbodyBody = new ArrayList<>();
listbodyBody.add(
    new UserAuth()
        .withUserId("fb3f175c1fd146ab8cd8e3272be6107b")
        .withUserName("user01")
        .withAuth(UserAuth.AuthEnum.NUMBER_1)
);
request.withBody(listbodyBody);
try {
    CreateUserRepositoryAuthResponse response = client.createUserRepositoryAuth(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \\\n
        client = SwrClient.new_builder() \\
            .with_credentials(credentials) \\
            .with_region(SwrRegion.value_of("cn-north-4")) \\
            .build()

    try:
        request = CreateUserRepositoryAuthRequest()
        listBodybody = [
            UserAuth(
                user_id="fb3f175c1fd146ab8cd8e3272be6107b",
                user_name="user01",
                auth=1
            )
        ]
    
```

```
        ]
        request.body = listBodybody
        response = client.create_user_repository_auth(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.CreateUserRepositoryAuthRequest{}
    var listBodybody = []model.UserAuth{
        {
            UserId: "fb3f175c1fd146ab8cd8e3272be6107b",
            UserName: "user01",
            Auth: model.GetUserAuthAuthEnum().E_1,
        },
    }
    request.Body = &listBodybody
    response, err := client.CreateUserRepositoryAuth(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
201	Creation succeeded.
400	Request error.
401	Authentication failed.
404	The image does not exist.
500	Internal error.

Error Codes

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

3.7.2 Deleting Image Permissions

Description

Delete image permissions.

Constraints

None

API Calling

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

URI

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

Table 3-84 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-85 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-86 Request body parameter

Parameter	Mandatory	Type	Description
[Array]	Yes	Array of strings	User ID, which needs to be obtained from IAM.

Response Parameters

N/A

Example Request

```
DELETE https://{{endpoint}}/v2/manage/namespaces/{{namespace}}/repos/{{repository}}/access  
[ "fb3f175c1fd146ab8cd8e3272be6107b" ]
```

Example Response

None

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;  
import com.huaweicloud.sdk.swr.v2.*;  
import com.huaweicloud.sdk.swr.v2.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class DeleteUserRepositoryAuthSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        SwrClient client = SwrClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(SwrRegion.valueOf("cn-north-4"))  
            .build();  
        DeleteUserRepositoryAuthRequest request = new DeleteUserRepositoryAuthRequest();  
        List<String> listbodyBody = new ArrayList<>();  
        listbodyBody.add("fb3f175c1fd146ab8cd8e3272be6107b");  
        request.withBody(listbodyBody);  
        try {  
            DeleteUserRepositoryAuthResponse response = client.deleteUserRepositoryAuth(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
        }  
    }  
}
```

```
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = SwrClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(SwrRegion.value_of("cn-north-4")) \
        .build()

    try:
        request = DeleteUserRepositoryAuthRequest()
        listBodybody = [
            "fb3f175c1fd146ab8cd83272be6107b"
        ]
        request.body = listBodybody
        response = client.delete_user_repository_auth(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
```

```
auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := swr.NewSwrClient(
    swr.SwrClientBuilder().
        WithRegion(region.ValueOf("cn-north-4")).
        WithCredential(auth).
        Build())

request := &model.DeleteUserRepositoryAuthRequest{}
var listBodybody = []string{
    "fb3f175c1fd146ab8cdae3272be6107b",
}
request.Body = &listBodybody
response, err := client.DeleteUserRepositoryAuth(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
204	Deletion succeeded.
400	Request error.
401	Authentication failed.
404	The image does not exist.
500	Internal error.

Error Codes

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

3.7.3 Updating Image Permissions

Description

Update image permissions.

Constraints

None

API Calling

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

URI

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

Table 3-87 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-88 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-89 Request body parameter

Parameter	Mandatory	Type	Description
[Array]	Yes	Array of UserAuth objects	Information required for creating image permissions.

Table 3-90 UserAuth

Parameter	Mandatory	Type	Description
user_id	Yes	String	User ID, which needs to be obtained from IAM.
user_name	Yes	String	Username, which needs to be obtained from IAM.
auth	Yes	Long	User permissions. 7: Manage. 3: Write. 1: Read.

Response Parameters

N/A

Example Request

```
PATCH https://{endpoint}/v2/manage/namespaces/{namespace}/repos/{repository}/access
[ {
  "user_id" : "fb3f175c1fd146ab8cd8e3272be6107b",
  "user_name" : "liugenping01",
  "auth" : 7
} ]
```

Example Response

None

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;
```

```
import java.util.List;
import java.util.ArrayList;

public class UpdateUserRepositoryAuthSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        SwrClient client = SwrClient.newBuilder()
            .withCredential(auth)
            .withRegion(SwrRegion.valueOf("cn-north-4"))
            .build();
        UpdateUserRepositoryAuthRequest request = new UpdateUserRepositoryAuthRequest();
        List<UserAuth> listbodyBody = new ArrayList<>();
        listbodyBody.add(
            new UserAuth()
                .withUserId("fb3f175c1fd146ab8cdbe3272be6107b")
                .withUserName("liugenping01")
                .withAuth(UserAuth.AuthEnum.NUMBER_7)
        );
        request.withBody(listbodyBody);
        try {
            UpdateUserRepositoryAuthResponse response = client.updateUserRepositoryAuth(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \
        client = SwrClient.new_builder() \
```

```
.with_credentials(credentials) \
.with_region(SwrRegion.value_of("cn-north-4")) \
.build()

try:
    request = UpdateUserRepositoryAuthRequest()
    listBodybody = [
        UserAuth(
            user_id="fb3f175c1fd146ab8cd8e3272be6107b",
            user_name="liugenping01",
            auth=7
        )
    ]
    request.body = listBodybody
    response = client.update_user_repository_auth(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.UpdateUserRepositoryAuthRequest{}
    var listBodybody = []model.UserAuth{
    {
        UserId: "fb3f175c1fd146ab8cd8e3272be6107b",
        UserName: "liugenping01",
        Auth: model.GetUserAuthAuthEnum().E_7,
    },
    }
    request.Body = &listBodybody
    response, err := client.UpdateUserRepositoryAuth(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

```
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
201	Update succeeded.
400	Request error.
401	Authentication failed.
404	The image does not exist.
500	Internal error.

Error Codes

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

3.7.4 Querying Image Permissions

Description

Query image permissions.

Constraints

None

API Calling

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

URI

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

Table 3-91 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-92 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json . The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-93 Response body parameters

Parameter	Type	Description
id	Integer	id

Parameter	Type	Description
name	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.
self_auth	UserAuth object	Permissions of the current user.
others_auths	Array of UserAuth objects	Permissions of other users.

Table 3-94 UserAuth

Parameter	Type	Description
user_id	String	User ID, which needs to be obtained from IAM.
user_name	String	Username, which needs to be obtained from IAM.
auth	Long	User permissions. 7: Manage. 3: Write. 1: Read.

Example Request

```
GET https://{endpoint}/v2/manage/amespaces/{namespace}/repos/{repository}/access
```

Example Response

Status code: 200

Query succeeded.

```
{
  "id" : 1422,
  "name" : "group",
  "self_auth" : {
    "user_id" : "3059e6b5562241fda3fa441cca6f228b",
    "user_name" : "liugenping",
    "auth" : 7
  },
  "others_auths" : [ {
    "user_id" : "fb3f175c1fd146ab8cd83272be6107b",
    "user_name" : "liugenping01",
    "auth" : 7
  }]
}
```

Status Codes

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

Error Codes

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

3.8 Image Replication Management

3.8.1 Obtaining the List of Automatic Image Replication Tasks

Description

Obtain information required for an image replication task.

Constraints

None

URI

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

Table 3-95 Path parameters

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.
repository	Yes	String	Image repository name.

Table 3-96 Query parameter

Parameter	Mandatory	Type	Description
filter	Yes	String	Enter limit::{limit} offset::{offset} order::{order} . {limit} indicates the number of returned records, and {offset} indicates the start index. Parameters offset and limit should be used together and are mandatory. {order} indicates the sorting type (optional). The value can be desc (descending order) or asc (ascending order).

Request Parameters

Table 3-97 Request header parameters

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

Parameter	Mandatory	Type	Description
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-98 Response header parameter

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 3-99 Response body parameter

Parameter	Type	Description
[Array]	Array of SyncJob objects	Query succeeded.

Table 3-100 SyncJob

Parameter	Type	Description
createdAt	String	Creation time. 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.
domainID	String	Tenant ID.
domainName	String	Tenant name.
id	Integer	ID
namespace	String	Organization name.
override	Boolean	Whether to overwrite.

Parameter	Type	Description
remoteNames pace	String	Target organization.
remoteRegion Id	String	Target region.
repoName	String	Repository name.
status	String	Synchronization status. The value can be waiting , running , success , failed , timeout , cancel , or existed .
syncOperatorId	String	Operator account ID.
syncOperator Name	String	Operator account name.
tag	String	Image tag.
updatedAt	String	updatedAt

Example Request

Obtain the list of automatic image replication tasks.

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

Example Response

Status code: 200

Query succeeded.

