

Cloud Certificate & Manager

API Reference

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1 Before You Start

Welcome to use Cloud Certificate & Manager (CCM). CCM issues cloud certificates and manages the entire lifecycle of the certificates. It can be used in many scenarios, such as cloud platform, Internet of Vehicles (IoV), and Internet of Things (IoT). CCM includes the SSL Certificate Manager (SCM) and Private Certificate Authority (PCA) services.

Before calling CCM APIs, ensure that you have understood the concepts related to CCM. For more information, see [What Is CCM?](#)

Endpoints

An endpoint is the **request address** for calling an API. CCM is a global service deployed for all physical regions. [Table 1-1](#) lists the endpoints of CCM. You can obtain CCM endpoints at [Regions and Endpoints](#). For example, if your region is CN-Hong Kong, the endpoint is **scm.ap-southeast-1.myhuaweicloud.com**.

Table 1-1 CCM endpoints

Region	Endpoint Region	Endpoint	Protocol	Microservice Included
All	ALL	scm.ap-southeast-1.myhuaweicloud.com	HTTPS	SCM
All	ALL	ccm.ap-southeast-3.myhuaweicloud.com	HTTPS	PCA

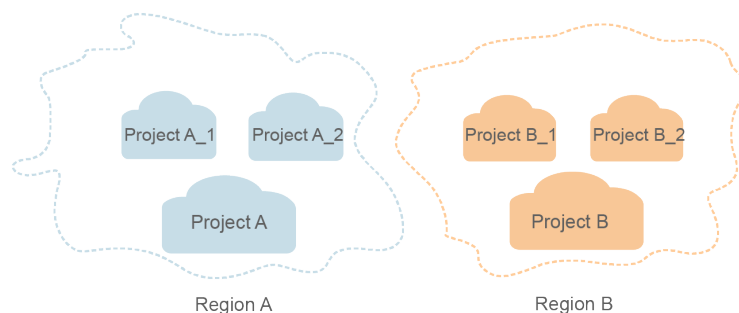
NOTE

If you use an account on the international website, use the international website endpoint. For details about the endpoint of a region, see [Table 1-1](#).

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. An account is a payment entity. Accounts should not be used directly to perform routine management. For security purposes, create sub-users and grant them permissions for routine management.
- **User**
An IAM user is created using an account to use cloud services. Each IAM user has its own identity credentials (password and access keys).
The account name, username, and password will be required for API authentication.
- **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 as universal regions and dedicated regions. A universal region provides universal cloud services for common tenants. A dedicated region provides services of the same type only or for specific tenants.
- **Availability Zone (AZ)**
An Availability Zone (AZ) contains one or more physical data centers. Each AZ has independent cooling, fire extinguishing, moisture-proof, and electricity facilities. Within an AZ, compute, network, storage, and other resources 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**
Projects group and isolate resources (including compute, storage, and network resources) across physical regions. A default project is provided for each region, and subprojects can be created under each default project. Users can be granted permissions to access all resources in a specific project. For more refined access control, create subprojects under a project and create resources in the subprojects. Users can then be assigned permissions to access only specific resources in the subprojects.

Figure 1-1 Project isolating model



- Enterprise Project

Enterprise projects group and logically isolate resources. An enterprise project can contain resources in multiple regions, and resources can be directly transferred between enterprise projects.

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

2 API Overview

By using the APIs provided by CCM, you can use all functions of CCM.

Managing SSL Certificates

API		Description
Certificate lifecycle management	Querying the Certificate List	Query the SSL certificate list.
	Importing a Certificate	Import a certificate to SCM.
	Obtaining Details of a Certificate	Query details of an SSL certificate.
	Deleting a Certificate	Delete an SSL certificate.
	Exporting a Certificate	Export an SSL certificate.
Certificate application management	Apply for a certificate.	Apply for an SSL certificate.
	Withdrawing a Certificate Application	Withdraw an SSL certificate application.
Certificate order management	Purchasing an SSL Certificate	Purchase an SSL certificate.
Certificate deployment management	Pushing a Certificate	Push an SSL certificate to other Huawei Cloud services.
	Pushing Certificates in Batches	Push an SSL certificate to other Huawei Cloud services in batches.

API		Description
	Deploying Certificates	Deploy SSL certificates to other Huawei Cloud services, such as CDN, WAF, and ELB.
	Querying Deployed Resources	For issued and uploaded non-SM cryptographic algorithm certificates, query the resources that have been deployed for a certificate.
CSRs	Creating a CSR	Create the CSR.
	Querying the CSR List	Query the EIP list.
	Querying a CSR	Query the CSR.
	Updating CSR	Update the CSR.
	Deleting a CSR	Delete the CSR.
	Upload CSR	Upload the CSR.
	Querying a Private Key	Query the private key.

Managing Private Certificates

API	Description
Managing private CAs	Manage private CAs, including creating, querying, and deleting private CAs.
Managing private certificates	Manage private certificates, including creating, querying, and deleting private certificates.
Revoking a certificate	Revoke certificates, including creating an agency, querying an agency, and querying the OBS bucket list.

3 Calling APIs

3.1 Making an API Request

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

Request URI

A request URI is in the following format:

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

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

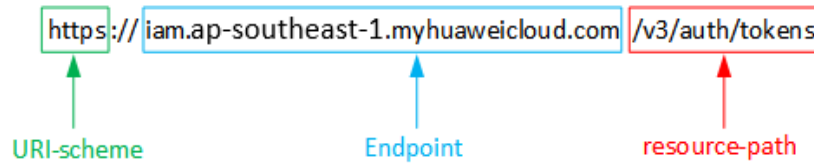
- **URI-scheme:**
Protocol used to transmit requests. All APIs use HTTPS.
- **Endpoint:**
Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from [Regions and Endpoints](#).
For example, the endpoint of IAM in region **CN-Hong Kong** is **iam.ap-southeast-1.myhuaweicloud.com**.
- **resource-path:**
Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the **resource-path** of the API used to obtain a user token is **/v3/auth/tokens**.
- **query-string:**
Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of "Parameter name=Parameter value". 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 3-1 Example URI



NOTE

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

Request Methods

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

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

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

```
POST https://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:

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

 NOTE

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

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

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

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

Request Body

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

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

In the case of the API used to [obtain a user token](#), the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Set **username** to the name of a user, **domainname** to the name of the account that the user belongs to, ********* to the user's login password, and **xxxxxxxxxxxxxxxxxxxx** to the project name. You can learn more information about projects from [Regions and Endpoints](#). Check the value of the **Region** column.

 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": "xxxxxxxxxxxxxxxxxxxx"
      }
    }
  }
}
```

```
}  
}
```

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

3.2 Authentication

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

- Token-based authentication: Requests are authenticated using a token.
- AK/SK-based authentication: Requests are authenticated by encrypting the request body using an AK/SK pair. AK/SK-based authentication is recommended because it is more secure than token-based authentication.

Token-based Authentication

NOTE

- The validity period of a token is 24 hours. When using a token for authentication, cache it to prevent frequently calling the IAM API used to obtain a user token.
- Ensure that the token is valid when you use it. Using a token that will soon expire may cause API calling failures.

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to requests to get permissions for calling the API.

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

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

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

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

AK/SK-based Authentication

NOTE

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

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

- AK: access key ID, which is a unique identifier used in conjunction with a secret access key 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-based authentication, you can use an AK/SK to sign requests based on the signature algorithm or use the signing SDK to sign requests. For details about how to sign requests and use the signing SDK, see [API Request Signing Guide](#).

3.3 Response

Status Code

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

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

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

Response Header

A response header corresponds to a request header, for example, **Content-Type**.

[Figure 3-2](#) shows the response header for the API of [obtaining a user token](#), in which **x-subject-token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

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

```
connection → keep-alive

content-type → application/json

date → Tue, 12 Feb 2019 06:52:13 GMT

server → Web Server

strict-transport-security → max-age=31536000; includeSubdomains;

transfer-encoding → chunked

via → proxy A

x-content-type-options → nosniff

x-download-options → noopen

x-frame-options → SAMEORIGIN

x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5

x-subject-token
→ MIIYXQYJKoZIhvcNAQcCoIIYTCCEoCAQExDTALBgIghkgBZQMEAgEwgharBgkqhkiG9w0BBwGgghacBIIWmHsidG9rZW4iOensiZXhwaXJlc19hdCI6IiwMTktMDItMTNUMC
fj3KJs6YgKnpVNRbW2eZ5eb78SZOkqjACgklqO1wi4JIGzrpd18LGXK5bdfq4lqHCYb8P4NaY0NYejcAgz/VeFYtLWT1GSO0zxKZmlQHq82HBqHdgIZO9fuEbL5dMhdavj+33wEI
xHRCE9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXl1jipPEGA270g1FruooL6jgglFkNPQuFSOU8+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUbpvGw-oPNFYxJECKnoH3HRozv0vN--n5d6Nbxg==

x-xss-protection → 1; mode=block;
```

(Optional) Response Body

A response body is generally returned in a structured format, corresponding to the **Content-Type** in the response header, and is used to transfer content other than the response header.

The following shows part of the response body for the API to [obtain a user token](#). The following describes part of the response body.

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

```

If an error occurs during API calling, the system returns an error code and a message to you. The following shows the format of an error response body:

```
{
  "error": {
    "message": "The request you have made requires authentication.",
    "title": "Unauthorized"
  }
}
```

In the preceding information, **error_code** is an error code, and **error_msg** describes the error.

4 API

4.1 Managing SSL Certificates

4.1.1 Certificate Application Management

4.1.1.1 Apply for a certificate.

Function

This API is used to apply for a certificate.

URI

POST /v3/scm/certificates/{certificate_id}/apply

Table 4-1 Path Parameters

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	Certificate ID. Minimum: 16 Maximum: 16

Request Parameters

Table 4-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token. Minimum: 32 Maximum: 2097152

Table 4-3 Request body parameters

Parameter	Mandatory	Type	Description
domain	Yes	String	Domain name bound to a certificate. - If you purchase a single-domain or wildcard-domain certificate, enter a single domain name or wildcard domain name. - If you purchase a multi-domain certificate, you need to select a domain name as the primary domain name. Example: www.example.com Minimum: 0 Maximum: 255

Parameter	Mandatory	Type	Description
sans	No	String	Additional domain name associated with a multi-domain certificate. This value is required only when the purchased certificate is a multi-domain certificate and the quota of additional domain names can be increased. Use semicolons (;) to separate multiple domain names. Example: www.example.com;www.example1.com;www.example2.com Minimum: 0 Maximum: 4096
csr	No	String	Certificate CSR string, which must match the domain name. Minimum: 0 Maximum: 5120
company_name	No	String	Company name. This parameter is mandatory for OV and EV certificates. The value contains 0 to 63 characters. Minimum: 0 Maximum: 63
company_unit	No	String	Department name. The value contains 0 to 63 characters. Minimum: 0 Maximum: 63
company_province	No	String	Province where the company is located. This parameter is mandatory for OV and EV certificates. The value contains 0 to 63 characters. Minimum: 0 Maximum: 63

Parameter	Mandatory	Type	Description
company_city	No	String	City where the company is located. This parameter is mandatory for OV and EV certificates. The value contains 0 to 63 characters. Minimum: 0 Maximum: 63
country	No	String	Country code, which is mandatory for OV and EV certificates. The value must comply with the regular expression [A-Za-z]{2} . Minimum: 2 Maximum: 2
applicant_name	Yes	String	Applicant name. Enter 4 to 100 characters. Only letters, digits, underscores (_), hyphens (-), periods (.), brackets, spaces, and commas (,) are allowed. Minimum: 0 Maximum: 63
applicant_phone	Yes	String	Phone number of an applicant. Example: 13212345678 Minimum: 0 Maximum: 63
applicant_email	Yes	String	Email of an applicant. Example: example@huawei.com Minimum: 0 Maximum: 256
contact_name	No	String	Technical contact name. The value contains 0 to 63 characters. Minimum: 0 Maximum: 63
contact_phone	No	String	Phone number of the technical contact. Example: 13212345678 Minimum: 0 Maximum: 63

Parameter	Mandatory	Type	Description
contact_email	No	String	Email of a technical contact. Example: example@huawei.com Minimum: 0 Maximum: 256
auto_dns_auth	No	Boolean	Whether to push DNS authentication information to Huawei Cloud DNS. • true: Push • false: No push
agree_privacy_protection	Yes	Boolean	Whether to agree with the privacy agreement. You can submit your certificate application only when this parameter is set to true. • true: Agree to the privacy agreement. • false: Disagree with the privacy agreement.

Parameter	Mandatory	Type	Description
domain_method	Yes	String	Domain name verification method. • DNS: You need to verify the domain ownership by resolving a specific DNS record on the domain name management platform. • File: You need to create a specified file on the server to verify your ownership of the domain. • Email: You can click the link and follow the directions in the email to verify ownership of the domain. For DV and basic DV certificates (GeoTrust entry-level SSL certificates and DigiCert free SSL certificates), DNS is supported for verification by default. IP address (public IP address) certificates can be verified only by files. File verification is supported by only IP address certificates. Minimum: 0 Maximum: 32
key_algorithm	No	String	Key algorithm. The default value is RSA_2048. Minimum: 0 Maximum: 32

Response Parameters

Status code: 200

Table 4-4 Response body parameters

Parameter	Type	Description
request_info	String	Request result. Minimum: 0 Maximum: 63

Status code: 401**Table 4-5** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-6** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-7** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{
  "domain" : "www.test.com",
  "company_name" : "Company XX",
  "company_province" : "Sichuan",
  "company_city" : "Chengdu",
  "applicant_name" : "xx",
  "applicant_phone" : "12312345678",
  "applicant_email" : "example@test.com",
  "csr" : "",
  "sans" : "",
  "country" : "CN",
  "company_unit" : "IT",
  "contact_name" : "test",
  "contact_phone" : "12312345678",
  "contact_email" : "example@test.com",
  "auto_dns_auth" : false,
  "agree_privacy_protection" : true,
  "domain_method" : "DNS"
}
```

Example Responses

Status code: 200

Normal response.

```
{
  "request_info" : "success"
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
}
```

```
"error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.1.2 Withdrawing a Certificate Application

Function

Withdraw the certificate application.

URI

POST /v3/scm/certificates/{certificate_id}/cancel-cert

Table 4-8 Path Parameters

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	Certificate ID. Minimum: 16 Maximum: 16

Request Parameters

Table 4-9 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Response Parameters

Status code: 200

Table 4-10 Response body parameters

Parameter	Type	Description
cert_id	String	Certificate ID. Minimum: 16 Maximum: 16
message	String	Execution result. The value can be: success Minimum: 0 Maximum: 16

Status code: 401

Table 4-11 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-12** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-13** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

None

Example Responses

Status code: 200

Normal response.

```
{
  "cert_id" : "scsxxxx",
  "message" : "success"
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.2 Certificate Tag Management

4.1.2.1 Querying the Certificate List by Tag

Function

Query the certificate list by tag.

URI

POST /v3/scm/{resource_instances}/action

Table 4-14 Path Parameters

Parameter	Mandatory	Type	Description
resource_instances	Yes	String	Resource instance. The value is resource_instances. Minimum: 18 Maximum: 18

Request Parameters

Table 4-15 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Table 4-16 Request body parameters

Parameter	Mandatory	Type	Description
without_any_tag	No	Boolean	If this parameter is set to true, all resources without tags are queried. In this case, the tags , tags_any , not_tags , and not_tags_any fields are not required. • true • false

Parameter	Mandatory	Type	Description
tags	No	Array of ScsTag objects	The list of tags. The resources to be queried contain tags specified in this field. Each resource can contain a maximum of 20 keys. Each tag key can have a maximum of 20 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each key must be unique, and each value for a key must be unique. The response returns resources containing all the specified tags. Keys are in the AND relationship and values in each key-value structure are in the OR relationship. If this parameter is not specified, all resources will be returned. Array Length: 1 - 20
tags_any	No	Array of ScsTag objects	The list of tags. The instances to be queried contain any tag listed in tags_any. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 20 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each key must be unique, and each value for a key must be unique. The response returns resources containing the tags in this list. Keys in this list are in an OR relationship and values in each key-value structure are also in an OR relationship. If no filtering condition is specified, full data is returned. Array Length: 1 - 20

Parameter	Mandatory	Type	Description
not_tags	No	Array of ScsTag objects	The list of tags. The instances to be queried do not contain any tag listed in not_tags. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 20 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Keys must be unique and values of a key must be unique. The response returns instances containing no tag in this list. Keys are in the AND relationship and values in each key-value structure is in the OR relationship. If this parameter is not specified, all resources will be returned. Array Length: 1 - 20
not_tags_any	No	Array of ScsTag objects	The list of tags. The instances to be queried do not contain all tags listed in not_tags_any. Each instance to be queried contains a maximum of 20 keys. Each tag key has a maximum of 20 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each key must be unique, and each value for a key must be unique. The response returns resources containing no tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no tag filtering criteria is specified, full data is returned. Array Length: 1 - 20

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of certificate records on each page. The options are as follows: • 10: 10 certificate records can be displayed on each page. • 20: 20 certificate records can be displayed on each page. • 50: 50 certificate records can be displayed on each page. Minimum: 10 Maximum: 50 Default: 10
offset	No	Integer	Specifies the offset. The query starts from the next piece of data indexed by this parameter. Minimum: 0 Default: 0
action	No	String	Operation type. Possible values are as follows: • filter • count: indicates the total number of records to be queried. Minimum: 5 Maximum: 6
matches	No	Array of ScsMatch objects	Search field. key indicates the field to be matched, for example, resource_name. value indicates the matched value. The key is a fixed dictionary value and cannot contain duplicate keys or unsupported keys. Array Length: 0 - 10

Table 4-17 ScsTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. It can contain UTF-8 letters, digits, spaces, and the following characters: _ . : = + - @ Minimum: 1 Maximum: 128
values	No	Array of strings	Tag values. It can contain UTF-8 letters, digits, spaces, and the following special characters: _ . : = + - @ Minimum: 0 Maximum: 255 Array Length: 1 - 20

Table 4-18 ScsMatch

Parameter	Mandatory	Type	Description
key	No	String	Tag key. It can contain UTF-8 letters, digits, spaces, and the following characters: _ . : = + - @ Minimum: 1 Maximum: 128
value	No	String	Tag value. It can contain UTF-8 letters, digits, spaces, and the following characters: _ . : / = + - @ Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 4-19 Response body parameters

Parameter	Type	Description
total_count	Integer	Total number of records Minimum: 0 Maximum: 100
resources	Array of TagResource objects	Resource instance list. For details, see the data structure description of the TagResource field. Array Length: 0 - 100

Table 4-20 TagResource

Parameter	Type	Description
resource_id	String	Whether the certificate can be unsubscribed. Minimum: 0 Maximum: 63
tags	Array of ScsResourceTag objects	Resource ID of the certificate. Array Length: 0 - 100
resource_name	String	Number of wildcard domain names. Minimum: 0 Maximum: 63
resource_detail	resource_detail object	Certificate resource details.

Table 4-21 ScsResourceTag

Parameter	Type	Description
key	String	Tag key. Minimum: 0 Maximum: 128
value	String	Tag value. Minimum: 0 Maximum: 255

Table 4-22 resource_detail

Parameter	Type	Description
cert_id	String	Certificate ID. Minimum: 16 Maximum: 16
cert_name	String	Certificate name. The value contains 3 to 63 characters. Minimum: 3 Maximum: 63
domain	String	Domain name bound to a certificate. • If you purchase a single-domain or wildcard-domain certificate, enter a single domain name or wildcard domain name. • If you purchase a multi-domain certificate, you need to select a domain name as the primary domain name. Example: www.example.com Minimum: 0 Maximum: 255
cert_type	String	Certificate type. • OV_SSL_CERT: enterprise SSL certificate. • EV_SSL_CERT: enhanced SSL certificate. Minimum: 0 Maximum: 32
cert_brand	String	Certificate authority. GLOBALSIGN Minimum: 0 Maximum: 32
domain_type	String	Zone type. • SINGLE_DOMAIN: single domain name. • MULTI_DOMAIN: multi-domain name type. • WILDCARD: wildcard domain name. Minimum: 0 Maximum: 32

Parameter	Type	Description
purchase_period	Integer	Certificate validity period, in years. Minimum: 0 Maximum: 1000
expired_time	String	Certificate expiration time, which is a timestamp in milliseconds. Minimum: 0 Maximum: 32
order_status	String	Order status. Minimum: 0 Maximum: 32
domain_num	Integer	Number of domain names. • If domain_type is set to SINGLE_DOMAIN or WILDCARD, the value is 1. • If domain_type is set to MULTI_DOMAIN, the value ranges from 2 to 250. Minimum: 1 Maximum: 250
wildcard_number	Integer	Specifies the list of queried tags. If no tag is matched, an empty array is returned. Minimum: 1 Maximum: 100
sans	String	Resource name. This parameter is an empty string by default. Minimum: 0 Maximum: 4096
cert_des	String	Certificate description. Minimum: 0 Maximum: 32
signature_algorithm	String	Additional domain name associated with the certificate Minimum: 0 Maximum: 32
fail_reason	String	Failure cause. Minimum: 0 Maximum: 255

Parameter	Type	Description
partner_order_id	String	Sequence number of an order. Minimum: 0 Maximum: 63
push_support	Boolean	Whether a certificate can be pushed.
cert_issued_time	String	Time when a certificate is issued, in milliseconds. Minimum: 0 Maximum: 32
resource_id	String	Resource ID. Minimum: 0 Maximum: 63
unsubscribe_support	Boolean	Signature algorithm
origin_cert_id	String	Initial certificate ID. Minimum: 0 Maximum: 63
renewal_cert_id	String	ID of the certificate to be renewed. Minimum: 0 Maximum: 63
auto_renew_status	Integer	Auto-renewal status. Minimum: 0 Maximum: 100
remain_cert_number	Integer	Number of remaining valid certificates. Minimum: 0 Maximum: 100
auto_deploy_support	Boolean	Whether the certificate supports automatic deployment.

Status code: 401

Table 4-23 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-24** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-25** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{
  "action": "filter",
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ]
}
```

Example Responses

Status code: 200

Normal response.

```
{
  "total_count": 1,
  "resources": [ {
    "resource_id": "scs1664525717891"
  }, {
    "resource_detail": [ {
      "cert_id": "scs1664525717891",
      "cert_name": "scm-e409cb",
      "auto_deploy_support": false,
      "auto_renew_status": 0,
      "cert_brand": "CFCA",
      "cert_des": null,
      "cert_issued_time": 1664528641000,
      "cert_type": "OV_SSL_CERT",
      "domain": "www.cfca.com",
      "domain_num": 6,
      "domain_type": "MULTI_DOMAIN",
      "enterprise_project_id": "7c0b1c33-491f-4b87-914a-bb708815b51a",
      "expired_time": 1696064641000,
      "fail_reason": null,
      "order_status": "ISSUED",
      "origin_cert_id": null,
      "partner_order_id": "TA1664528570549_0573",
      "purchase_period": 1,
      "push_support": false,
      "remain_cert_number": 0,
      "renewal_cert_id": null,
      "resource_id": null,
      "sans": "www.test.com;*.test1.com;*.test2.com;www.test3.com;www.test4.com",
      "signature_algorithm": null,
      "unsubscribe_support": false,
      "wildcard_number": 2
    } ]
  }, {
    "tags": [ {
      "key": "key1",
      "value": "value1"
    } ]
  }, {
    "resource_name": "scm-e409cb"
  } ]
}
```

Status code: 401

Authentication failed.

```
{
  "error_code": "SCM.XXX",
  "error_msg": "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.2.2 Creating or Deleting Tags in Batches

Function

Create or delete tags in batches.

URI

POST /v3/scm/{resource_id}/tags/action

Table 4-26 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Certificate ID. Minimum: 16 Maximum: 16

Request Parameters

Table 4-27 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Table 4-28 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Label operation ID. • create: Create a user. • delete: Delete the task. Minimum: 6 Maximum: 6
tags	No	Array of ScsResourceTag objects	Tag list, which is the value pairs of tag keys and values. Array Length: 1 - 20

Table 4-29 ScsResourceTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: 0 Maximum: 128
value	No	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 4-30 Response body parameters

Parameter	Type	Description
desc	String	Request result. Minimum: 0 Maximum: 63

Status code: 401**Table 4-31** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-32** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500

Table 4-33 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{
  "action" : "create",
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  }, {
    "key" : "key2",
    "value" : "value2"
  } ]
}
```

Example Responses

Status code: 200

Normal response.

```
{
  "desc" : "success"
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
}
```

```
"error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.2.3 Creating a Tag

Function

Create a tag.

URI

POST /v3/scm/{resource_id}/tags

Table 4-34 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Certificate ID. Minimum: 16 Maximum: 16

Request Parameters

Table 4-35 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Table 4-36 Request body parameters

Parameter	Mandatory	Type	Description
tag	Yes	ScsResourceTag object	Label.

Table 4-37 ScsResourceTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: 0 Maximum: 128
value	No	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 4-38 Response body parameters

Parameter	Type	Description
desc	String	Request result. Minimum: 0 Maximum: 63

Status code: 401**Table 4-39** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-40** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-41** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{
  "tag" : {
    "key" : "key1",
    "value" : "value1"
  }
}
```

Example Responses

Status code: 200

Normal response.