```
[ {  
    "createdAt" : "2020-03-12T08:11:36.518144Z",  
    "domainID" : "0657*****f60",  
    "domainName" : "h*****4",  
    "id" : 1,  
    "namespace" : "test",  
    "override" : false,  
    "remoteNamespace" : "remtens",  
    "remoteRegionId" : "cn-north-1",  
    "repoName" : "testrepo",  
    "status" : "success",  
    "syncOperatorId" : "065*****10",  
    "syncOperatorName" : "h*****4",  
    "tag" : "8",  
    "updatedAt" : "2020-03-12T08:11:41.505499Z"  
} ]
```

Status Codes

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

Error Codes

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

3.8.2 Obtaining the List of Automatic Image Replication Tasks

Description

Obtain all automatic image replication tasks of a repository.

Constraints

None

API Calling

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

URI

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

Table 3-101 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-102 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-103 Response body parameter

Parameter	Type	Description
[Array]	Array of SyncRepo objects	Auto sync policy.

Table 3-104 SyncRepo

Parameter	Type	Description
createdAt	String	Creation time. 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.
domainID	String	Tenant ID.
domainName	String	Tenant name.
id	Integer	ID
namespace	String	Organization name.
override	Boolean	Whether to overwrite.
remoteNames pace	String	Target organization.
remoteRegion Id	String	Target region.
repoName	String	Repository name.
syncAuto	Boolean	Automatic synchronization.
updatedAt	String	Update time. 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.

Example Request

```
GET https://[endpoint]/v2/manage/namespaces/{namespace}/repos/{repository}/sync_repo
{
  "remoteRegionId" : "cn-north-208",
  "remoteNamespace" : "sdsad"
}
```

Example Response

Status code: 200

Query succeeded.

```
[ {  
    "createdAt" : "2020-04-17T02:11:03.53183Z",  
    "domainID" : "8b1e81*****633fb",  
    "domainName" : "p*****59",  
    "id" : 45,  
    "namespace" : "test",  
    "override" : true,  
    "remoteNamespace" : "sdsad",  
    "remoteRegionId" : "cn-north-1",  
    "repoName" : "grpc-helloworld",  
    "syncAuto" : true,  
    "updatedAt" : "2020-04-17T02:11:03.531831Z"  
} ]
```

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;  
import com.huaweicloud.sdk.swr.v2.*;  
import com.huaweicloud.sdk.swr.v2.model.*;  
  
public class ListImageAutoSyncReposDetailsSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        SwrClient client = SwrClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(SwrRegion.valueOf("cn-north-4"))  
            .build();  
        ListImageAutoSyncReposDetailsRequest request = new ListImageAutoSyncReposDetailsRequest();  
        try {  
            ListImageAutoSyncReposDetailsResponse response = client.listImageAutoSyncReposDetails(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = SwrClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(SwrRegion.value_of("cn-north-4")) \
        .build()

    try:
        request = ListImageAutoSyncReposDetailsRequest()
        response = client.list_image_auto_sync_repos_details(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.ListImageAutoSyncReposDetailsRequest{}
    response, err := client.ListImageAutoSyncReposDetails(request)
```

```
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

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

Error Codes

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

3.8.3 Creating an Automatic Image Replication Task

Description

Create an automatic image replication task. New images and image updates can be automatically replicated between regions. Existing images must be manually replicated. For details, see [Manually Replicating Images](#).

Constraints

None

API Calling

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

URI

POST /v2/manage/namespaces/{namespace}/repos/{repository}/sync_repo

Table 3-105 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-106 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-107 Request body parameters

Parameter	Mandatory	Type	Description
remoteRegionId	Yes	String	Target region ID.
remoteNamespace	Yes	String	Target organization.

Parameter	Mandatory	Type	Description
syncAuto	No	Boolean	Automatic replication. The default value is false .
override	No	Boolean	Whether to overwrite. The default value is false , which indicates not to overwrite any nonidentical image that has the same name in the target organization.

Response Parameters

N/A

Example Request

```
POST https://{endpoint}/v2/manage/namespaces/{namespace}/repos/{repository}/sync_repo
{
    "remoteRegionId" : "string",
    "remoteNamespace" : "string",
    "syncAuto" : true,
    "override" : true
}
```

Example Response

None

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;

public class CreateImageSyncRepoSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
    }
}
```

```
ICredential auth = new BasicCredentials()  
    .withAk(ak)  
    .withSk(sk);  
  
SwrClient client = SwrClient.newBuilder()  
    .withCredential(auth)  
    .withRegion(SwrRegion.valueOf("cn-north-4"))  
    .build();  
CreateImageSyncRepoRequest request = new CreateImageSyncRepoRequest();  
CreateImageSyncRepoRequestBody body = new CreateImageSyncRepoRequestBody();  
body.withOverride(true);  
body.withSyncAuto(true);  
body.withRemoteNamespace("string");  
body.withRemoteRegionId("string");  
request.withBody(body);  
try {  
    CreateImageSyncRepoResponse response = client.createImageSyncRepo(request);  
    System.out.println(response.toString());  
} catch (ConnectionException e) {  
    e.printStackTrace();  
} catch (RequestTimeoutException e) {  
    e.printStackTrace();  
} catch (ServiceResponseException e) {  
    e.printStackTrace();  
    System.out.println(e.getHttpStatus());  
    System.out.println(e.getRequestId());  
    System.out.println(e.getErrorCode());  
    System.out.println(e.getErrorMsg());  
}  
}
```

Python

```
# coding: utf-8  
  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkswr.v2 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    # variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before running this  
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak = os.getenv("CLOUD_SDK_AK")  
    sk = os.getenv("CLOUD_SDK_SK")  
  
    credentials = BasicCredentials(ak, sk) \  
  
    client = SwrClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(SwrRegion.value_of("cn-north-4")) \  
        .build()  
  
    try:  
        request = CreateImageSyncRepoRequest()  
        request.body = CreateImageSyncRepoRequestBody(  
            override=True,  
            sync_auto=True,  
            remote_namespace="string",  
            remote_region_id="string"  
        )  
        response = client.create_image_sync_repo(request)  
        print(response)  
    except exceptions.ClientRequestException as e:
```

```
print(e.status_code)
print(e.request_id)
print(e.error_code)
print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.CreateImageSyncRepoRequest{}
    overrideCreateImageSyncRepoRequestBody:= true
    syncAutoCreateImageSyncRepoRequestBody:= true
    request.Body = &model.CreateImageSyncRepoRequestBody{
        Override: &overrideCreateImageSyncRepoRequestBody,
        SyncAuto: &syncAutoCreateImageSyncRepoRequestBody,
        RemoteNamespace: "string",
        RemoteRegionId: "string",
    }
    response, err := client.CreateImageSyncRepo(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
200	Creation succeeded.

Status Code	Description
400	Request error.
401	Authentication failed.
404	The organization or the repository does not exist.
500	Internal error.

Error Codes

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

3.8.4 Deleting an Automatic Image Replication Task

Description

Delete a specified automatic image replication task based on the target region and organization.

Constraints

None

API Calling

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

URI

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

Table 3-108 Path parameters

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.

Parameter	Mandatory	Type	Description
repository	Yes	String	Image repository name.

Request Parameters

Table 3-109 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-110 Request body parameters

Parameter	Mandatory	Type	Description
remoteRegionId	Yes	String	Target region ID.
remoteNamespace	Yes	String	Target organization.

Response Parameters

N/A

Example Request

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

Example Response

None

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;

public class DeleteImageSyncRepoSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        SwrClient client = SwrClient.newBuilder()
            .withCredential(auth)
            .withRegion(SwrRegion.valueOf("cn-north-4"))
            .build();
        DeleteImageSyncRepoRequest request = new DeleteImageSyncRepoRequest();
        try {
            DeleteImageSyncRepoResponse response = client.deleteImageSyncRepo(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
```

```
# In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak = os.getenv("CLOUD_SDK_AK")
sk = os.getenv("CLOUD_SDK_SK")

credentials = BasicCredentials(ak, sk) \

client = SwrClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(SwrRegion.value_of("cn-north-4")) \
    .build()

try:
    request = DeleteImageSyncRepoRequest()
    response = client.delete_image_sync_repo(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.DeleteImageSyncRepoRequest{}
    response, err := client.DeleteImageSyncRepo(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
200	Deletion succeeded.
400	Request error.
401	Authentication failed.
404	The organization, image repository, or task does not exist.
500	Internal error.

Error Codes

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

3.8.5 Manually Replicating Images

Description

Existing images must be manually replicated. Check whether image replication succeeded using the following two ways: 1. If the response status code is 200 and no errors are reported, the image replication succeeded. 2. Use the SWR console or call the API of querying image repository information, if the replicated image tag exists in the target organization of the target region, the image replication succeeded.

Constraints

None

URI

POST /v2/manage/namespaces/{namespace}/repos/{repository}/sync_images

Table 3-111 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-112 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-113 Request body parameters

Parameter	Mandatory	Type	Description
imageTag	Yes	Array of strings	Image tag list.

Parameter	Mandatory	Type	Description
override	No	Boolean	Whether to overwrite. The default value is false , which indicates not to overwrite any nonidentical image that has the same name in the target organization.
remoteNamespace	Yes	String	Target organization.
remoteRegionId	Yes	String	Target region ID.

Response Parameters

Status code: 200

Table 3-114 Response body parameter

Parameter	Type	Description
[Array]	Array of strings	Operation succeeded.

Status code: default

Table 3-115 Response body parameter

Parameter	Type	Description
[Array]	Array of strings	Image tags that fail to be replicated.

Example Request

Synchronize the V1 image.