```
{
  "desc" : "success"
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal response.

Status Code	Description
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.2.4 Querying the Tag List by Certificate ID

Function

Query the tag list based on the certificate ID.

URI

GET /v3/scm/{resource_id}/tags

Table 4-42 Path Parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Certificate ID. Minimum: 16 Maximum: 16

Request Parameters

Table 4-43 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Response Parameters

Status code: 200

Table 4-44 Response body parameters

Parameter	Type	Description
tags	Array of ScsResourceTag objects	Tag list, which is the value pairs of tag keys and values. Array Length: 1 - 20

Table 4-45 ScsResourceTag

Parameter	Type	Description
key	String	Tag key. Minimum: 0 Maximum: 128
value	String	Tag value. Minimum: 0 Maximum: 255

Status code: 401

Table 4-46 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403

Table 4-47 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500

Table 4-48 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

None

Example Responses

Status code: 200

Normal response.

```
{
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  }, {
    "key" : "key2",
    "value" : "value2"
  } ]
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.2.5 Querying the List of All Tags

Function

Query the list of all tags.

URI

GET /v3/scm/tags

Request Parameters

Table 4-49 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Response Parameters

Status code: 200

Table 4-50 Response body parameters

Parameter	Type	Description
tags	Array of ScsTag objects	Tag list, which is the value pairs of tag keys and values. Array Length: 1 - 20

Table 4-51 ScsTag

Parameter	Type	Description
key	String	Tag key. It can contain UTF-8 letters, digits, spaces, and the following characters: _ . : = + - @ Minimum: 1 Maximum: 128
values	Array of strings	Tag values. It can contain UTF-8 letters, digits, spaces, and the following special characters: _ . : = + - @ Minimum: 0 Maximum: 255 Array Length: 1 - 20

Status code: 401**Table 4-52** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-53** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-54** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

None

Example Responses

Status code: 200

Normal response.

```
{
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  }, {
    "key": "key2",
    "values": [ "value1", "value2" ]
  } ]
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.3 Certificate Order Management

4.1.3.1 Purchasing an SSL Certificate

Function

This API is used to purchase an SSL certificate.

URI

POST /v3/scm/certificates/buy

Request Parameters

Table 4-55 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token. Minimum: 32 Maximum: 2097152

Table 4-56 Request body parameters

Parameter	Mandatory	Type	Description
cert_brand	Yes	String	Certificate authority. The options are as follows: • GEOTRUST • GLOBALSIGN • SYMANTEC • CFCA • TRUSTASIA • VTRUS Minimum: 0 Maximum: 32
cert_type	Yes	String	Certificate type. The options are as follows: • DV_SSL_CERT • DV_SSL_CERT_BASIC • EV_SSL_CERT • EV_SSL_CERT_PRO • OV_SSL_CERT • OV_SSL_CERT_PRO Minimum: 0 Maximum: 32
domain_type	Yes	String	Domain name type. The options are as follows: • SINGLE_DOMAIN: single domain name. • MULTI_DOMAIN: multi-domain name type. • WILDCARD: wildcard domain name. Minimum: 0 Maximum: 32
effective_time	Yes	Integer	Certificate validity period, in years. Minimum: 1 Maximum: 3

Parameter	Mandatory	Type	Description
domain_numbers	Yes	Integer	Number of domain names. • If domain_type is set to SINGLE_DOMAIN or WILDCARD, the value is 1. • If domain_type is set to MULTI_DOMAIN, the value ranges from 2 to 100. Minimum: 1 Maximum: 100
order_number	Yes	Integer	Number of purchased certificates. The value ranges from 1 to 100. Minimum: 1 Maximum: 100
agree_privacy_protection	Yes	Boolean	Whether to agree to the privacy agreement. The value can only be true. • true: agree • false: disagree
primary_domain_type	No	String	Primary domain name type in multiple domain names. The value can be: • SINGLE_DOMAIN: primary single domain name • WILDCARD_DOMAIN: primary wildcard domain name Minimum: 0 Maximum: 63
single_domain_number	No	Integer	Number of additional single domain names. Minimum: 1 Maximum: 100
wildcard_domain_number	No	Integer	Number of additional wildcard domain names. Minimum: 1 Maximum: 100
is_auto_pay	No	Boolean	Whether to enable auto payment. • true: enable • false: disable

Parameter	Mandatory	Type	Description
order_id	No	String	Order ID. Used only in combined purchase scenarios. Minimum: 0 Maximum: 63
tags	No	Array of ScsResourceTag objects	Tags. Array Length: 0 - 10

Table 4-57 ScsResourceTag

Parameter	Mandatory	Type	Description
key	No	String	Tag key. Minimum: 0 Maximum: 128
value	No	String	Tag value. Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 4-58 Response body parameters

Parameter	Type	Description
order_id	String	Order ID. Minimum: 0 Maximum: 63
cert	Array of CertDetail objects	For details, see parameter description of the CertDetail field. Array Length: 0 - 1000

Table 4-59 CertDetail

Parameter	Type	Description
cert_id	String	Certificate ID. Minimum: 16 Maximum: 16

Status code: 401**Table 4-60** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-61** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500

Table 4-62 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{
  "cert_brand" : "GLOBALSIGN",
  "cert_type" : "OV_SSL_CERT",
  "domain_type" : "MULTI_DOMAIN",
  "effective_time" : 1,
  "domain_numbers" : 5,
  "order_number" : 1,
  "agree_privacy_protection" : true
}
```

Example Responses

Status code: 200

Normal return.

```
{
  "order_id" : "CS1803192259ROA8U",
  "cert" : [ {
    "cert_id" : "scs1481110651012"
  } ]
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{  
  "error_code" : "SCM.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
200	Normal return.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.4 CSR Management

4.1.4.1 Creating a CSR

Function

Create a CSR.

URI

POST /v3/scm/csr

Request Parameters

Table 4-63 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Table 4-64 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	User-defined CSR name. Minimum: 0 Maximum: 63
domain_name	Yes	String	Domain name bound to the CSR. If you want to use the CSR, ensure the domain name bound to a certificate contains the domain name set here. Minimum: 0 Maximum: 63
sans	No	String	Additional domain name bound to the CSR. Minimum: 0 Maximum: 255
private_key_algorithm	Yes	String	Private key algorithm. The value can be: • RSA_2048 • RSA_3072 • RSA_4096 • EC_P256 • EC_P384 • SM2 Minimum: 0 Maximum: 63
usage	Yes	String	CSR usage. The value can be: • PERSONAL: individual certificate • ENTERPRISE: enterprise certificate Minimum: 0 Maximum: 255
company_country	No	String	Country. This parameter is mandatory when usage is set to ENTERPRISE. Example value: CN. Minimum: 0 Maximum: 255

Parameter	Mandatory	Type	Description
company_province	No	String	Province. This parameter is mandatory when usage is set to ENTERPRISE. Example: Beijing. Minimum: 0 Maximum: 255
company_city	No	String	City. This parameter is mandatory when usage is set to ENTERPRISE. Example: Beijing. Minimum: 0 Maximum: 255
company_name	No	String	Company name. This parameter is mandatory when usage is set to ENTERPRISE. Minimum: 0 Maximum: 255

Response Parameters

Status code: 201

Table 4-65 Response body parameters

Parameter	Type	Description
id	String	CSR ID. Minimum: 0 Maximum: 63
name	String	User-defined CSR name. Minimum: 0 Maximum: 63
domain_name	String	Domain name. Minimum: 0 Maximum: 63
sans	String	Additional domain name bound to the CSR. Minimum: 0 Maximum: 255

Parameter	Type	Description
private_key_algo	String	Key algorithm type. The options are as follows: • RSA_2048 • RSA_3072 • RSA_4096 • EC_P256 • EC_P384 • SM2 Minimum: 0 Maximum: 63
usage	String	CSR usage. The value can be: • PERSONAL: individual certificate • ENTERPRISE: enterprise certificate Minimum: 0 Maximum: 255
company_country	String	Country. This parameter is mandatory when usage is set to ENTERPRISE. Minimum: 0 Maximum: 255
company_province	String	Province. This parameter is mandatory when usage is set to ENTERPRISE. Minimum: 0 Maximum: 255
company_city	String	City. This parameter is mandatory when usage is set to ENTERPRISE. Minimum: 0 Maximum: 255
company_name	String	Company name. This parameter is mandatory when usage is set to ENTERPRISE. Minimum: 0 Maximum: 255
create_time	Long	CSR creation time. Minimum: 13 Maximum: 20
update_time	Long	CSR update time. Minimum: 13 Maximum: 20

Status code: 401

Table 4-66 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403

Table 4-67 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500

Table 4-68 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{  
  "name" : "CSRxxxx",  
  "domain_name" : "xxx.com",  
  "private_key_algo" : "RSA_2048",  
  "usage" : "ENTERPRISE"  
}
```

Example Responses

Status code: 201

Normal response.

```
{  
  "id" : "48e392628b0f47769e47d91acc7654a5",  
  "name" : "xxxx",  
  "domain_name" : "xxx.com",  
  "sans" : "",  
  "private_key_algo" : "RSA_2048",  
  "usage" : "ENTERPRISE",  
  "company_country" : "CN",  
  "company_province" : "Beijing",  
  "company_city" : "Beijing",  
  "company_name" : "company",  
  "create_time" : 1735804566545,  
  "update_time" : 1735804566545  
}
```

Status code: 401

Authentication failed.

```
{  
  "error_code" : "SCM.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 403

Access denied.

```
{  
  "error_code" : "SCM.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{  
  "error_code" : "SCM.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
201	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.4.2 Querying the CSR List

Function

Query the CSR list.

URI

GET /v3/scm/csr

Table 4-69 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of certificate records on each page. The options are as follows: • 10: 10 certificate records can be displayed on each page. • 20: 20 certificate records can be displayed on each page. • 50: 50 certificate records can be displayed on each page. Minimum: 10 Maximum: 50 Default: 10

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset. Minimum: 0 Maximum: 100 Default: 0
name	No	String	CSR name. Minimum: 0 Maximum: 32
private_key_algorithm	No	String	Key algorithm type. The value can be: • RSA_2048 • RSA_3072 • RSA_4096 • EC_P256 • EC_P384 • SM2 Minimum: 0 Maximum: 64

Request Parameters

Table 4-70 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Response Parameters

Status code: 200

Table 4-71 Response body parameters

Parameter	Type	Description
csr_list	Array of CSRResponseBody objects	CSR list. For details, see the data structure description of the CSRResponseBody field. Array Length: 0 - 1000
total	Integer	Number of CSRs. Minimum: 0 Maximum: 10000

Table 4-72 CSRResponseBody

Parameter	Type	Description
id	String	CSR ID Minimum: 16 Maximum: 16
name	String	CSR name Minimum: 3 Maximum: 63
csr	String	CSR content Minimum: 3 Maximum: 255
domain_name	String	Domain name bound to the CSR Minimum: 1 Maximum: 255
sans	String	Additional domain name bound to the CSR Minimum: 1 Maximum: 4096
private_key_algo	String	Key algorithm Minimum: 0 Maximum: 64
usage	String	CSR usage Minimum: 0 Maximum: 64

Parameter	Type	Description
company_country	String	Country Minimum: 1 Maximum: 128
company_province	String	Province Minimum: 1 Maximum: 255
company_city	String	City Minimum: 1 Maximum: 32
company_name	String	Company name Minimum: 1 Maximum: 128
create_time	Long	CSR creation time. Minimum: 13 Maximum: 20

Status code: 401

Table 4-73 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403

Table 4-74 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-75** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

None

Example Responses

Status code: 200

Normal response.

```
{
  "csr_list": [ {
    "id": "48e392628b0f47769e47d91acc7654a5",
    "name": "xxxx",
    "domain_name": "xxx.com",
    "sans": "",
    "private_key_algo": "RSA_2048",
    "usage": "ENTERPRISE",
    "company_country": "CN",
    "company_province": "Beijing",
    "company_city": "Beijing",
    "company_name": "company",
```



```
"create_time" : 1735804566545,  
"update_time" : 1735804566545  
}],  
"total" : 1  
}
```

Status code: 401

Authentication failed.

```
{  
  "error_code" : "SCM.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 403

Access denied.

```
{  
  "error_code" : "SCM.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{  
  "error_code" : "SCM.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.4.3 Querying a CSR

Function

Query the CSR.

URI

GET /v3/scm/csr/{id}

Table 4-76 Path Parameters

Parameter	Mandatory	Type	Description
id	Yes	String	CSR ID. Minimum: 32 Maximum: 32

Request Parameters

Table 4-77 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Response Parameters

Status code: 200

Table 4-78 Response body parameters

Parameter	Type	Description
id	String	CSR ID Minimum: 16 Maximum: 16
name	String	CSR name Minimum: 3 Maximum: 63
csr	String	CSR content Minimum: 3 Maximum: 255

Parameter	Type	Description
domain_name	String	Domain name bound to the CSR Minimum: 1 Maximum: 255
sans	String	Additional domain name bound to the CSR Minimum: 1 Maximum: 4096
private_key_algo	String	Key algorithm Minimum: 0 Maximum: 64
usage	String	CSR usage Minimum: 0 Maximum: 64
company_country	String	Country Minimum: 1 Maximum: 128
company_province	String	Province Minimum: 1 Maximum: 255
company_city	String	City Minimum: 1 Maximum: 32
company_name	String	Company name Minimum: 1 Maximum: 128
create_time	Long	CSR creation time. Minimum: 13 Maximum: 20

Status code: 401

Table 4-79 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-80** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-81** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

None

Example Responses

Status code: 200

Normal response.

```
{
  "id" : "48e392628b0f47769e47d91acc7654a5",
  "name" : "xxxx",
  "csr" : "xxx",
  "domain_name" : "xxx.com",
  "sans" : "",
  "private_key_algo" : "RSA_2048",
  "usage" : "ENTERPRISE",
  "company_country" : "CN",
  "company_province" : "Beijing",
  "company_city" : "Beijing",
  "company_name" : "company",
  "create_time" : 1735804566545,
  "update_time" : 1735804566545
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.

Status Code	Description
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.4.4 Updating CSR

Function

Update CSR.

URI

PUT /v3/scm/csr/{id}

Table 4-82 Path Parameters

Parameter	Mandatory	Type	Description
id	Yes	String	CSR ID. Minimum: 32 Maximum: 32

Request Parameters

Table 4-83 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Table 4-84 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	CSR name Minimum: 0 Maximum: 255

Response Parameters

Status code: 200

Table 4-85 Response body parameters

Parameter	Type	Description
id	String	CSR ID Minimum: 16 Maximum: 16
name	String	CSR name Minimum: 3 Maximum: 63
csr	String	CSR content Minimum: 3 Maximum: 255
domain_name	String	Domain name bound to the CSR Minimum: 1 Maximum: 255
sans	String	Additional domain name bound to the CSR Minimum: 1 Maximum: 4096
private_key_algo	String	Key algorithm Minimum: 0 Maximum: 64
usage	String	CSR usage Minimum: 0 Maximum: 64
company_country	String	Country Minimum: 1 Maximum: 128

Parameter	Type	Description
company_province	String	Province Minimum: 1 Maximum: 255
company_city	String	City Minimum: 1 Maximum: 32
company_name	String	Company name Minimum: 1 Maximum: 128
create_time	Long	CSR creation time. Minimum: 13 Maximum: 20

Status code: 401**Table 4-86** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-87** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500

Table 4-88 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{
  "name" : "CSRxxxx"
}
```

Example Responses

Status code: 200

Normal response.

```
{
  "id" : "48e392628b0f47769e47d91acc7654a5",
  "name" : "xxxx",
  "domain_name" : "xxx.com",
  "sans" : "",
  "private_key_algo" : "RSA_2048",
  "usage" : "ENTERPRISE",
  "company_country" : "CN",
  "company_province" : "Beijing",
  "company_city" : "Beijing",
  "company_name" : "company",
  "create_time" : 1735804566545,
  "update_time" : 1735804566545
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.4.5 Deleting a CSR

Function

Delete CSR

URI

DELETE /v3/scm/csr/{id}

Table 4-89 Path Parameters

Parameter	Mandatory	Type	Description
id	Yes	String	CSR ID. Minimum: 16 Maximum: 40

Request Parameters

Table 4-90 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Response Parameters

Status code: 204

Normal response.

Status code: 401

Table 4-91 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403

Table 4-92 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-93** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

None

Example Responses

Status code: 401

Authentication failed.

```
{  
  "error_code" : "SCM.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 403

Access denied.

```
{  
  "error_code" : "SCM.XXX",  
}
```

```
{  
  "error_msg" : "XXX"  
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{  
  "error_code" : "SCM.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
204	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.4.6 Upload CSR

Function

Upload CSR

URI

POST /v3/scm/csr/upload

Request Parameters

Table 4-94 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Table 4-95 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	User-defined CSR name. Minimum: 0 Maximum: 63
csr	Yes	String	Certificate CSR file Minimum: 0 Maximum: 2555
private_key	No	String	Certificate private key file Minimum: 0 Maximum: 63

Response Parameters

Status code: 200

Table 4-96 Response body parameters

Parameter	Type	Description
id	String	CSR ID. Minimum: 32 Maximum: 32
name	String	User-defined CSR name. Minimum: 1 Maximum: 63

Parameter	Type	Description
create_time	Long	CSR creation time. Minimum: 13 Maximum: 20

Status code: 401

Table 4-97 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403

Table 4-98 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500

Table 4-99 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{
  "name" : "csrxxxx",
  "csr" : "xxxxxx",
  "private_key" : "xxxxxx"
}
```

Example Responses

Status code: 200

Normal response.

```
{
  "id" : "474a519e2c884c34a2d01033a6493b3c",
  "name" : "xxx",
  "create_time" : 1685325399000
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```


Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.4.7 Querying a Private Key

Function

Query the private key.

URI

GET /v3/scm/csr/{id}/private-key

Table 4-100 Path Parameters

Parameter	Mandatory	Type	Description
id	Yes	String	CSR ID. Minimum: 32 Maximum: 32

Request Parameters

Table 4-101 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It 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. Minimum: 32 Maximum: 2097152

Response Parameters

Status code: 200

Table 4-102 Response body parameters

Parameter	Type	Description
private_key	String	Private key Minimum: 0 Maximum: 2555

Status code: 401

Table 4-103 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403

Table 4-104 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-105** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

None

Example Responses

Status code: 200

Normal response.

```
{  
  "private_key" : "xxxxxx"  
}
```

Status code: 401

Authentication failed.

```
{  
  "error_code" : "SCM.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.5 Certificate Lifecycle Management

4.1.5.1 Querying the Certificate List

Function

This API is used to query the certificate list by certificate name or bound domain name.

URI

GET /v3/scm/certificates

Table 4-106 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of certificate records on each page. The options are as follows: • 10: 10 certificate records can be displayed on each page. • 20: 20 certificate records can be displayed on each page. • 50: 50 certificate records can be displayed on each page. Minimum: 10 Maximum: 50 Default: 10
offset	No	Integer	Query offset. Minimum: 0 Maximum: 100 Default: 0
sort_dir	No	String	Sorting order. The returned certificates are listed by parameter sort_key . The options are as follows: • ASC: ascending order • DESC: descending order Default: DESC Minimum: 0 Maximum: 32
sort_key	No	String	Sorting criteria. The options are as follows: • certExpiredTime: Certificate expiration time. • certStatus: certificate status • certUpdateTime: Certificate update time. Default: certUpdateTime Minimum: 0 Maximum: 64

Parameter	Mandatory	Type	Description
status	No	String	Certificate status. The options are as follows: -ALL: All certificate statuses. • PAID: The certificate has been paid and needs to be applied for from the CA. • ISSUED: The certificate has been issued. • CHECKING: The certificate application is being reviewed. • CANCELCHECKING: The certificate application cancellation is being reviewed. • UNPASSED: The certificate application fails. • EXPIRED: The certificate has expired. • REVOKING: The certificate revocation application is being reviewed. • REVOKED: The certificate has been revoked. • UPLOAD: The certificate is being managed. • CHECKING_ORG: The organization verification is to be completed. • ISSUING: The certificate is to be issued. • SUPPLEMENTCHECKING: Additional domain names to be added for a multi-domain certificate are being reviewed. Default: ALL Minimum: 0 Maximum: 64
deploy_support	No	Boolean	Whether to filter only certificates that can be deployed. Default: false

Parameter	Mandatory	Type	Description
owned_by_self	No	Boolean	Whether the resource belongs to the current tenant. The options are as follows: • true: Only resources that belong to the current tenant are queried, excluding shared resources. • false: Query the current tenant and the resources shared with the tenant. Default: true Minimum: 0 Maximum: 64
expired_days_since	No	Integer	The certificate is within the validity period and expires in a maximum of xx days. Minimum: 0 Maximum: 1095 Default: 0

Request Parameters

Table 4-107 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token. Minimum: 32 Maximum: 2097152

Response Parameters

Status code: 200

Table 4-108 Response body parameters

Parameter	Type	Description
certificates	Array of CertificateDetail objects	For details, see data structure description of the CertificateDetail field. Array Length: 0 - 1000
total_count	Integer	Number of certificates. Minimum: 0 Maximum: 10000

Table 4-109 CertificateDetail

Parameter	Type	Description
id	String	Certificate ID. Minimum: 16 Maximum: 16
name	String	Certificate name. Maximum: 63 Minimum: 3
domain	String	Domain name bound to a certificate. Minimum: 1 Maximum: 255
sans	String	Additional domain name bound to a multi-domain certificate. Minimum: 1 Maximum: 4096
signature_algorithm	String	Signature algorithm. Minimum: 0 Maximum: 64
deploy_support	Boolean	Whether deployment is supported.
type	String	Certificate type. The options are: DV_SSL_CERT, DV_SSL_CERT_BASIC, EV_SSL_CERT, EV_SSL_CERT_PRO, OV_SSL_CERT, or OV_SSL_CERT_PRO Minimum: 1 Maximum: 128

Parameter	Type	Description
brand	String	Certificate authority. The value can be GLOBALSIGN, SYMANTEC, GEOTRUST or CFCA. Minimum: 1 Maximum: 255
expire_time	String	Certificate expiration time. Minimum: 1 Maximum: 32
domain_type	String	Zone type. The options are: • SINGLE_DOMAIN: Single domain names • WILDCARD: Wildcard domain names • MULTI_DOMAIN: Multiple domain names Minimum: 1 Maximum: 128
validity_period	Integer	Certificate validity period, in months. [CCM provides a solution for purchasing certificates with a multi-year validity period. This multi-year certificate takes effect by adding multiple SSL certificates with a validity period of one year. For example, a certificate with three years' validity period contains three SSL certificates with one-year validity period and the same specifications. The system automatically applies for a second certificate based on the information about the first certificate 30 days before the first certificate expires.] (tag:hws) Minimum: 12 Maximum: 12

Parameter	Type	Description
status	String	Certificate status. The options are as follows: • PAID: The certificate has been paid and needs to be applied for from the CA. • ISSUED: The certificate has been issued. • CHECKING: The certificate application is being reviewed. • CANCELCHECKING: The certificate application cancellation is being reviewed. • UNPASSED: The certificate application fails. • EXPIRED: The certificate has expired. • REVOKING: The certificate revocation application is being reviewed. • CANCLEREVOKING: The cancellation on certificate revocation is being reviewed. • REVOKED: The certificate has been revoked. • UPLOAD: The certificate is being managed. • SUPPLEMENTCHECKING: Additional domain names to be added for a multi-domain certificate are being reviewed. • CANCELSUPPLEMENTING: The cancellation on additional domain names to be added is being reviewed. Minimum: 0 Maximum: 64
domain_count	Integer	Number of domain names can be bound to a certificate. Minimum: 1 Maximum: 100

Parameter	Type	Description
wildcard_count	Integer	Number of wildcard domain names can be bound to a certificate. Minimum: 0 Maximum: 100
description	String	Certificate description Minimum: 0 Maximum: 255
domain_id	String	Account ID. Minimum: 0 Maximum: 100

Status code: 401**Table 4-110** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-111** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500

Table 4-112 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

None

Example Responses

Status code: 200

Normal return.

```
{
  "certificates" : [ {
    "id" : "scs1554192131150",
    "name" : "test",
    "domain" : "www.zx.com",
    "sans" : "a.zx.com;b.zx.com",
    "type" : "OV_SSL_CERT",
    "deploy_support" : true,
    "signature_algorithm" : "SHA256WITHRSA",
    "brand" : "GEOTRUST",
    "expire_time" : "2021-05-27 16:46:25.0",
    "domain_type" : "MULTI_DOMAIN",
    "validity_period" : 12,
    "status" : "ISSUED",
    "domain_count" : 2,
    "wildcard_count" : 0,
    "description" : null
  } ],
  "total_count" : 1
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal return.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.5.2 Importing a Certificate

Function

Import a certificate to CCM.