```
POST https://[endpoint]/v2/manage/namespaces/{namespace}/repos/{repository}/sync_images
{
  "imageTag": [ "V1" ],
  "override": true,
  "remoteNamespace": "sdsad",
  "remoteRegionId": "cn-north-208"
}
```

Example Response

Status code: 200

Operation succeeded.

[]

Status Codes

Status Code	Description
200	Operation succeeded.
400	Request error.
401	Authentication failed.
404	The organization or the repository does not exist.
500	Internal error.
default	Image tags that fail to be replicated.

Error Codes

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

3.9 Trigger Management

3.9.1 Creating a Trigger

Description

Create a trigger.

Constraints

None

API Calling

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

URI

POST /v2/manage/namespaces/{namespace}/repos/{repository}/triggers

Table 3-116 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-117 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-118 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Action to trigger. The value is update .
app_type	Yes	String	Application type. The value can be deployments or statefulsets .

Parameter	Mandatory	Type	Description
application	Yes	String	Application name.
cluster_id	No	String	Cluster ID. When trigger_mode is set to cci , leave this parameter blank.
cluster_name	No	String	Cluster name. When trigger_mode is set to cci , leave this parameter blank.
cluster_ns	Yes	String	Namespace where the application is located.
condition	Yes	String	Trigger condition. If type is set to all , the value is .* . If type is set to tag , the value is a tag name. If type is set to regular , the value is a regular expression.
container	No	String	Name of the container to be updated. By default, all containers using this image are updated.
enable	Yes	String	Whether to enable the trigger.
name	Yes	String	Trigger name.
trigger_mode	No	String	Trigger type. The value can be cce or cci . The default value is cce .
trigger_type	Yes	String	Trigger condition. The value can be all , tag , or regular .

Response Parameters

N/A

Example Request

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

```
{
  "action" : "update",
  "app_type" : "deployments",
  "application" : "adsfa",
  "cluster_id" : "5b28c12f-dc10-11e9-97b3-0255ac1001b5",
  "cluster_name" : "test",
  "cluster_ns" : "default",
  "condition" : ".*",
  "container" : "",
  "enable" : "true",
  "name" : "test",
  "trigger_mode" : "cce",
```

```
        "trigger_type" : "all"  
    }
```

Example Response

None

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;  
import com.huaweicloud.sdk.swr.v2.*;  
import com.huaweicloud.sdk.swr.v2.model.*;  
  
public class CreateTriggerSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        SwrClient client = SwrClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(SwrRegion.valueOf("cn-north-4"))  
            .build();  
        CreateTriggerRequest request = new CreateTriggerRequest();  
        CreateTriggerRequestBody body = new CreateTriggerRequestBody();  
        body.withTriggerType("all");  
        body.withTriggerMode("cce");  
        body.withName("test");  
        body.withEnable("true");  
        body.withContainer("");  
        body.withCondition(".*");  
        body.withClusterNs("default");  
        body.withClusterName("test");  
        body.withClusterId("5b28c12f-dc10-11e9-97b3-0255ac1001b5");  
        body.withApplication("adsfa");  
        body.withAppType("deployments");  
        body.withAction("update");  
        request.withBody(body);  
        try {  
            CreateTriggerResponse response = client.createTrigger(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
        }  
    }  
}
```

```
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = SwrClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(SwrRegion.value_of("cn-north-4")) \
        .build()

    try:
        request = CreateTriggerRequest()
        request.body = CreateTriggerRequestBody(
            trigger_type="all",
            trigger_mode="cce",
            name="test",
            enable="true",
            container="",
            condition="*",
            cluster_ns="default",
            cluster_name="test",
            cluster_id="5b28c12f-dc10-11e9-97b3-0255ac1001b5",
            application="adsfa",
            app_type="deployments",
            action="update"
        )
        response = client.create_trigger(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)
```

```
func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.CreateTriggerRequest{}
    triggerModeCreateTriggerRequestBody:= "cce"
    containerCreateTriggerRequestBody:= ""
    clusterNameCreateTriggerRequestBody:= "test"
    clusterIdCreateTriggerRequestBody:= "5b28c12f-dc10-11e9-97b3-0255ac1001b5"
    request.Body = &model.CreateTriggerRequestBody{
        TriggerType: "all",
        TriggerMode: &triggerModeCreateTriggerRequestBody,
        Name: "test",
        Enable: "true",
        Container: &containerCreateTriggerRequestBody,
        Condition: "*",
        ClusterNs: "default",
        ClusterName: &clusterNameCreateTriggerRequestBody,
        ClusterId: &clusterIdCreateTriggerRequestBody,
        Application: "adsfa",
        AppType: "deployments",
        Action: "update",
    }
    response, err := client.CreateTrigger(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
201	Creation succeeded.
400	Request error.
401	Authentication failed.
404	The organization or the repository does not exist.

Status Code	Description
409	The trigger already exists.
500	Internal error.

Error Codes

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

3.9.2 Obtaining the Trigger List of a Specific Image Repository

Description

Obtains the trigger list of a specific image repository.

Constraints

None

API Calling

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

URI

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

Table 3-119 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-120 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-121 Response body parameter

Parameter	Type	Description
[Array]	Array of Trigger objects	Trigger list.

Table 3-122 Trigger

Parameter	Type	Description
action	String	Action to trigger. The value is update .
app_type	String	Application type. The value can be deployments or statefulsets .
application	String	Application name.
cluster_id	String	Cluster ID. When trigger_mode is set to cci , leave this parameter blank.
cluster_name	String	Cluster name. When trigger_mode is set to cci , leave this parameter blank.

Parameter	Type	Description
cluster_ns	String	Namespace where the application is located.
condition	String	Trigger condition. If type is set to all , the value is <code>.*</code> . If type is set to tag , the value is a tag name. If type is set to regular , the value is a regular expression.
container	String	Name of the container to be updated. By default, all containers using this image are updated.
created_at	String	Creation time.
creator_name	String	Creator.
enable	String	Whether to enable the trigger.
name	String	Trigger name.
trigger_history	Array of TriggerHistories objects	Trigger history.
trigger_mode	String	Trigger type. The value can be cce or cci .
trigger_type	String	Trigger condition. The value can be all , tag , or regular .

Table 3-123 TriggerHistories

Parameter	Type	Description
action	String	Action to trigger. The value is update .
app_type	String	Application type. The value can be deployments or statefulsets .
application	String	Application name.
cluster_id	String	Cluster ID. When trigger_mode is set to cci , leave this parameter blank.
cluster_name	String	Cluster name. When trigger_mode is set to cci , leave this parameter blank.
cluster_ns	String	Namespace where the application is located.
condition	String	Trigger condition. If type is set to all , the value is <code>.*</code> . If type is set to tag , the value is a tag name. If type is set to regular , the value is a regular expression.

Parameter	Type	Description
container	String	Name of the container to be updated. By default, all containers using this image are updated.
created_at	String	Creation time.
creator_name	String	Creator.
detail	String	Details.
result	String	Update result. The value can be success or failed .
tag	String	Triggered version number.

Example Request

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

Example Response

Status code: 200

Query succeeded.

```
[ {
  "action" : "update",
  "app_type" : "deployments",
  "application" : "abcde",
  "cluster_id" : "*****",
  "cluster_name" : "test123",
  "cluster_ns" : "default",
  "condition" : ".*",
  "container" : "",
  "created_at" : "2020-04-16T02:04:55.922236Z",
  "creator_name" : "*****",
  "enable" : "true",
  "name" : "test1",
  "trigger_history" : null,
  "trigger_mode" : "cce",
  "trigger_type" : "all"
} ]
```

Status Codes

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

Error Codes

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

3.9.3 Deleting a Trigger

Description

Delete a trigger.

Constraints

None

API Calling

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

URI

DELETE /v2/manage/namespaces/{namespace}/repos/{repository}/triggers/{trigger}

Table 3-124 Path parameters

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.
repository	Yes	String	Image repository name.
trigger	Yes	String	Trigger name.

Request Parameters

Table 3-125 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

N/A

Example Request

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

Example Response

N/A

Status Codes

Status Code	Description
204	Deletion succeeded.
400	Request error.
401	Authentication failed.
404	The organization, image repository, or trigger does not exist.
500	Internal error.

Error Codes

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

3.9.4 Obtaining Information About a Trigger

Description

Obtain information about a trigger.

Constraints

None

API Calling

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

URI

GET /v2/manage/namespaces/{namespace}/repos/{repository}/triggers/{trigger}

Table 3-126 Path parameters

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.
repository	Yes	String	Image repository name.
trigger	Yes	String	Trigger name.

Request Parameters

Table 3-127 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-128 Response body parameters

Parameter	Type	Description
action	String	Action to trigger. The value is update .
app_type	String	Application type. The value can be deployments or statefulsets .
application	String	Application name.
cluster_id	String	Cluster ID. When trigger_mode is set to cci , leave this parameter blank.
cluster_name	String	Cluster name. When trigger_mode is set to cci , leave this parameter blank.
cluster_ns	String	Namespace where the application is located.
condition	String	Trigger condition. If type is set to all , the value is .* . If type is set to tag , the value is a tag name. If type is set to regular , the value is a regular expression.
container	String	Name of the container to be updated. By default, all containers using this image are updated.

Parameter	Type	Description
created_at	String	Creation time.
creator_name	String	Creator.
enable	String	Whether to enable the trigger.
name	String	Trigger name.
trigger_history	Array of TriggerHistories objects	Trigger history.
trigger_mode	String	Trigger type. The value can be cce or cci .
trigger_type	String	Trigger condition. The value can be all , tag , or regular .

Table 3-129 TriggerHistories

Parameter	Type	Description
action	String	Action to trigger. The value is update .
app_type	String	Application type. The value can be deployments or statefulsets .
application	String	Application name.
cluster_id	String	Cluster ID. When trigger_mode is set to cci , leave this parameter blank.
cluster_name	String	Cluster name. When trigger_mode is set to cci , leave this parameter blank.
cluster_ns	String	Namespace where the application is located.
condition	String	Trigger condition. If type is set to all , the value is .* . If type is set to tag , the value is a tag name. If type is set to regular , the value is a regular expression.
container	String	Name of the container to be updated. By default, all containers using this image are updated.
created_at	String	Creation time.
creator_name	String	Creator.
detail	String	Details.
result	String	Update result. The value can be success or failed .

Parameter	Type	Description
tag	String	Triggered version number.

Example Request

GET https://{endpoint}/v2/manage/namespaces/{namespace}/repos/{repository}/triggers/{trigger}

Example Response

Status code: 200

Query succeeded.