URI

POST /v3/scm/certificates/import

Request Parameters

Table 4-113 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token. Minimum: 32 Maximum: 2097152

Table 4-114 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Certificate name. Enter a string of 3 to 63 characters. Only letters, numbers, underscores (_), hyphens (-), and periods (.) are allowed. Minimum: 3 Maximum: 63
certificate	Yes	String	Certificate content, which can be an intermediate certificate or a root certificate. If the certificate_chain field is transferred to the certificate chain, this field is set to the certificate. Use the escape character \n or \r\n to replace carriage return and line feed characters. Minimum: 0 Maximum: 4096
certificate_chain	No	String	Certificate chain, which is optional and can be transferred through the certificate field. Use the escape character \n or \r\n to replace carriage return and line feed characters. Minimum: 0 Maximum: 8192

Parameter	Mandatory	Type	Description
private_key	Yes	String	Private key of a certificate. The private key protected by password cannot be uploaded. The carriage return character must be replaced with the escape character \n or \r\n. Minimum: 0 Maximum: 4096
duplicate_check	No	Boolean	Whether the same certificate can be uploaded. • true: The same certificate can be uploaded. • false: disagree

Response Parameters

Status code: 200

Table 4-115 Response body parameters

Parameter	Type	Description
certificate_id	String	Certificate ID. Minimum: 16 Maximum: 16

Status code: 401

Table 4-116 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-117** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-118** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{
  "name" : "test_cert",
  "certificate" : "-----BEGIN CERTIFICATE-----*****-----END CERTIFICATE-----BEGIN CERTIFICATE-----
*****-----END CERTIFICATE-----",
  "private_key" : "-----BEGIN RSA PRIVATE KEY-----*****-----END RSA PRIVATE KEY-----"
}
```

Example Responses**Status code: 200**

Normal return.

```
{
  "certificate_id" : "scs1600313391074"
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal return.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.5.3 Obtaining Details of a Certificate

Function

This API is used to query details about a certificate.

URI

GET /v3/scm/certificates/{certificate_id}

Table 4-119 Path Parameters

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	Certificate ID. Minimum: 16 Maximum: 16

Request Parameters

Table 4-120 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token. Minimum: 32 Maximum: 2097152

Response Parameters

Status code: 200

Table 4-121 Response body parameters

Parameter	Type	Description
id	String	Certificate ID. Minimum: 16 Maximum: 16

Parameter	Type	Description
status	String	Certificate status. The options are: • PAID: The certificate has been paid and needs to be applied for from the CA. • ISSUED: The certificate has been issued. • CHECKING: The certificate application is being reviewed. • CANCELCHECKING: The certificate application cancellation is being reviewed. • UNPASSED: The certificate application fails. • EXPIRED: The certificate has expired. • REVOKING: The certificate revocation application is being reviewed. • REVOKED: The certificate has been revoked. • UPLOAD: The certificate is being managed. • SUPPLEMENTCHECKING: Additional domain names to be added for a multi-domain certificate are being reviewed. • CANCELSUPPLEMENTING: The cancellation on additional domain names to be added is being reviewed. Minimum: 0 Maximum: 32
order_id	String	Order ID. Minimum: 0 Maximum: 63
name	String	Certificate name. Minimum: 3 Maximum: 63

Parameter	Type	Description
type	String	Certificate type. The options are: DV_SSL_CERT , DV_SSL_CERT_BASIC , EV_SSL_CERT , EV_SSL_CERT_PRO , OV_SSL_CERT , or OV_SSL_CERT_PRO Minimum: 0 Maximum: 32
brand	String	Certificate authority. The options are: GLOBALSIGN , SYMANTEC , GEOTRUST , or CFCA Minimum: 0 Maximum: 32
push_support	String	Whether a certificate can be pushed. Minimum: 0 Maximum: 32
revoke_reason	String	Reason for certificate revocation. Minimum: 0 Maximum: 255
signature_algorithm	String	Signature algorithm. Minimum: 0 Maximum: 64
issue_time	String	Time when the certificate was issued. If no valid value is obtained, this parameter is left blank. Minimum: 0 Maximum: 32
not_before	String	Time when the certificate takes effect. If no valid value is obtained, this parameter is left blank. Minimum: 0 Maximum: 32
not_after	String	Time when the certificate becomes invalid. If no valid value is obtained, this parameter is left blank. Minimum: 0 Maximum: 32

Parameter	Type	Description
validity_period	Integer	Certificate validity period, in months. [CCM provides a solution for purchasing certificates with a multi-year validity period. This multi-year certificate takes effect by adding multiple SSL certificates with a validity period of one year. For example, a certificate with three years' validity period contains three SSL certificates with one-year validity period and the same specifications. The system automatically applies for a second certificate based on the information about the first certificate 30 days before the first certificate expires.] (tag:hws) Minimum: 12 Maximum: 12
validation_method	String	Domain ownership verification method. The value can be DNS, FILE, or EMAIL. Minimum: 0 Maximum: 32
domain_type	String	Domain name type. The options are as follows: • SINGLE_DOMAIN: Single domain names • WILDCARD: Wildcard domain names • MULTI_DOMAIN: Multiple domain names Minimum: 0 Maximum: 32
multi_domain_type	String	Multi-domain name type. The options are as follows: • primary_single: primary single domain name • primary_wildcard: primary wildcard domain name Minimum: 0 Maximum: 32

Parameter	Type	Description
domain	String	Domain name bound to a certificate. Minimum: 0 Maximum: 255
sans	String	Additional domain name associated with the certificate Minimum: 0 Maximum: 4096
domain_count	Integer	Number of domain names can be bound to a certificate. Minimum: 1 Maximum: 100
wildcard_count	Integer	Number of additional domain names can be bound to a certificate. Minimum: 0 Maximum: 99
fingerprint	String	SHA-1 certificate fingerprint Minimum: 40 Maximum: 40
shared	Boolean	Shared resource or not
application_info	application_info object	Certificate application information.
description	String	Certificate description. Minimum: 0 Maximum: 255
authentication	Array of Authentication objects	Domain ownership verification information. For details, see data structure of the Authentication field. Array Length: 0 - 100

Table 4-122 application_info

Parameter	Type	Description
country	String	Country or region. Minimum: 0 Maximum: 255

Parameter	Type	Description
company_name	String	Company name. Minimum: 0 Maximum: 255
company_province	String	State/Province Minimum: 0 Maximum: 255
company_city	String	City where a company is located. Minimum: 0 Maximum: 255
applicant_name	String	Applicant name. Minimum: 0 Maximum: 255
applicant_phone	String	Phone number of an applicant. Minimum: 0 Maximum: 255
applicant_email	String	Email of an applicant. Minimum: 0 Maximum: 255
contact_name	String	Name of a technical contact. Minimum: 0 Maximum: 255
contact_phone	String	Phone number of the technical contact. Minimum: 0 Maximum: 255
contact_email	String	Email of a technical contact. Minimum: 0 Maximum: 255

Table 4-123 Authentication

Parameter	Type	Description
record_name	String	Name of a domain ownership verification value. Minimum: 0 Maximum: 255

Parameter	Type	Description
record_type	String	Type of the domain name verification value. Minimum: 0 Maximum: 255
record_value	String	Domain verification value. Minimum: 0 Maximum: 255
domain	String	Domain name mapping to the verification value Minimum: 0 Maximum: 255

Status code: 401**Table 4-124** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-125** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500

Table 4-126 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

None

Example Responses

Status code: 200

Normal return.

```
{
  "id" : "scs1590053258704",
  "order_id" : "CS20052117270N7V9",
  "name" : "scm-testing",
  "type" : "DV_SSL_CERT",
  "brand" : "SYMANTEC",
  "push_support" : "OFF",
  "revoke_reason" : null,
  "status" : "CHECKING_DOMAIN",
  "signature_algorithm" : null,
  "issue_time" : null,
  "not_before" : null,
  "not_after" : null,
  "validity_period" : 12,
  "validation_method" : "DNS",
  "domain_type" : "SINGLE_DOMAIN",
  "multi_domain_type" : null,
  "domain" : "hosting-*****.test.cn",
  "sans" : null,
  "domain_count" : 1,
```

```
"wildcard_count" : 0,
"fingerprint" : "185d687de3f44f2249d0e0f084efccb56b7c2cbe",
"enterprise_project_id" : "0",
"authentication" : [ {
  "record_name" : "_dnsauth.hosting-****.test.cn",
  "record_type" : "TXT",
  "record_value" : "201801040000001ytm4q*****cd8p7eg9ktlwfsord",
  "domain" : "hosting-****.test.cn"
} ]
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal return.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.5.4 Deleting a Certificate

Function

This API is used to delete a certificate from Huawei Cloud.

URI

DELETE /v3/scm/certificates/{certificate_id}

Table 4-127 Path Parameters

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	Certificate ID. Minimum: 16 Maximum: 16

Request Parameters

Table 4-128 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token. Minimum: 32 Maximum: 2097152

Response Parameters

Status code: 204

Normal return.

Status code: 401

Table 4-129 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-130** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-131** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

None

Example Responses

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
204	Normal return.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.5.5 Exporting a Certificate

Function

This API is used to export a certificate.

URI

POST /v3/scm/certificates/{certificate_id}/export

Table 4-132 Path Parameters

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	Certificate ID. Minimum: 16 Maximum: 16

Request Parameters

Table 4-133 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token. Minimum: 32 Maximum: 2097152

Response Parameters

Status code: 200

Table 4-134 Response body parameters

Parameter	Type	Description
entire_certificate	String	Certificate and certificate chain. Minimum: 1 Maximum: 12288
certificate	String	Certificate content, excluding the certificate chain. Minimum: 1 Maximum: 4096
certificate_chain	String	Certificate chain Minimum: 1 Maximum: 8192

Parameter	Type	Description
private_key	String	Private key of a certificate Minimum: 1 Maximum: 4096

Status code: 401

Table 4-135 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403

Table 4-136 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500

Table 4-137 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

None

Example Responses

Status code: 200

Normal return.

```
{
  "entire_certificate" : "-----BEGIN CERTIFICATE-----*****-----END CERTIFICATE-----BEGIN CERTIFICATE-----
*****-----END CERTIFICATE-----",
  "certificate" : "-----BEGIN CERTIFICATE-----*****-----END CERTIFICATE-----",
  "certificate_chain" : "-----BEGIN CERTIFICATE-----*****-----END CERTIFICATE-----",
  "private_key" : "-----BEGIN RSA PRIVATE KEY-----*****-----END RSA PRIVATE KEY-----"
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```


Status Codes

Status Code	Description
200	Normal return.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.6 Certificate Deployment Management

4.1.6.1 Pushing a Certificate

Function

This API is used to push an SSL certificate to another HUAWEI CLOUD service, such as Elastic Load Balance (ELB), Web Application Firewall (WAF), and Content Delivery Network (CDN).

URI

POST /v3/scm/certificates/{certificate_id}/push

Table 4-138 Path Parameters

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	Certificate ID. Minimum: 16 Maximum: 16

Request Parameters

Table 4-139 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token. Minimum: 32 Maximum: 2097152

Table 4-140 Request body parameters

Parameter	Mandatory	Type	Description
target_project	Yes	String	Region where the service you want to push a certificate to is deployed. Minimum: 1 Maximum: 255
target_service	Yes	String	Service to which the certificate is pushed. Currently, certificates can only be pushed to CDN, WAF, and ELB. Minimum: 1 Maximum: 64

Response Parameters

Status code: 204

Normal return.