```
{  
    "action" : "update",  
    "app_type" : "deployments",  
    "application" : "cci-deployment-20204161",  
    "cluster_id" : "",  
    "cluster_name" : "",  
    "cluster_ns" : "cci-namespace-21539491",  
    "condition" : "*",  
    "container" : "",  
    "created_at" : "2020-04-16T01:35:08.639589Z",  
    "creator_name" : "paas_swz_z00232859",  
    "enable" : "true",  
    "name" : "test",  
    "trigger_history" : [ {  
        "action" : "update",  
        "app_type" : "deployments",  
        "application" : "cci-deployment-20204161",  
        "cluster_id" : "",  
        "cluster_name" : "",  
        "cluster_ns" : "",  
        "condition" : "*",  
        "container" : "",  
        "created_at" : "2020-04-16T01:36:36.155119Z",  
        "creator_name" : "*****",  
        "detail" : "xxxxxxxxxxxx",  
        "result" : "failed",  
        "tag" : "test"  
    } ],  
    "trigger_mode" : "cci",  
    "trigger_type" : "all"  
}
```

Status Codes

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

Error Codes

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

3.9.5 Updating Trigger Settings

Description

Update trigger settings.

Constraints

None

API Calling

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

URI

PATCH /v2/manage/namespaces/{namespace}/repos/{repository}/triggers/{trigger}

Table 3-130 Path parameters

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.
repository	Yes	String	Image repository name.
trigger	Yes	String	Trigger name.

Request Parameters

Table 3-131 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-132 Request body parameter

Parameter	Mandatory	Type	Description
enable	Yes	String	Whether to enable the function, true : enable; false : disable.

Response Parameters

N/A

Example Request

```
PATCH https://{endpoint}/v2/manage/namespaces/{namespace}/repos/{repository}/triggers/{trigger}  
{  
    "enable" : "true"  
}
```

Example Response

None

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;

public class UpdateTriggerSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        SwrClient client = SwrClient.newBuilder()
            .withCredential(auth)
            .withRegion(SwrRegion.valueOf("cn-north-4"))
            .build();
        UpdateTriggerRequest request = new UpdateTriggerRequest();
        UpdateTriggerRequestBody body = new UpdateTriggerRequestBody();
        body.withEnable("true");
        request.withBody(body);
        try {
            UpdateTriggerResponse response = client.updateTrigger(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatus());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```

```
ak = os.getenv("CLOUD_SDK_AK")
sk = os.getenv("CLOUD_SDK_SK")

credentials = BasicCredentials(ak, sk) \

client = SwrClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(SwrRegion.value_of("cn-north-4")) \
    .build()

try:
    request = UpdateTriggerRequest()
    request.body = UpdateTriggerRequestBody(
        enable="true"
    )
    response = client.update_trigger(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.UpdateTriggerRequest{}
    request.Body = &model.UpdateTriggerRequestBody{
        Enable: "true",
    }
    response, err := client.UpdateTrigger(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
201	Update succeeded.
400	Request error.
401	Authentication failed.
404	The organization, image repository, or trigger does not exist.
500	Internal error.

Error Codes

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

3.10 Image Retention Policy Management

3.10.1 Adding an Image Retention Policy

Description

Add an image retention policy.

Constraints

None

API Calling

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

URI

POST /v2/manage/namespaces/{namespace}/repos/{repository}/retentions

Table 3-133 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-134 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-135 Request body parameters

Parameter	Mandatory	Type	Description
algorithm	Yes	String	Retention policy matching rule. The value is or .
rules	Yes	Array of Rule objects	Image retention policy.

Table 3-136 Rule

Parameter	Mandatory	Type	Description
template	Yes	String	Retention policy type. The value can be date_rule and tag_rule .
params	Yes	Object	If template is set to date_rule , set params to {"days": "xxx"} . If template is set to tag_rule , set params to {"num": "xxx"} .
tag_selectors	Yes	Array of TagSelector objects	Exception images.

Table 3-137 TagSelector

Parameter	Mandatory	Type	Description
kind	Yes	String	Matching rule. The value can be label or regexp .
pattern	Yes	String	If kind is set to label , set this parameter to the image tag. If kind is set to regexp , set this parameter to a regular expression.

Response Parameters

Status code: 201

Table 3-138 Response body parameter

Parameter	Type	Description
id	Integer	Image retention policy ID.

Example Request

```
POST https://[endpoint]/v2/manage/namespaces/{namespace}/repos/{repository}/retentions
{
    "algorithm" : "string",
    "rules" : [ {
        "params" : { },
        "tag_selectors" : [ {
            "kind" : "string",
            "pattern" : "string"
        }
    ]
}
```

```
    },
    "template" : "string"
}
}
```

Example Response

Status code: 201

Creation succeeded.

```
{
  "id" : 34
}
```

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateRetentionSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        SwrClient client = SwrClient.newBuilder()
            .withCredential(auth)
            .withRegion(SwrRegion.valueOf("cn-north-4"))
            .build();
        CreateRetentionRequest request = new CreateRetentionRequest();
        CreateRetentionRequestBody body = new CreateRetentionRequestBody();
        List<TagSelector> listRulesTagSelectors = new ArrayList<>();
        listRulesTagSelectors.add(
            new TagSelector()
                .withKind("string")
                .withPattern("string")
        );
        List<Rule> listbodyRules = new ArrayList<>();
        listbodyRules.add(
            new Rule()
                .withTemplate(Rule.TemplateEnum.fromValue("string"))
                .withParams(new Object())
        );
    }
}
```

```
.withTagSelectors(listRulesTagSelectors)
);
body.withRules(listbodyRules);
body.withAlgorithm("string");
request.withBody(body);
try {
    CreateRetentionResponse response = client.createRetention(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = SwrClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(SwrRegion.value_of("cn-north-4")) \
        .build()

    try:
        request = CreateRetentionRequest()
        listTagSelectorsRules = [
            TagSelector(
                kind="string",
                pattern="string"
            )
        ]
        listRulesbody = [
            Rule(
                template="string",
                params={},
                tag_selectors=listTagSelectorsRules
            )
        ]
        request.body = CreateRetentionRequestBody(
            rules=listRulesbody,
            algorithm="string"
        )
        response = client.create_retention(request)
        print(response)
    except exceptions.ClientRequestException as e:
```

```
print(e.status_code)
print(e.request_id)
print(e.error_code)
print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.CreateRetentionRequest{}
    var listTagSelectorsRules = []model.TagSelector{
        {
            Kind: "string",
            Pattern: "string",
        },
    }
    paramsRules:= make(map[string]string)
    var paramsRulesInterface interface{} = paramsRules
    var listRulesbody = []model.Rule{
        {
            Template: model.GetRuleTemplateEnum().STRING,
            Params: &paramsRulesInterface,
            TagSelectors: listTagSelectorsRules,
        },
    }
    request.Body = &model.CreateRetentionRequestBody{
        Rules: listRulesbody,
        Algorithm: "string",
    }
    response, err := client.CreateRetention(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
201	Creation succeeded.
400	Request error.
401	Authentication failed.
404	The organization or the repository does not exist.
500	Internal error.

Error Codes

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

3.10.2 Obtaining the List of Image Retention Policies

Description

Obtain the list of image retention policies.

Constraints

None

API Calling

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

URI

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

Table 3-139 Path parameters

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.
repository	Yes	String	Image repository name.

Request Parameters

Table 3-140 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-141 Response body parameter

Parameter	Type	Description
[Array]	Array of Retention objects	Query succeeded.

Table 3-142 Retention

Parameter	Type	Description
algorithm	String	Retention policy matching rule. The value is or .
id	Integer	ID
rules	Array of Rule objects	Image retention policy.
scope	String	Reserved field.

Table 3-143 Rule

Parameter	Type	Description
template	String	Retention policy type. The value can be date_rule and tag_rule .
params	Object	If template is set to date_rule , set params to <code>{"days": "xxx"}</code> . If template is set to tag_rule , set params to <code>{"num": "xxx"}</code> .
tag_selectors	Array of TagSelector objects	Exception images.

Table 3-144 TagSelector

Parameter	Type	Description
kind	String	Matching rule. The value can be label or regexp .
pattern	String	If kind is set to label , set this parameter to the image tag. If kind is set to regexp , set this parameter to a regular expression.

Example Request

GET https://[endpoint]/v2/manage/namespaces/{namespace}/repos/{repository}/retentions

Example Response

Status code: 200

Query succeeded.

```
[ {  
    "algorithm" : "or",  
    "id" : 222,  
    "rules" : [ {  
        "params" : {  
            "days" : "30"  
        },  
        "tag_selectors" : [ {  
            "kind" : "label",  
            "pattern" : "v5"  
        }, {  
            "kind" : "label",  
            "pattern" : "1.0.1"  
        }, {  
            "kind" : "regexp",  
            "pattern" : "^123$"  
        } ],  
        "template" : "date_rule"  
    } ],  
    "scope" : ""  
} ]
```

Status Codes

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

Error Codes

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

3.10.3 Deleting an Image Retention Policy

Description

Delete an image retention policy.

Constraints

None

API Calling

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

URI

DELETE /v2/manage/namespaces/{namespace}/repos/{repository}/retentions/{retention_id}

Table 3-145 Path parameters

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.
repository	Yes	String	Image repository name.
retention_id	Yes	Integer	Image retention policy ID.

Request Parameters

Table 3-146 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json . The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

N/A

Example Request

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

Example Response

N/A

Status Codes

Status Code	Description
200	Deletion succeeded.
400	Request error.
401	Authentication failed.
404	The organization, image repository, or policy does not exist.
500	Internal error.

Error Codes

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

3.10.4 Obtaining an Image Retention Policy Record

Description

Obtain the records of image retention policies.

Constraints

None

API Calling

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

URI

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

Table 3-147 Path parameters

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.
repository	Yes	String	Image repository name.
retention_id	Yes	Integer	Image retention policy ID.

Request Parameters

Table 3-148 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-149 Response body parameters

Parameter	Type	Description
algorithm	String	Retention policy matching rule. The value is or .
id	Integer	ID
rules	Array of Rule objects	Image retention policy.
scope	String	Reserved field.

Table 3-150 Rule

Parameter	Type	Description
template	String	Retention policy type. The value can be date_rule and tag_rule .
params	Object	If template is set to date_rule , set params to <code>{"days": "xxx"}</code> . If template is set to tag_rule , set params to <code>{"num": "xxx"}</code> .
tag_selectors	Array of TagSelector objects	Exception images.

Table 3-151 TagSelector

Parameter	Type	Description
kind	String	Matching rule. The value can be label or regexp .
pattern	String	If kind is set to label , set this parameter to the image tag. If kind is set to regexp , set this parameter to a regular expression.

Example Request

```
GET https://{endpoint}/v2/manage/namespaces/{namespace}/repos/{repository}/retentions/{retention_id}
```

Example Response

Status code: 200

Query succeeded.

```
{
  "algorithm" : "or",
  "id" : 222,
  "rules" : [ {
```

```
"params" : {  
    "days" : "30"  
},  
"tag_selectors" : [ {  
    "kind" : "label",  
    "pattern" : "v5"  
}, {  
    "kind" : "label",  
    "pattern" : "1.0.1"  
}, {  
    "kind" : "regexp",  
    "pattern" : "^123$"  
}],  
"template" : "date_rule"  
},  
"scope" : ""  
}
```

Status Codes

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

Error Codes

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

3.10.5 Modifying an Image Retention Policy

Description

Modify an image retention policy.

Constraints

None

API Calling

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

URI

PATCH /v2/manage/namespaces/{namespace}/repos/{repository}/retentions/{retention_id}

Table 3-152 Path parameters

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.
repository	Yes	String	Image repository name.
retention_id	Yes	Integer	Image retention policy ID.

Request Parameters

Table 3-153 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Table 3-154 Request body parameters

Parameter	Mandatory	Type	Description
algorithm	Yes	String	Retention policy matching rule. The value is or .

Parameter	Mandatory	Type	Description
rules	Yes	Array of Rule objects	Image retention policy.

Table 3-155 Rule

Parameter	Mandatory	Type	Description
template	Yes	String	Retention policy type. The value can be date_rule and tag_rule .
params	Yes	Object	If template is set to date_rule , set params to <code>{"days": "xxx"}</code> . If template is set to tag_rule , set params to <code>{"num": "xxx"}</code> .
tag_selectors	Yes	Array of TagSelector objects	Exception images.

Table 3-156 TagSelector

Parameter	Mandatory	Type	Description
kind	Yes	String	Matching rule. The value can be label or regexp .
pattern	Yes	String	If kind is set to label , set this parameter to the image tag. If kind is set to regexp , set this parameter to a regular expression.

Response Parameters

N/A

Example Request

```
PATCH https://{endpoint}/v2/manage/namespaces/{namespace}/repos/{repository}/retentions/{retention_id}

{
  "algorithm" : "or",
  "rules" : [ {
    "params" : {
      "days" : "30"
    },
    "tag_selectors" : [ {
      "kind" : "label",
      "pattern" : "nginx"
    }
  }
}
```

```
        "pattern" : "v5"
    }, {
        "kind" : "label",
        "pattern" : "1.0.1"
    }, {
        "kind" : "regexp",
        "pattern" : "^123$"
    }],
    "template" : "date_rule"
}
}
```

Example Response

None

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;
import com.huaweicloud.sdk.swr.v2.*;
import com.huaweicloud.sdk.swr.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class UpdateRetentionSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        SwrClient client = SwrClient.newBuilder()
            .withCredential(auth)
            .withRegion(SwrRegion.valueOf("cn-north-4"))
            .build();
        UpdateRetentionRequest request = new UpdateRetentionRequest();
        UpdateRetentionRequestBody body = new UpdateRetentionRequestBody();
        List<TagSelector> listRulesTagSelectors = new ArrayList<>();
        listRulesTagSelectors.add(
            new TagSelector()
                .withKind("label")
                .withPattern("v5")
        );
        listRulesTagSelectors.add(
            new TagSelector()
                .withKind("label")
                .withPattern("1.0.1")
        );
    }
}
```

```
    );
    listRulesTagSelectors.add(
        new TagSelector()
            .withKind("regexp")
            .withPattern("^123$")
    );
    List<Rule> listbodyRules = new ArrayList<>();
    listbodyRules.add(
        new Rule()
            .withTemplate(Rule.TemplateEnum.fromValue("date_rule"))
            .withParams("{\"days\":\"30\"}")
            .withTagSelectors(listRulesTagSelectors)
    );
    body.withRules(listbodyRules);
    body.withAlgorithm("or");
    request.withBody(body);
    try {
        UpdateRetentionResponse response = client.updateRetention(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \


    client = SwrClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(SwrRegion.value_of("cn-north-4")) \
        .build()

try:
    request = UpdateRetentionRequest()
    listTagSelectorsRules = [
        TagSelector(
            kind="label",
            pattern="v5"
        ),
        TagSelector(
            kind="label",
            pattern="1.0.1"
        ),
    ]
```

```
        TagSelector(
            kind="regexp",
            pattern="^123$"
        )
    ]
listRulesbody = [
    Rule(
        template="date_rule",
        params={"days": "30"},
        tag_selectors=listTagSelectorsRules
    )
]
request.body = UpdateRetentionRequestBody(
    rules=listRulesbody,
    algorithm="or"
)
response = client.update_retention(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.UpdateRetentionRequest{}
    var listTagSelectorsRules = []model.TagSelector{
        {
            Kind: "label",
            Pattern: "v5",
        },
        {
            Kind: "label",
            Pattern: "1.0.1",
        },
        {
            Kind: "regexp",
            Pattern: "^123$",
        }
    }
}
```

```
        },
    }
paramsRules := `{"days":"30"}`
var paramsRulesInterface interface{} = paramsRules
var listRulesbody = []model.Rule{
    {
        Template: model.GetRuleTemplateEnum().DATE_RULE,
        Params: &paramsRulesInterface,
        TagSelectors: listTagSelectorsRules,
    },
}
request.Body = &model.UpdateRetentionRequestBody{
    Rules: listRulesbody,
    Algorithm: "or",
}
response, err := client.UpdateRetention(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Code	Description
201	Update succeeded.
400	Request error.
401	Authentication failed.
404	The organization, image repository, or policy does not exist.
500	Internal error.

Error Codes

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

3.10.6 Obtaining Image Retention Records

Description

Obtain image retention records.

Constraints

None

API Calling

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

URI

GET /v2/manage/namespaces/{namespace}/repos/{repository}/retentions/histories

Table 3-157 Path parameters

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.
repository	Yes	String	Image repository name.

Table 3-158 Query parameter

Parameter	Mandatory	Type	Description
limit	No	String	Number of returned records. Parameters offset and limit should always be used together.
offset	No	String	Start index. The value can be 0 or a positive integer multiple of the limit value. Parameters offset and limit should always be used together.
filter	No	String	Enter limit::{limit} offset::{offset} . {limit} indicates the number of returned records, and {offset} indicates the start index. Parameters offset and limit should be used together.

Request Parameters

Table 3-159 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-160 Response header parameter

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 3-161 Response body parameters

Parameter	Type	Description
retention_log	Array of RetentionLog objects	Image retention log.
total	Integer	Total number.

Table 3-162 RetentionLog

Parameter	Type	Description
created_at	String	Creation time.

Parameter	Type	Description
id	Integer	ID
namespace	String	Organization name.
repo	String	Image repository name.
retention_id	Integer	Image retention policy ID.
rule_type	String	Policy.
tag	String	Image tag.