Status code: 401

Table 4-141 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-142** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-143** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{  
  "target_service" : "waf",  
  "target_project" : "cn-north-7"  
}
```

Example Responses

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
204	Normal return.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.6.2 Pushing Certificates in Batches

Function

This API is used to push an SSL certificate to another Huawei Cloud service in batches, such as Elastic Load Balance (ELB), Web Application Firewall (WAF), and Content Delivery Network (CDN).

URI

POST /v3/scm/certificates/{certificate_id}/batch-push

Table 4-144 Path Parameters

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	Certificate ID. Minimum: 16 Maximum: 16

Request Parameters

Table 4-145 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token. Minimum: 32 Maximum: 2097152

Table 4-146 Request body parameters

Parameter	Mandatory	Type	Description
target_projects	Yes	Array of strings	Region where the service you want to push a certificate to is deployed, for example, CDN, ELB, or WAF. Minimum: 1 Maximum: 32 Array Length: 1 - 10
target_service	Yes	String	Service to which the certificate is pushed. Currently, certificates can only be pushed to CDN, WAF, and ELB. Minimum: 1 Maximum: 64

Response Parameters

Status code: 200

Table 4-147 Response body parameters

Parameter	Type	Description
results	Array of results objects	Deployment result Array Length: 1 - 10

Table 4-148 results

Parameter	Type	Description
project_name	String	Region name, for example, cn-north-7. Minimum: 0 Maximum: 63
cert_id	String	Certificate ID. Minimum: 0 Maximum: 255
message	String	Push result. Minimum: 0 Maximum: 255

Status code: 401

Table 4-149 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403

Table 4-150 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-151** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{
  "target_service": "waf",
  "target_projects": [ "cn-north-7" ]
}
```

Example Responses

Status code: 200

Normal response.

```
{
  "results": [ {
    "project_name": "cn-north-7",
    "cert_id": "scs16751254852691",
    "message": "success"
  } ]
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.6.3 Deploying Certificates

Function

This API is used to deploy an SSL certificate to another Huawei Cloud service, such as Elastic Load Balance (ELB), Web Application Firewall (WAF), and Content Delivery Network (CDN).

Constraints

- Upload a certificate and a test certificate with a validity period of three months. For other cloud services, the deployment fee is CNY30/domain.

URI

POST /v3/scm/certificates/{certificate_id}/deploy

Table 4-152 Path Parameters

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	Certificate ID. Minimum: 16 Maximum: 16

Request Parameters

Table 4-153 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token. Minimum: 32 Maximum: 2097152

Table 4-154 Request body parameters

Parameter	Mandatory	Type	Description
project_name	No	String	Name of the project where the resource to be deployed is located. If the resource is deployed in the main project, the value is the region ID. Minimum: 1 Maximum: 255
service_name	Yes	String	Service to which the certificate is pushed. Currently, certificates can only be pushed to CDN, WAF, and ELB. Minimum: 1 Maximum: 64

Parameter	Mandatory	Type	Description
resources	Yes	Array of DeployedResource objects	List of resources to be deployed. Array Length: 1 - 20

Table 4-155 DeployedResource

Parameter	Mandatory	Type	Description
id	No	String	Resource ID. This parameter is mandatory when WAF or ELB is deployed. Minimum: 0 Maximum: 63
type	No	String	Resource type. Currently, this parameter is required only when WAF resources are deployed. The value can be cloud for cloud mode or premium for dedicated mode. Minimum: 0 Maximum: 63
domain_name	No	String	Domain name to be deployed. Currently, this parameter is required only when CDN is deployed, that is, the domain name to be accelerated. The domain name must match the certificate. Minimum: 0 Maximum: 63
enterprise_project_id	No	String	ID of the enterprise project to which the resource to be deployed belongs. This parameter is mandatory only when WAF resources are deployed. Minimum: 0 Maximum: 63

Response Parameters

Status code: 200

Table 4-156 Response body parameters

Parameter	Type	Description
failure_list	Array of FaiureResource objects	List of resources that fail to be deployed. Array Length: 1 - 20

Table 4-157 FaiureResource

Parameter	Type	Description
resource	String	Information about the resource that fails to be deployed. When WAF or ELB is deployed, this field is the resource ID. When CDN is deployed, this field is the acceleration domain name. Minimum: 0 Maximum: 63
failure_info	String	Failure cause, which is generally the error code returned by the target service. Minimum: 0 Maximum: 255

Status code: 401**Table 4-158** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403

Table 4-159 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500**Table 4-160** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{
  "service_name": "ELB",
  "project_name": "cn-north-7",
  "resources": [ {
    "id": "982b8a6a6ebc43809d82a46ca99aaeb7"
  } ]
}
```

Example Responses

Status code: 200

Normal response.

```
{
  "failure_list": [ {
    "resource": "982b8a6a6ebc43809d82a46ca99aaeb7",
    "failure_info": "ELB.8904:certificate 982b8a6a6ebc43809d82a46ca99aaeb7 does not exist"
  } ]
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.1.6.4 Querying Deployed Resources

Function

Query the resources deployed for the issued and uploaded non-SM series cryptographic algorithm certificates.

URI

POST /v3/scm/deployed-resources

Request Parameters

Table 4-161 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API. The value of X-Subject-Token in the response header is the user token. Minimum: 32 Maximum: 2097152

Table 4-162 Request body parameters

Parameter	Mandatory	Type	Description
certificate_ids	Yes	Array of strings	Certificate ID list. Minimum: 16 Maximum: 16 Array Length: 1 - 50
service_names	Yes	Array of strings	Service name list. • WAF: Query WAF resources associated with a certificate. • CDN: Query the CDN resources associated with a certificate. • ELB: Query the resources associated with ELB (classic) of a certificate. • ALL: Query the resources of the preceding four services. Minimum: 0 Maximum: 5 Array Length: 1 - 50

Response Parameters

Status code: 200

Table 4-163 Response body parameters

Parameter	Type	Description
results	Array of ResultDetail objects	Request result list. For details, see data structure of the ResultDetail field. Array Length: 1 - 50

Table 4-164 ResultDetail

Parameter	Type	Description
certificate_id	String	Certificate ID. Minimum: 16 Maximum: 16
total_num	Integer	Number of resources deployed for the certificate in the current service. Minimum: 0 Maximum: 1000
deployed_resources	Array of DeployedResourceDetail objects	List of resources deployed under the current certificate. For details, see data structure of the DeployedResourceDetail field. Array Length: 0 - 100

Table 4-165 DeployedResourceDetail

Parameter	Type	Description
service	String	Name of the resource service where the certificate has been deployed. - WAF: The certificate is associated with WAF resources. - CDN: The certificate is associated with the resources of the content delivery network. - ELB: The certificate is associated with ELB (classic) resources. Minimum: 0 Maximum: 5
resource_num	Integer	Number of resources deployed for the certificate in the current service. Minimum: 0 Maximum: 1000

Parameter	Type	Description
resource_location	String	Global service or region-level service. Minimum: 0 Maximum: 63
region_resources	Array of RegionResourceDetail objects	Region resource list. For details, see data structure description of the RegionResourceDetail field. Array Length: 0 - 100

Table 4-166 RegionResourceDetail

Parameter	Type	Description
region_id	String	Region ID. If the service is a global service, set region_id to global . Other services are named based on the IAM. Minimum: 0 Maximum: 63
is_error	Boolean	Indicates whether an exception occurs in the response when the resource information of the current region is requested. • true: An exception occurs. The statistics of the current region are inaccurate. • false: No exception occurs. The statistics of the current region are correct.
resources	Array of ResourceDetail objects	Resource set. The identifier of each resource is in the format of resource ID + : + resource name . For details, see the data structure description of the ResourceDetail field. Array Length: 0 - 100

Table 4-167 ResourceDetail

Parameter	Type	Description
resource_id	String	Resource ID. Minimum: 0 Maximum: 63

Parameter	Type	Description
resource_name	String	Resource name. Options: Minimum: 0 Maximum: 63

Status code: 401**Table 4-168** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 403**Table 4-169** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Status code: 500

Table 4-170 Response body parameters

Parameter	Type	Description
error_code	String	Error code returned for an error request. Minimum: 3 Maximum: 36
error_msg	String	Error information returned for an error request. Minimum: 0 Maximum: 1024

Example Requests

```
{
  "certificate_ids" : [ "scs1665472591541" ],
  "service_names" : [ "WAF" ]
}
```

Example Responses

Status code: 200

Normal response.

```
{
  "results" : [ {
    "certificate_id" : "scs1665472591541",
    "total_num" : 1,
    "deployed_resources" : [ {
      "service" : "ELB",
      "resource_num" : 1,
      "resource_location" : "region",
      "region_resources" : [ {
        "region_id" : "cn-north-7",
        "is_error" : false,
        "resources" : [ {
          "resource_id" : "d93c9fe40959468eb2baf32590a1140a",
          "resource_name" : "xxx"
        } ]
      } ]
    } ]
  } ]
}
```

Status code: 401

Authentication failed.

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Access denied.

```
{
  "error_code" : "SCM.XXX",
}
```

```
{  
  "error_msg" : "XXX"  
}
```

Status code: 500

Failed to complete the request because of an internal server error.

```
{  
  "error_code" : "SCM.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
200	Normal response.
401	Authentication failed.
403	Access denied.
404	Access page not found.
500	Failed to complete the request because of an internal server error.

Error Codes

See [Error Codes](#).

4.2 Managing Private Certificates

4.2.1 Private CA Management

4.2.1.1 Querying the CA List

Function

This API is used to query the CA list.

URI

GET /v1/private-certificate-authorities

Table 4-171 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	The number of returned records. The default value is 10 . Minimum: 0 Maximum: 1000
name	No	String	The CA certificate name (CN) filter. This parameter is used to obtain the set of CA certificates whose names contain a specific value. Minimum: 1 Maximum: 64
offset	No	Integer	Index position. The query starts from the next data record indexed by this parameter. The default value is 0 . Minimum: 0
status	No	String	The CA certificate status. You can search CA certificates by status. ● PENDING: The CA certificate is to be activated. A CA certificate in this status cannot issue certificates. ● ACTIVED: The CA certificate is activated. A CA certificate in this status can issue certificates. ● DISABLED: The CA certificate is disabled. A CA certificate in this status cannot issue certificates. ● DELETED: The CA certificate is to be deleted as scheduled. A CA certificate in this status cannot issue certificates. ● EXPIRED: The CA certificate has expired. A CA certificate in this status cannot issue certificates.

Parameter	Mandatory	Type	Description
type	No	String	CA certificate types: • ROOT: a root CA certificate • SUBORDINATE: a subordinate CA certificate
sort_key	No	String	Sorting attribute. The following attributes are available now: • create_time: Time the certificate was created (default) • common_name: The certificate name • ca_type: The CA certificate type • not_after: The certificate expiration time
sort_dir	No	String	Sorting direction. The options are as follows: • DESC: descending order (default) • ASC: ascending order

Request Parameters

Table 4-172 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 200

Table 4-173 Response body parameters

Parameter	Type	Description
total	Integer	Total number of CA certificates

Parameter	Type	Description
certificate_authorities	Array of CertificateAuthorities objects	The CA list. For details, see data structure for the CertificateAuthorities field.

Table 4-174 CertificateAuthorities

Parameter	Type	Description
ca_id	String	ID of the CA certificate Minimum: 36 Maximum: 36
type	String	The CA type can be: • ROOT: a root CA • SUBORDINATE: a subordinate CA
status	String	CA certificate status: • PENDING: The CA certificate is to be activated. A CA certificate in this status cannot issue certificates. • ACTIVED: The CA certificate is activated. A CA certificate in this status can issue certificates. • DISABLED: The CA certificate is disabled. A CA certificate in this status cannot issue certificates. • DELETED: The CA certificate is to be deleted as scheduled. A CA certificate in this status cannot issue certificates. • EXPIRED: The CA certificate has expired. A CA certificate in this status cannot issue certificates.
path_length	Integer	CA path length. NOTE Note: The path length of the generated root CA certificate is not limited, but this field is set to 7 in the database. The path length of a subordinate CA is specified by you when you create the subordinate CA. The default value is 0 . Minimum: 0 Maximum: 6

Parameter	Type	Description
issuer_id	String	The ID of the CA certificate that issues the certificate. For a root CA, the value of this parameter is null . Minimum: 36 Maximum: 36
issuer_name	String	The name of the parent CA certificate. For a root CA, the value of this parameter is null . Minimum: 1 Maximum: 64
key_algorithm	String	Key algorithm
signature_algorithm	String	Signature hash algorithm
freeze_flag	Integer	Freezing tag: • 0: The certificate is not frozen. • Other values: The certificate is frozen (The type of value is reserved).
gen_mode	String	Certificate generation method. • GENERATE: The certificate is generated through the PCA system. • IMPORT: The certificate is imported externally. • CSR: The CSR is imported externally and issued by the internal CA. The private key is not managed in PCA.
serial_number	String	Serial number of the certificate Minimum: 1 Maximum: 64
create_time	Long	Time the certificate was created. The value is a timestamp in milliseconds.
delete_time	Long	Time the certificate was deleted. The value is a timestamp in milliseconds.
not_before	Long	Time the certificate was created. The value is a timestamp in milliseconds.
not_after	Long	Time the certificate expires. The value is a timestamp in milliseconds.
distinguished_name	DistinguishedName object	Certificate name. For details, see data structure for the DistinguishedName field.

Parameter	Type	Description
crl_configuration	ListCrlConfiguration object	Certificate CRL. For details, see data structure for the ListCrlConfiguration field.

Table 4-175 DistinguishedName

Parameter	Type	Description
common_name	String	Common certificate name (CN). Minimum: 1 Maximum: 64
country	String	Country code, which must comply with the regular expression "[A-Za-z]{2}". Minimum: 2 Maximum: 2
state	String	State or city name. Minimum: 1 Maximum: 128
locality	String	Country/Region. Minimum: 1 Maximum: 128
organization	String	Organization name. Minimum: 1 Maximum: 64
organizational_unit	String	Organization Unit (OU). Minimum: 1 Maximum: 64

Table 4-176 ListCrlConfiguration

Parameter	Type	Description
enabled	Boolean	Whether to enable the gray release for the CRL. • true • false

Parameter	Type	Description
crl_name	String	Name of the CRL. NOTE If you do not specify this parameter, the system uses the ID of the parent CA that issues the current certificate by default.
obs_bucket_name	String	OBS bucket name.
valid_days	Integer	CRL update interval, in days. This parameter is mandatory when the CRL release function is enabled. Minimum: 7 Maximum: 30
crl_dis_point	String	The address of the CRL file in the OBS bucket. NOTE This parameter is composed of crl_name , obs_bucket_name , and OBS address.