Example Request

```
GET https://{endpoint}/v2/manage/namespaces/{namespace}/repos/{repository}/retentions/histories
```

Example Response

Status code: 200

Request succeeded.

```
{
  "retention_log": [ {
    "created_at": "2020-04-17T08:01:09.658309Z",
    "id": 9088,
    "namespace": "hwstaff_l00283074",
    "repo": "experience_2048",
    "retention_id": 91,
    "rule_type": "{\"template\":\"tag_rule\",\"params\":{\"num\":\"7\"},\"tag_selectors\":[]}",
    "tag": "4"
  }],
  "total": 1
}
```

Status Codes

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

Error Codes

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

3.11 Temporary Login Command

3.11.1 Generating a Temporary Login Command

Description

Generate a temporary login command using the value of **X-Swr-Dockerlogin** in the response header and the value of **host** in the response body.

Constraints

None

API Calling

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

URI

POST /v2/manage/utils/secret

Table 3-163 Query parameter

Parameter	Mandatory	Type	Description
projectname	No	String	Project name. The default value is the region name, for example, cn-north-1 .

Request Parameters

Table 3-164 Request header parameters

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

Parameter	Mandatory	Type	Description
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-165 Response header parameter

Parameter	Type	Description
X-Swr-Dockerlogin	String	A docker login command, for example, docker login -u cn-north-1@OW*****FPUKBXI -p 6f0779072*****863d1ae3cce921b7f33 .

Table 3-166 Response body parameter

Parameter	Type	Description
auths	Map<String, AuthInfo >	Authentication information.

Table 3-167 AuthInfo

Parameter	Type	Description
auth	String	Base64-encoded authentication information.

Example Request

POST https://{endpoint}/v2/manage/utils/secret

POST https://{endpoint}/v2/manage/utils/secret

Example Response

Status code: 200

Creation succeeded.

```
{  
    "auths" : {  
        "swr:xxx" : {  
            "auth" : "Y24tbtm9ydGg*****hhMTgzMGVmN2RhZjJm"  
        }  
    }  
}
```

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;  
import com.huaweicloud.sdk.swr.v2.*;  
import com.huaweicloud.sdk.swr.v2.model.*;  
  
public class CreateSecretSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        SwrClient client = SwrClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(SwrRegion.valueOf("cn-north-4"))  
            .build();  
        CreateSecretRequest request = new CreateSecretRequest();  
        request.withProjectname("<projectname>");  
        try {  
            CreateSecretResponse response = client.createSecret(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatus());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = SwrClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(SwrRegion.value_of("cn-north-4")) \
        .build()

    try:
        request = CreateSecretRequest()
        request.projectname = "<projectname>"
        response = client.create_secret(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := swr.NewSwrClient(
        swr.SwrClientBuilder().
            WithRegion(region.ValueOf("cn-north-4")).
            WithCredential(auth).
            Build())

    request := &model.CreateSecretRequest{}
```

```
projectnameRequest:= "<projectname>"  
request.Projectname = &projectnameRequest  
response, err := client.CreateSecret(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

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

Error Codes

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

3.12 Quota Management

3.12.1 Obtaining Quota Information

Description

Obtain quota information.

Constraints

None

API Calling

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

URI

GET /v2/manage/projects/{project_id}/quotas

Table 3-168 Path parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 3-169 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type (format). The value can be application/json; charset=utf-8 application/json The default value is application/json .
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 X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 3-170 Response body parameter

Parameter	Type	Description
quotas	Array of ShowQuota objects	List of quotas.

Table 3-171 ShowQuota

Parameter	Type	Description
quota_limit	Integer	Quota limit.
quota_key	String	Quota type.
unit	String	Unit.

Parameter	Type	Description
used	Integer	Used quota.

Example Request

GET https://{endpoint}/v2/manage/projects/{project_id}/quotas

Example Response

Status code: 200

The quota information is returned successfully.

```
{  
    "quotas": [ {  
        "quota_limit": 15,  
        "quota_key": "namespace",  
        "unit": "",  
        "used": 1  
    } ]  
}
```

SDK Sample Code

The following are SDK sample code:

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.swr.v2.region.SwrRegion;  
import com.huaweicloud.sdk.swr.v2.*;  
import com.huaweicloud.sdk.swr.v2.model.*;  
  
public class ListQuotasSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        SwrClient client = SwrClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(SwrRegion.valueOf("cn-north-4"))  
            .build();  
        ListQuotasRequest request = new ListQuotasRequest();  
        try {  
            ListQuotasResponse response = client.listQuotas(request);  
        } catch (Exception e) {  
            e.printStackTrace();  
        }  
    }  
}
```

```
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkswr.v2.region.swr_region import SwrRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkswr.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = SwrClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(SwrRegion.value_of("cn-north-4")) \
        .build()

    try:
        request = ListQuotasRequest()
        response = client.list_quotas(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    swr "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/swr/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
```

```
sk := os.Getenv("CLOUD_SDK_SK")

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := swr.NewSwrClient(
    swr.SwrClientBuilder().
        WithRegion(region.ValueOf("cn-north-4")).
        WithCredential(auth).
        Build())

request := &model.ListQuotasRequest{}
response, err := client.ListQuotas(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

More

For SDK sample code in other programming languages, see the **Sample Code** tab in the [API Explorer](#).

Status Codes

Status Codes	Description
200	Obtaining the quota succeeded.
400	Request error.
401	Authentication failed.
500	Internal error.

Error Codes

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

4 Example Applications

4.1 Creating an Image Repository

Scenario

This section describes how to create and delete an image repository using APIs. For details on how to call APIs, see [Calling APIs](#).

Involved APIs

In this example, the following APIs are used to:

- [Create an Organization](#)
- [Query the List of Organizations](#)
- [Create an Image Repository](#)
- [Query the Brief Information on an Image Repository](#)

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](#).

Procedure

1. Create an organization.
 - URI format
POST /v2/manage/namespaces
For details, see [Creating an Organization](#).
 - Example request
POST `https://[{endpoint}]/v2/manage/namespaces`
Body:

```
{  
    "namespace": "group"  
}
```

- Example response
 - {}
2. Query the list of organizations.
- URI format

GET /v2/manage/namespaces?filter=namespace::*{namespace}*

For details, see [Querying the List of Organizations](#)
 - Example request

GET https://*{endpoint}*/v2/manage/namespaces?filter=namespace::group
 - Example response

```
{
  "namespaces": [
    {
      "auth": 7,
      "creator_name": "test",
      "id": 7,
      "name": "group"
    }
  ]
}
```
3. Create an image repository.
- URI format

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

For details, see [Creating an Image Repository](#).
 - Example request

POST https://*{endpoint}*/v2/manage/namespaces/*{namespace}*/repos?
repository=test&category=linux&description=test&is_public=false
 - Example response
 - {}
4. Query the brief information on an image repository.
- URI format

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

For details, see [Querying the Brief Information on an Image Repository](#).
 - Example request

GET https://*{endpoint}*/v2/manage/namespaces/*{namespace}*/repos/*{repository}*
 - Example response

```
{
  "category": "other",
  "created": "2020-10-30T11:35:02.939134Z",
  "creator_id": "ff4f44473a1d4ab3847906410af2d152",
  "creator_name": "test",
  "description": "",
  "domain_id": "8b1e8153e5c4414fa57c356319b633fb",
  "id": 379367,
  "internal_path": "swr.cn-north-4.myhuaweicloud.com/group/test",
  "is_public": true,
  "name": "test",
  "ns_id": 7,
  "num_download": 3,
  "num_images": 1,
  "path": "swr.cn-north-4.myhuaweicloud.com/group/test",
  "priority": 0,
  "size": 1048576
}
```

```
        "size": 1304902,  
        "updated": "2020-10-30T11:47:46.084808Z",  
        "url": ""  
    }
```

4.2 Adding Image Permissions

Scenario

This section describes how to add image permissions using APIs. For details on how to call APIs, see [Calling APIs](#).

Involved APIs

In this example, the following APIs are used to:

- [Creating Image Permissions](#)
- [Querying Image Permissions](#)

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](#).

Prerequisites

An image repository has been created. For details on how to create an image repository, see [Creating an Image Repository](#).

Procedure

1. Create image permissions.

- URI format

POST /v2/manage/namespaces/{namespace}/repos/{repository}/access

For details, see [Creating Image Permissions](#)

- Example request

POST https://[endpoint]/v2/manage/namespaces/group/repos/test/access

Body:

```
[  
  {  
    "user_id": "fb3f175c1fd146ab8cd8e3272be*****",  
    "user_name": "test",  
    "auth": 7  
  }  
]
```

- Example response

{

2. Query image permissions.

- URI format

GET https://[endpoint]/v2/manage/namespaces/{namespace}/repos/{repository}/access

For details, see [Querying Image Permissions](#).

- Example request
GET /v2/manage/namespaces/group/repos/test/access
- Example response

```
{  
    "id": 385550,  
    "name": "test",  
    "others_auths": [  
        {  
            "auth": 7,  
            "user_id": "fb3f175c1fd146ab8cd83272be****",  
            "user_name": "test"  
        }  
    ],  
    "self_auth": {  
        "auth": 7,  
        "user_id": "fb3f175c1fd146ab8cd83272be****",  
        "user_name": "test"  
    }  
}
```

4.3 Adding an Image Retention Policy

Scenario

This section describes how to add an image retention policy using APIs. For details on how to call APIs, see [Calling APIs](#).

Involved APIs

In this example, the following APIs are used to:

- [Adding an Image Retention Policy](#)
- [Deleting an Image Retention Policy](#)

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](#).

Procedure

1. Add an image retention policy.

- URI format

POST /v2/manage/namespaces/{namespace}/repos/{repository}/retentions

For details, see [Adding an Image Retention Policy](#)

- Example request

POST https://{{endpoint}}/v2/manage/namespaces/group/repos/test/retentions

Body:

```
{  
    "algorithm": "or",
```

```
"rules": [
  {
    "template": "date_rule",
    "params": {
      "days": "30"
    },
    "tag_selectors": [
      {
        "kind": "label",
        "pattern": "v5"
      },
      {
        "kind": "label",
        "pattern": "1.0.1"
      },
      {
        "kind": "regexp",
        "pattern": "^123$"
      }
    ]
  }
]
```

- Example response

```
{
  "id": 34
}
```

2. Delete an image retention policy.

- URI format

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

For details, see [Deleting an Image Retention Policy](#)

- Example request

DELETE https://{*endpoint*}/v2/manage/namespaces/group/repos/test/retentions/34

- Example response

```
{}
```

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	The request failed because of a service error.
501 Not Implemented	The request failed because the server does not support the requested function.
502 Bad Gateway	The request failed because the request is invalid.
503 Service Unavailable	The request failed because the service is unavailable.
504 Gateway Timeout	A gateway timeout error occurred.

5.2 Error Code

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. If you are unable to identify the cause of an error, contact customer service and provide the error code so that we can help you solve the problem as soon as possible.

Format of an Error Response Body

If an error occurs during API calling, 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

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

Status Code	Error Code	Description
401	SVCSTG.SWR.401000	Authentication failed. Obtain a new token and try again.
500	SVCSTG.SWR.500001	Internal server error: Failed to obtain the application description.
500	SVCSTG.SWR.500002	Internal server error: Failed to obtain the image information.
500	SVCSTG.SWR.500003	Internal server error: Failed to obtain the image list.
404	SVCSTG.SWR.404004	The software package does not exist.
500	SVCSTG.SWR.500005	Internal server error: Deletion fails.
409	SVCSTG.SWR.409006	The image already exists.
500	SVCSTG.SWR.500007	Internal server error: Operation fails.
500	SVCSTG.SWR.500008	Internal server error: Failed to obtain the list.
404	SVCSTG.SWR.404009	The image list cannot be found.
404	SVCSTG.SWR.4040010	The image does not exist.
500	SVCSTG.SWR.5000011	Internal server error: Update fails.
406	SVCSTG.SWR.4060074	The organization cannot be deleted because images exist.
400	SVCSTG.SWR.4000013	Invalid digest.
400	SVCSTG.SWR.4000014	Invalid parameter.
400	SVCSTG.SWR.4000015	Invalid package name.
400	SVCSTG.SWR.4000016	Invalid version number.
500	SVCSTG.SWR.5000017	Internal server error: The application signature function is disabled.
500	SVCSTG.SWR.5000018	Internal server error: Failed to read public keys.

Status Code	Error Code	Description
500	SVCSTG.SWR.5000019	Internal server error: Failed to find local files.
500	SVCSTG.SWR.5000020	Internal server error: Failed to obtain session locks.
500	SVCSTG.SWR.5000021	Internal server error: Failed to synchronize files.
500	SVCSTG.SWR.5000022	Internal server error: Failed to synchronize meta files.
406	SVCSTG.SWR.4060012	Failed to delete the image repository because it contains images.
409	SVCSTG.SWR.4090023	The system is busy.
500	SVCSTG.SWR.5000024	Internal server error: Failed to generate the SHA value.
413	SVCSTG.SWR.4130025	The file exceeds the maximum size allowed.
500	SVCSTG.SWR.5000027	Internal server error: Failed to decompress the package.
400	SVCSTG.SWR.4000028	Incorrect image format.
400	SVCSTG.SWR.4000029	Incorrect image format: The image name is inconsistent.
500	SVCSTG.SWR.5000030	Internal server error: Failed to locate the file pointer.
400	SVCSTG.SWR.4000031	Invalid AK/SK.
500	SVCSTG.SWR.5000032	Internal server error: JSON conversion fails.
500	SVCSTG.SWR.5000033	Internal server error: Failed to save the application file.
500	SVCSTG.SWR.5000034	Internal server error: Failed to delete the application.
500	SVCSTG.SWR.5000035	Internal server error: Failed to save the application to the database.
500	SVCSTG.SWR.5000036	Internal server error: Failed to update the application database.
500	SVCSTG.SWR.5000037	Internal server error: Failed to create the signature.

Status Code	Error Code	Description
500	SVCSTG.SWR.50000 38	Internal server error: Failed to delete the signature.
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.

Status Code	Error Code	Description
500	SVCSTG.SWR.50000 57	Internal server error: Failed to obtain the organization.
404	SVCSTG.SWR.40400 58	The organization does not exist.
500	SVCSTG.SWR.50000 59	Internal server error: Failed to create the organization.
409	SVCSTG.SWR.40900 60	The organization already exists.
500	SVCSTG.SWR.50000 61	Failed to obtain the IP address of the software instance.
500	SVCSTG.SWR.50000 62	Failed to obtain the local IP address of the software.
500	SVCSTG.SWR.50000 63	Failed to obtain the tag list.
400	SVCSTG.SWR.40000 64	Invalid image: The manifest file contains empty RepoTags.
400	SVCSTG.SWR.40000 65	Invalid image: The manifest file does not have layer information.
400	SVCSTG.SWR.40000 66	Invalid image: The manifest file does not have configuration information.
400	SVCSTG.SWR.40000 67	Invalid image package: The image package does not have a manifest file.
400	SVCSTG.SWR.40000 68	Invalid image: Failed to parse the manifest file.
400	SVCSTG.SWR.40000 69	Invalid image: The image format is incorrect or not supported.
507	SVCSTG.SWR.50700 70	Your OBS service is disabled or incorrect. Please first check your OBS service.
500	SVCSTG.SWR.50000 71	Internal server error: Failed to obtain the user list.
500	SVCSTG.SWR.50000 73	Internal server error: Restoration fails.
500	SVCSTG.SWR.50000 75	Internal server error: Failed to update the organization.
409	SVCSTG.SWR.40900 76	The organization permission already exists.
500	SVCSTG.SWR.50000 77	Internal server error: Failed to obtain the organization permission.

Status Code	Error Code	Description
404	SVCSTG.SWR.40400 78	The organization permission does not exist.
500	SVCSTG.SWR.50000 79	Internal server error: Failed to update the organization permission.
500	SVCSTG.SWR.50000 80	Internal server error: Failed to create the organization permission.
500	SVCSTG.SWR.50000 81	Internal server error: Failed to delete the organization permission.
500	SVCSTG.SWR.50000 82	Internal server error: Failed to parse the JSON file.
404	SVCSTG.SWR.40400 83	The requested URL cannot be found.
500	SVCSTG.SWR.50000 84	Internal server error: Failed to obtain the service.
500	SVCSTG.SWR.50000 85	Internal server error: Failed to create the tag.
500	SVCSTG.SWR.50000 86	Internal server error: Failed to update the tag.
500	SVCSTG.SWR.50000 87	Internal server error: Failed to obtain the image layer.
500	SVCSTG.SWR.50000 88	Internal server error: Failed to delete the image layer from UDS.
409	SVCSTG.SWR.40900 89	The permission already exists.
500	SVCSTG.SWR.50000 90	Internal server error: Failed to obtain the permission.
404	SVCSTG.SWR.40400 91	The permission does not exist.
500	SVCSTG.SWR.50000 92	Internal server error: Failed to update the permission.
500	SVCSTG.SWR.50000 93	Internal server error: Failed to create the permission.
400	SVCSTG.SWR.40000 97	The maximum number of organizations has been exceeded.
400	SVCSTG.SWR.40000 98	The maximum number of images has been exceeded.
400	SVCSTG.SWR.40000 99	The maximum number of image tags has been exceeded.

Status Code	Error Code	Description
500	SVCSTG.SWR.5000112	Internal server error. Failed to obtain the image.
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	Content-Type must be set to multipart/form-data .
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	Type must be set to app .
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	is_public must be set to true or false .
400	SVCSTG.SWR.4001010	Type must be set to app or image .
400	SVCSTG.SWR.4001011	Type must be set to app , image or left blank.
413	SVCSTG.SWR.4131012	The description exceeds the maximum length allowed.
400	SVCSTG.SWR.4001013	ak or sk cannot be left blank.
400	SVCSTG.SWR.4001014	Mandatory parameters must be set.
400	SVCSTG.SWR.4001015	The form file cannot be found.

Status Code	Error Code	Description
400	SVCSTG.SWR.40010 16	At least is_public and manifests must be set.
400	SVCSTG.SWR.40010 18	Incorrect request body type.
400	SVCSTG.SWR.40010 19	Failed to parse the form file.
500	SVCSTG.SWR.50010 20	Internal server error: Failed to read the form file.
400	SVCSTG.SWR.40010 21	The version number cannot be left blank.
400	SVCSTG.SWR.40010 22	Incorrect file type.
400	SVCSTG.SWR.40010 23	Unsupported file type.
400	SVCSTG.SWR.40010 24	Failed to query parameters.
400	SVCSTG.SWR.40010 25	Invalid parameter.
500	SVCSTG.SWR.50010 26	Failed to obtain the manifest file.
400	SVCSTG.SWR.40010 27	Status must be set to done or error .
400	SVCSTG.SWR.40010 28	Invalid organization name.
400	SVCSTG.SWR.40010 29	Invalid image name.
400	SVCSTG.SWR.40010 30	Invalid package.
403	SVCSTG.SWR.40310 32	The number of requests exceeds the maximum number allowed.
403	SVCSTG.SWR.40310 33	Unavailable request.
400	SVCSTG.SWR.40010 35	Invalid filtering criteria.
400	SVCSTG.SWR.40010 36	Parameters are lost.
400	SVCSTG.SWR.40010 37	The registration center type is not supported.