Status code: 400**Table 4-177** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401**Table 4-178** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-179** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-180** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-181** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to query the CA certificate list, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

GET https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities

Example Responses

Status code: 200

Request succeeded.

```
{
  "total": 2,
  "certificate_authorities": [ {
    "signature_algorithm": "SHA384",
    "issuer_id": null,
    "issuer_name": null,
    "not_after": 1678159435000,
    "not_before": 1646623375000,
    "status": "ACTIVED",
    "freeze_flag": 0,
    "gen_mode": "GENERATE",
    "serial_number": "202203070322544291829058",
    "distinguished_name": {
      "country": "cn",
      "state": "shanghai",
      "locality": "shanghai",
      "organization": "shanghai",
      "organizational_unit": "shanghai",
      "common_name": "CSR_123"
    },
    "key_algorithm": "EC384",
    "create_time": 1646623375000,
    "delete_time": null,
    "ca_id": "a6bbf0be-79f3-4f66-858a-0fdc96dfcbe",
    "type": "ROOT",
    "path_length": 7,
    "crl_configuration": {
      "enabled": false,
      "obs_bucket_name": null,
      "valid_days": null,
      "crl_name": null,
      "crl_dis_point": null
    }
  }, {
    "signature_algorithm": "SHA256",
    "issuer_id": null,
    "issuer_name": null,
    "not_after": 1727492412000,
    "not_before": 1632797952000,
    "status": "ACTIVED",
    "freeze_flag": 0,
    "gen_mode": "GENERATE",
```

```
"serial_number" : "202109280259122080649087",
"distinguished_name" : {
  "country" : "CN",
  "state" : "Sichuan",
  "locality" : "Chengdu",
  "organization" : "Huawei",
  "organizational_unit" : "CloudBU",
  "common_name" : "pca-ca"
},
"key_algorithm" : "RSA2048",
"create_time" : 1632797953000,
"delete_time" : null,
"ca_id" : "fb7bd6a6-6a11-4a58-8710-a3c0a620aedc",
"type" : "ROOT",
"path_length" : 7,
"crl_configuration" : {
  "enabled" : false,
  "obs_bucket_name" : null,
  "valid_days" : null,
  "crl_name" : null,
  "crl_dis_point" : null
}
}]
}
```

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.1.2 Creating a CA

Function

This API is used to create a CA. If you wish to:

- Create a root CA, configure mandatory parameters based on the parameter description.
- Create a subordinate CA and activate its certificate, configure mandatory parameters based on the parameter description.
- Create a subordinate CA, but not want to activate its certificate, exclude one of the following parameters in the request body: **issuer_id**, **signature_algorithm**, and **validity**.

URI

POST /v1/private-certificate-authorities

Request Parameters

Table 4-182 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Table 4-183 Request body parameters

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the CA you want to create: • ROOT: a root CA • SUBORDINATE: a subordinate CA
distinguished_name	Yes	DistinguishedName object	Certificate name. For details, see data structure for the DistinguishedName field.
key_algorithm	Yes	String	Key algorithm. The options are as follows: • RSA2048: RSA algorithm with the key length of 2048 bits • RSA4096: RSA algorithm with the key length of 4096 bits • EC256: Elliptic Curve Digital Signature Algorithm (ECDSA) with the key length of 256 bits • EC384: Elliptic Curve Digital Signature Algorithm (ECDSA) with the key length of 384 bits
validity	No	Validity object	Validity period of a certificate. The options are as follows: • If you want to create a root CA, this parameter is mandatory. • If you want to create a subordinate CA and activate it, this parameter is mandatory. • If you want to create a subordinate CA but not activate it immediately, this parameter is not required. You can specify this parameter when activating the subordinate CA. NOTE For details, see data structure description of the Validity field.

Parameter	Mandatory	Type	Description
issuer_id	No	String	ID of the parent CA. The options are as follows: • If you want to create a root CA, this parameter is not required because a root CA is a self-signed certificate and does not have a parent CA. • If you want to create a subordinate CA and activate it, this parameter is mandatory. • If you want to create a subordinate CA but not activate it immediately, this parameter is not required. You can specify this parameter when activating the subordinate CA. Minimum: 36 Maximum: 36

Parameter	Mandatory	Type	Description
path_length	No	Integer	Length of the CA certificate path. The options are as follows: • If you want to create a root CA, this parameter is not required by default. This means CA path length is not limited and you can expand the CA hierarchies. To limit the CA hierarchies, you can specify this parameter when creating a subordinate CA. • If you want to create a subordinate CA and activate it, specify this parameter based on your need. Default value: 0 • If you want to create a subordinate CA but not need to activate it, this parameter is not required. You can specify this parameter when you activate the subordinate CA. Minimum: 0 Maximum: 6

Parameter	Mandatory	Type	Description
signature_algorithm	No	String	Signature hash algorithm. • There are three scenarios: – If you want to create a root CA, this parameter is mandatory. – If you want to create a subordinate CA and activate it, this parameter is mandatory. – If you want to create a subordinate CA but not activate it immediately, this parameter is not required. You can specify this parameter when activating the subordinate CA. • The options are as follows: – SHA256 – SHA384 – SHA512

Parameter	Mandatory	Type	Description
key_usages	No	Array of strings	Key usage. For details, see 4.2.1.3 in RFC 5280. • digitalSignature: The key can be used as a digital signature. • nonRepudiation: The key can be used for non-repudiation. • keyEncipherment: The key can be for key encryption. • dataEncipherment: The key can be used for data encryption. • keyAgreement: The key can be used for key negotiation. • keyCertSign: The key can issue a certificate. • cRLSign: The key can issue a certificate revocation list (CRL). • encipherOnly: The key is used only for encryption. • decipherOnly: The key is used only for decryption. NOTE The default values are as follows: • Root CA certificates: [digitalSignature, keyCertSign, cRLSign], which cannot be changed. The value you specified is ignored. • Subordinate CA certificates: [digitalSignature, keyCertSign, cRLSign], which can be customized.
crl_configuration	No	CrlConfiguration object	Certificate CRL. For details, see data structure for the CrlConfiguration field.

Table 4-184 DistinguishedName

Parameter	Mandatory	Type	Description
common_name	Yes	String	Common certificate name (CN). Minimum: 1 Maximum: 64
country	Yes	String	Country code, which must comply with the regular expression "[A-Za-z]{2}". Minimum: 2 Maximum: 2
state	Yes	String	State or city name. Minimum: 1 Maximum: 128
locality	Yes	String	Country/Region. Minimum: 1 Maximum: 128
organization	Yes	String	Organization name. Minimum: 1 Maximum: 64
organizational_unit	Yes	String	Organization Unit (OU). Minimum: 1 Maximum: 64

Table 4-185 Validity

Parameter	Mandatory	Type	Description
type	Yes	String	Validity period type, which is mandatory. The options are as follows: • YEAR: Year (12 months) • MONTH: Month (31 days) • DAY: Day • HOUR: Hour

Parameter	Mandatory	Type	Description
value	Yes	Integer	The certificate validity period. The value of this parameter varies depending on the value of type : • Root CA certificates: no longer than 30 years • Subordinate CA or private certificates: no longer than 20 years
start_from	No	Integer	Start time. The options are as follows: • The value is a timestamp in milliseconds. For example, 1645146939688 indicates 2022-02-18 09:15:39. • The value of start_from cannot be earlier than the result of the value of current_time minus 5 minutes.

Table 4-186 CrlConfiguration

Parameter	Mandatory	Type	Description
enabled	Yes	Boolean	Whether to enable the gray release function of CRL. • true • false
crl_name	No	String	Name of the certificate revocation list. NOTE If you do not specify this parameter, the system uses the ID of the parent CA that issues the current certificate by default.

Parameter	Mandatory	Type	Description
obs_bucket_name	No	String	OBS bucket name. NOTE To enable the CRL release function: - This parameter is mandatory. You must have created an agency to authorize the PCA service to access OBS. For details, see Certificate Revocation > Checking the Agency Permission and Certificate Revocation > Creating an Agency in this document. - The specified OBS bucket must exist. Otherwise, an error will be reported.
valid_days	No	Integer	CRL update interval, in days. This parameter is mandatory when the CRL release function is enabled. Minimum: 7 Maximum: 30

Response Parameters

Status code: 200

Table 4-187 Response body parameters

Parameter	Type	Description
ca_id	String	ID of the CA certificate being issued. Minimum: 36 Maximum: 36

Status code: 400

Table 4-188 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-189 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403

Table 4-190 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404

Table 4-191 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500

Table 4-192 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to create a CA certificate, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

POST https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities

```
{
  "type": "ROOT",
  "key_algorithm": "RSA4096",
  "signature_algorithm": "SHA512",
  "distinguished_name": {
    "common_name": "demoRootRSA",
    "country": "CN",
    "locality": "chengdu",
    "organization": "HW",
    "organization_unit": "dew",
    "state": "sichuan"
  },
  "validity": {
    "type": "YEAR",
    "value": 3
  },
  "crl_configuration": {
    "enabled": false,
    "obs_bucket_name": "demoBucket",
    "valid_days": 8
  }
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "ca_id" : "66504812-fedc-414a-9b7c-4c1836398524"
}
```

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.

Status Code	Description
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.1.3 Querying the CA Quota

Function

This API is used to query the CA quota.

URI

GET /v1/private-certificate-authorities/quotas

Request Parameters

Table 4-193 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 200

Table 4-194 Response body parameters

Parameter	Type	Description
quotas	Quotas object	Certificate quota. For details, see data structure for the Quotas field.

Table 4-195 Quotas

Parameter	Type	Description
resources	Array of Resources objects	Resource quota list. For details, see data structure for the Resources field.

Table 4-196 Resources

Parameter	Type	Description
type	String	Certificate type CERTIFICATE_AUTHORITY: CA certificate. CERTIFICATE: private certificate.
used	Integer	Used quota
quota	Integer	Total quota CERTIFICATE_AUTHORITY: 100 CERTIFICATE: 100,000

Status code: 400**Table 4-197** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401**Table 4-198** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403

Table 4-199 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-200** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-201** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to query the CA certificate quota, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

GET https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/quotas

Example Responses

Status code: 200

Request succeeded.

```
{
  "quotas" : {
    "resources" : [ {
      "type" : "CERTIFICATE_AUTHORITY",
      "used" : 25,
      "quota" : 100
    } ]
  }
}
```

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.1.4 Querying CA Details

Function

This API is used to query details about a CA.

URI

GET /v1/private-certificate-authorities/{ca_id}

Table 4-202 Path Parameters

Parameter	Mandatory	Type	Description
ca_id	Yes	String	ID of the CA certificate Minimum: 36 Maximum: 36

Request Parameters

Table 4-203 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 200

Table 4-204 Response body parameters

Parameter	Type	Description
ca_id	String	ID of the CA certificate Minimum: 36 Maximum: 36
type	String	The CA type can be: • ROOT: a root CA • SUBORDINATE: a subordinate CA
status	String	CA certificate status: • PENDING: The CA certificate is to be activated. A CA certificate in this status cannot issue certificates. • ACTIVED: The CA certificate is activated. A CA certificate in this status can issue certificates. • DISABLED: The CA certificate is disabled. A CA certificate in this status cannot issue certificates. • DELETED: The CA certificate is to be deleted as scheduled. A CA certificate in this status cannot issue certificates. • EXPIRED: The CA certificate has expired. A CA certificate in this status cannot issue certificates.
path_length	Integer	CA path length. NOTE Note: The path length of the generated root CA certificate is not limited, but this field is set to 7 in the database. The path length of a subordinate CA is specified by you when you create the subordinate CA. The default value is 0 . Minimum: 0 Maximum: 6
issuer_id	String	The ID of the CA certificate that issues the certificate. For a root CA, the value of this parameter is null . Minimum: 36 Maximum: 36

Parameter	Type	Description
issuer_name	String	The name of the parent CA certificate. For a root CA, the value of this parameter is null . Minimum: 1 Maximum: 64
key_algorithm	String	Key algorithm
signature_algorithm	String	Signature hash algorithm
freeze_flag	Integer	Freezing tag: • 0: The certificate is not frozen. • Other values: The certificate is frozen (The type of value is reserved).
gen_mode	String	Certificate generation method. • GENERATE: The certificate is generated through the PCA system. • IMPORT: The certificate is imported externally. • CSR: The CSR is imported externally and issued by the internal CA. The private key is not managed in PCA.
serial_number	String	Serial number of the certificate Minimum: 1 Maximum: 64
create_time	Long	Time the certificate was created. The value is a timestamp in milliseconds.
delete_time	Long	Time the certificate was deleted. The value is a timestamp in milliseconds.
not_before	Long	Time the certificate was created. The value is a timestamp in milliseconds.
not_after	Long	Time the certificate expires. The value is a timestamp in milliseconds.
distinguished_name	DistinguishedName object	Certificate name. For details, see data structure for the DistinguishedName field.
crl_configuration	ListCrlConfiguration object	Certificate CRL. For details, see data structure for the ListCrlConfiguration field.