Status Code	Error Code	Description
500	SVCSTG.SWR.50010 38	The registration center is unavailable.
500	SVCSTG.SWR.50010 39	Search fails.
400	SVCSTG.SWR.40010 41	Invalid domain .
403	SVCSTG.SWR.40310 42	There are too many requests.
403	SVCSTG.SWR.40310 43	Invalid JWT token request.
401	SVCSTG.SWR.40110 44	The image to be uploaded has been created by another user. You do not have the permission to upload the image.
400	SVCSTG.SWR.40010 45	The SWRServer parameter is missing.
500	SVCSTG.SWR.50010 46	Internal server error: Failed to check the organization.
500	SVCSTG.SWR.50010 47	Internal server error: Failed to save the organization.
400	SVCSTG.SWR.40010 48	Failed to obtain the token.
500	SVCSTG.SWR.50010 49	Internal server error: Failed to delete the organization.
500	SVCSTG.SWR.50010 50	Internal server error: Failed to obtain the image layer.
404	SVCSTG.SWR.40410 51	The image layer does not exist.
500	SVCSTG.SWR.50010 52	Internal server error: Invalid image layer.
500	SVCSTG.SWR.50010 53	Internal server error: Invalid upload of an image layer.
500	SVCSTG.SWR.50010 54	Internal server error: Failed to create the image layer path.
500	SVCSTG.SWR.50010 55	Internal server error: Failed to save the image layer.
404	SVCSTG.SWR.40410 56	The image tag does not exist.

Status Code	Error Code	Description
500	SVCSTG.SWR.50010 56	Internal server error: Failed to obtain the tag list.
404	SVCSTG.SWR.40410 57	The tag list does not exist.
500	SVCSTG.SWR.50010 58	Internal server error: Failed to save the image.
500	SVCSTG.SWR.50010 59	Internal server error: Failed to obtain the image.
404	SVCSTG.SWR.40410 60	The manifest file does not exist.
404	SVCSTG.SWR.40410 61	The organization does not exist.
500	SVCSTG.SWR.50010 62	Internal server error: Failed to update the organization.
500	SVCSTG.SWR.50010 63	Internal server error: Failed to delete the image layer.
401	SVCSTG.SWR.40110 64	Cross-account error. Insufficient permissions. (For example, use the token of account A to access or perform operations on resources of account B.)
400	SVCSTG.SWR.40010 65	Invalid organization permissions.
400	SVCSTG.SWR.40010 66	Invalid permissions.
400	SVCSTG.SWR.40010 67	Invalid username.
500	SVCSTG.SWR.50010 76	Failed to obtain the service token.
401	SVCSTG.S2I.401900 0	Authentication error: No user token or user AK/SK information found.
403	SVCSTG.SWR.40390 01	You cannot apply for or operate the resources that do not belong to you.
403	SVCSTG.SWR.40390 02	You do not have the permission to perform this operation.
400	SVCSTG.SWR.40090 10	Invalid organization.
400	SVCSTG.SWR.40090 11	Invalid image name.

Status Code	Error Code	Description
400	SVCSTG.SWR.40090 12	Invalid code source type.
400	SVCSTG.SWR.40090 13	Invalid ID.
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.

Status Code	Error Code	Description
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.
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.
400	SVCSTG.SWR.40010 91	Invalid parameter: permission.

5.3 Obtaining a Project ID

Scenarios

A project ID is required for some URLs when an API is called. Therefore, you need to obtain a project ID in advance. Two methods are available:

- [Obtain the Project ID by Calling an API](#)
- [Obtain the Project ID from the Console](#)

Obtain the Project ID by Calling an API

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

The API used to obtain a project ID is GET <https://{{Endpoint}}/v3/projects>. {{Endpoint}} is the IAM endpoint and can be obtained from [Regions and Endpoints](#). For details about API authentication, see [Authentication](#).

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

```
{  
  "projects": [  
    {  
      "domain_id": "65382450e8f64ac0870cd180d14e684b",  
      "is_domain": false,  
      "parent_id": "65382450e8f64ac0870cd180d14e684b",  
      "name": "project_name",  
      "description": "",  
      "links": {  
        "next": null,  
        "previous": null,  
        "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22cd05f897d6b99"  
      },  
      "id": "a4a5d4098fb4474fa22cd05f897d6b99",  
      "enabled": true  
    }  
  ]  
}
```

```
        },
        "links": {
            "next": null,
            "previous": null,
            "self": "https://www.example.com/v3/projects"
        }
    }
```

Obtain a Project ID from the Console

To obtain a project ID from the console, perform the following operations:

1. Log in to the management console.
2. Click the username and select **My Credentials** from the drop-down list.
On the **API Credentials** page, view the project ID in the project list.

Figure 5-1 Viewing the project ID

The screenshot shows the 'API Credentials' page in a web interface. On the left, there's a sidebar with 'My Credentials' (selected), 'API Credentials' (selected), and 'Access Keys'. The main area has a header 'API Credentials' with a help icon. Below it is a message: 'Learn more about HUAWEI CLOUD accounts, IAM users, and projects.' There are input fields for 'IAM User Name' and 'Account Name', and another for 'IAM User ID' and 'Account ID'. A search bar at the top right says 'Enter a project name.' Below these, a table titled 'Projects' lists three entries:

Project ID	Project Name	Region
[REDACTED]	ap-southeast-1	AP-Hong Kong
[REDACTED]	ap-southeast-3	AP-Singapore

5.4 Obtaining the Username and User ID

Scenarios

When calling APIs, you need to fill in your domain name and domain ID in certain URLs. To do so, you need to obtain domain name and domain ID on the console first. For details, see [Procedure](#).

Procedure

1. Log in to the management console.
2. Hover the mouse pointer over the username in the upper right corner and choose **My Credentials** from the drop-down list.

On the displayed **API Credentials** page, view the IAM username and IAM user ID.

Figure 5-2 API credentials

The screenshot shows the 'API Credentials' page in a web interface. The sidebar on the left shows 'My Credentials' (selected), 'API Credentials' (selected), and 'Access Keys'. The main area has a header 'API Credentials' with a help icon. Below it is a message: 'Learn more about HUAWEI CLOUD accounts, IAM users, and projects.' There are input fields for 'IAM User Name' and 'Account Name', and another for 'IAM User ID' and 'Account ID'.

6 Change History

Release Date	Description
2022-02-15	This issue is the twelfth official release, which incorporates the following change: Added Obtaining Quota Information .
2021-06-18	This issue is the eleventh official release. Optimized the whole document, including optimizing the function introduction, adding request examples, and improving parameter descriptions.
2020-11-10	This issue is the tenth official release. Added the following application examples: Creating an Image Repository , Adding Image Permissions , and Adding an Image Retention Policy
2020-10-23	This issue is the ninth official release. The following categories are added: <ul style="list-style-type: none">● Image Permission Management● Image Replication Management● Trigger Management● Image Retention Policy Management
2020-05-30	This issue is the eighth official release. Updated: <ul style="list-style-type: none">● The description of response parameters in Querying the List of Organizations● The information of the category parameter in Creating an Image Repository in an Organization, Updating the Brief Information on an Image Repository, Querying the Brief Information on an Image Repository, Querying the Image Repository List, and Querying the List of Shared Images.

Release Date	Description
2019-12-30	This issue is the seventh official release. Added authorization management APIs: <ul style="list-style-type: none">● Creating Organization Permissions● Deleting Organization Permissions● Updating Organization Permissions● Querying Organization Permissions
2019-08-30	This issue is the sixth official release. Added APIs used for querying API version information: <ul style="list-style-type: none">● Querying All API Versions● Querying a Specified API Version
2019-06-15	This issue is the fifth official release. Updated the information of the access_domain parameter. The following APIs are involved: <ul style="list-style-type: none">● Creating a Shared Account● Obtaining the List of Shared Accounts● Deleting a Shared Account● Updating a Shared Account● Checking the Existence of a Shared Account
2018-12-30	This issue is the fourth official release. Updated the parameters of the following APIs: <ul style="list-style-type: none">● Creating an Organization● Querying the List of Organizations● Creating an Image Repository in an Organization● Updating the Brief Information on an Image Repository● Querying the Brief Information on an Image Repository● Querying the Image Repository List● Creating a Shared Account● Obtaining the List of Shared Accounts● Updating a Shared Account● Checking the Existence of a Shared Account
2018-11-15	This issue is the third official release. Added section Querying the List of Shared Images .

Release Date	Description
2018-04-10	<p>This issue is the second official issue.</p> <p>Added the function of sharing private images among tenants. The following APIs are involved:</p> <ul style="list-style-type: none">● Creating a Shared Account● Obtaining the List of Shared Accounts● Deleting a Shared Account● Updating a Shared Account● Checking the Existence of a Shared Account
2018-01-26	This issue is the first official release.