Table 4-205 DistinguishedName

Parameter	Type	Description
common_name	String	Common certificate name (CN). Minimum: 1 Maximum: 64
country	String	Country code, which must comply with the regular expression "[A-Za-z]{2}". Minimum: 2 Maximum: 2
state	String	State or city name. Minimum: 1 Maximum: 128
locality	String	Country/Region. Minimum: 1 Maximum: 128
organization	String	Organization name. Minimum: 1 Maximum: 64
organizational_unit	String	Organization Unit (OU). Minimum: 1 Maximum: 64

Table 4-206 ListCrlConfiguration

Parameter	Type	Description
enabled	Boolean	Whether to enable the gray release for the CRL. • true • false
crl_name	String	Name of the CRL. NOTE If you do not specify this parameter, the system uses the ID of the parent CA that issues the current certificate by default.
obs_bucket_name	String	OBS bucket name.

Parameter	Type	Description
valid_days	Integer	CRL update interval, in days. This parameter is mandatory when the CRL release function is enabled. Minimum: 7 Maximum: 30
crl_dis_point	String	The address of the CRL file in the OBS bucket. NOTE This parameter is composed of crl_name , obs_bucket_name , and OBS address.

Status code: 400**Table 4-207** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401**Table 4-208** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403

Table 4-209 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-210** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-211** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to query details about a CA, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

GET https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/4c0e772e-a30c-4029-b929-b7acb04143f7

Example Responses

Status code: 200

Request succeeded.

```
{
  "signature_algorithm": "SHA384",
  "issuer_id": "928bd666-e879-448a-ab54-82f6ae3d81e0",
  "issuer_name": "Huawei IT Root CA",
  "not_after": 1647567892000,
  "not_before": 1645148632000,
  "status": "ACTIVED",
  "freeze_flag": 0,
  "gen_mode": "CSR",
  "serial_number": "202202180143522338893611",
  "distinguished_name": {
    "country": "CN",
    "state": "guangdong",
    "locality": "shenzhen",
    "organization": "Huawei",
    "organizational_unit": "IT",
    "common_name": "Huawei IT Root CA"
  },
  "key_algorithm": "RSA",
  "create_time": 1645148633000,
  "delete_time": null,
  "ca_id": "4c0e772e-a30c-4029-b929-b7acb04143f7",
  "type": "SUBORDINATE",
  "path_length": 0,
  "crl_configuration": {
    "enabled": false,
    "obs_bucket_name": null,
    "valid_days": null,
    "crl_name": null,
    "crl_dis_point": null
  }
}
```

Status code: 400

Invalid request parameters.

```
{
  "error_code": "PCA.XXX",
  "error_msg": "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code": "PCA.XXX",
  "error_msg": "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code": "PCA.XXX",
  "error_msg": "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.1.5 Deleting a Private CA

Function

This API is used to delete a CA as scheduled. The scheduled time range can be 7 to 30 days.

** NOTE**

Only the CAs in the **Pending activation** or **Disabled** status can be deleted. If a CA certificate is in the **Pending activation** status, the CA certificate will be deleted immediately, scheduled deletion is not supported.

URI

DELETE /v1/private-certificate-authorities/{ca_id}

Table 4-212 Path Parameters

Parameter	Mandatory	Type	Description
ca_id	Yes	String	ID of the CA certificate you plan to delete. Minimum: 36 Maximum: 36

Table 4-213 Query Parameters

Parameter	Mandatory	Type	Description
pending_days	Yes	String	Delayed deletion time, in days Minimum: 7 Maximum: 30

Request Parameters

Table 4-214 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 400

Table 4-215 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-216 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-217** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-218** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500

Table 4-219 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to delete a CA certificate as scheduled, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
DELETE https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/4c0e772e-a30c-4029-b929-b7acb04143f7?pending_days=7
```

Example Responses

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
204	Request succeeded, but no response body returned.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.1.6 Activating a CA

Function

This API is used to activate a CA.

NOTE

You can activate a certificate only when it is in the **Pending activation** status.

URI

POST /v1/private-certificate-authorities/{ca_id}/activate

Table 4-220 Path Parameters

Parameter	Mandatory	Type	Description
ca_id	Yes	String	ID of the subordinate CA you want to activate. Minimum: 36 Maximum: 36

Request Parameters

Table 4-221 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Table 4-222 Request body parameters

Parameter	Mandatory	Type	Description
issuer_id	Yes	String	ID of the parent CA. Minimum: 1 Maximum: 64
path_length	Yes	Integer	Path length. Minimum: 0 Maximum: 6
signature_algorithm	Yes	String	Signature hash algorithm. The options are as follows: • SHA256 • SHA384 • SHA512
validity	Yes	Validity object	Certificate validity. For details, see data structure for the Validity field.

Table 4-223 Validity

Parameter	Mandatory	Type	Description
type	Yes	String	Validity period type, which is mandatory. The options are as follows: • YEAR: Year (12 months) • MONTH: Month (31 days) • DAY: Day • HOURL: Hour

Parameter	Mandatory	Type	Description
value	Yes	Integer	The certificate validity period. The value of this parameter varies depending on the value of type : • Root CA certificates: no longer than 30 years • Subordinate CA or private certificates: no longer than 20 years
start_from	No	Integer	Start time. The options are as follows: • The value is a timestamp in milliseconds. For example, 1645146939688 indicates 2022-02-18 09:15:39. • The value of start_from cannot be earlier than the result of the value of current_time minus 5 minutes.

Response Parameters

Status code: 400

Table 4-224 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-225 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-226** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-227** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500

Table 4-228 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to activate a CA certificate, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
POST https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/4c0e772e-a30c-4029-b929-b7acb04143f7/activate
```

```
{
  "signature_algorithm" : "SHA256",
  "validity" : {
    "type" : "YEAR",
    "value" : 1
  },
  "path_length" : 3,
  "issuer_id" : "c718fe5f-d44a-467f-80f1-948348ff4132"
}
```

Example Responses

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
204	Request succeeded, but no response body returned.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.1.7 Exporting a CSR of a CA

Function

This API is used to export a Certificate Signing Request (CSR) of a CA.

 NOTE

A CSR can be exported only when the corresponding CA is in the **Pending activation** status.

URI

GET /v1/private-certificate-authorities/{ca_id}/csr

Table 4-229 Path Parameters

Parameter	Mandatory	Type	Description
ca_id	Yes	String	ID of the subordinate CA that has not been activated. Minimum: 36 Maximum: 36

Request Parameters

Table 4-230 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 200

Table 4-231 Response body parameters

Parameter	Type	Description
csr	String	Content of the CSR. The content varies depending on how you obtain the CSR: - If you use an API to obtain the CSR, the newline characters in it have been replaced with <code>\r\n</code>. - If you export the CSR from the console, the CSR is in PEM format. Minimum: 1 Maximum: 4096

Status code: 400

Table 4-232 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-233 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403

Table 4-234 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404

Table 4-235 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500

Table 4-236 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to export a CSR of a CA certificate, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
GET https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/4c0e772e-a30c-4029-b929-b7acb04143f7/csr
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "csr" : "-----BEGIN CERTIFICATE REQUEST-----\r
\nMIIBUDCB2AIBADBMRAwDgYDVQQDDAdDU1IsMTIzMQswCQYDVQQGEWJjbJERMA8G\r
\nA1UECAwlc2hhbmdoYWxkETAPBgNVBACMCHNoYW5naGFpMRIwEAYDVQQKDAIzaGFu\r
\nZyxoYWkwZjAQBgcqhkJOPQIBBgUrgQQAIGNiAAQl9M7bK+vys5x9mnfG3783aPRh\r
\nP/xqLPKVsRsQniC3vPZvlz9E7SasMfZLrXVK37QWhtAETgNG7NrQnwiOye0/8VZL\r
\nVX7ildM6CZY4SUYSa6TBUsXyGjOs514fjxbuT6gADAKBggqhkJOPQQDAgNnADBK\r
\nr\nAjBIQiPXU7TDDDwxrh\r
\n+JfZEYgmr61clQdE5GMozPDYime30zcuMnVrb9i3o/2BW+\r
\nr\n0IECMG0QWbAYh0LoqnmAYqlgTKK8nKsxm0xFuTRyfyxnWi8BpCvAGx803Qpa8EJV\r
\nr\nJTJcw==\r\n-----\r
\nEND CERTIFICATE REQUEST-----"
}
```

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
}
```



```
{  
  "error_msg" : "XXX"  
}
```

Status code: 401

Token required for the requested page.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 403

Authentication failed.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 404

No resources available or found.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 500

Internal service error.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.1.8 Disabling a Private CA

Function

This API is used to disable a private CA.

NOTE

You can disable a certificate only when it is in the **Activated** or **Expired** state.

URI

POST /v1/private-certificate-authorities/{ca_id}/disable

Table 4-237 Path Parameters

Parameter	Mandatory	Type	Description
ca_id	Yes	String	ID of the CA certificate you want to disable. Minimum: 36 Maximum: 36

Request Parameters

Table 4-238 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 400

Table 4-239 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401**Table 4-240** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-241** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-242** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500

Table 4-243 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to disable a CA certificate, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
POST https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/4c0e772e-a30c-4029-b929-b7acb04143f7/disable
```

Example Responses

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
204	Request succeeded, but no response body returned.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.1.9 Enabling a Private CA

Function

This API is used to enable a private CA.

 NOTE

Note: This operation is allowed only when the CA is in the **Disabled** status.

URI

POST /v1/private-certificate-authorities/{ca_id}/enable

Table 4-244 Path Parameters

Parameter	Mandatory	Type	Description
ca_id	Yes	String	ID of the CA you want to enable. Minimum: 36 Maximum: 36

Request Parameters

Table 4-245 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 400

Table 4-246 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-247 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403

Table 4-248 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-249** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-250** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to enable a CA, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
POST https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/4c0e772e-a30c-4029-b929-b7acb04143f7/enable
```

Example Responses

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
204	Request succeeded, but no response body returned.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.

Status Code	Description
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.1.10 Exporting a CA Certificate

Function

This API is used to export the CA certificate.

NOTE

Note: You can export a certificate only when it is in the **Activated** or **Expired** state.

URI

POST /v1/private-certificate-authorities/{ca_id}/export

Table 4-251 Path Parameters

Parameter	Mandatory	Type	Description
ca_id	Yes	String	ID of the CA certificate you want to export. Minimum: 36 Maximum: 36

Request Parameters

Table 4-252 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 200

Table 4-253 Response body parameters

Parameter	Type	Description
certificate	String	Certificate content. NOTE - If you use an API to obtain the certificate, the newline characters in it have been replaced with \r\n. - If you export the certificate from the console, the certificate is in PEM format. Minimum: 1 Maximum: 4096
certificate_chain	String	The content of the certificate chain. The sequence of the certificate chain (from top to bottom) is as follows: intermediate certificate >... > root certificate. NOTE - If you use an API to obtain the certificate chain, the newline characters in it have been replaced with \r\n. - If you export the certificate chain from the console, the certificate chain is in PEM format. Minimum: 1 Maximum: 2097152

Status code: 400**Table 4-254** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-255 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-256** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-257** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500

Table 4-258 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to export a CA certificate, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

POST <https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/4c0e772e-a30c-4029-b929-b7acb04143f7/export>

Example Responses

Status code: 200

Request succeeded.

```

"certificate" : "-----BEGIN CERTIFICATE-----\r
\nMIIDCzCCAlugAwIBAgIKKsxpff9kUc96dDANBgkqhkiG9w0BAQsFADBOMQowCAYD\r
\nVQZDDAE3MQswCQYDVQZGQwEwJDTjEjMA4GA1UECwA2UjIjaHVhbmRlEQMA4GA1UEBwwH\r
\nQ2hlbmddkTEPMA0GA1UECgwGSVhd2VpMB4XDTrMTA2NDMxMDA0NDMxMDA0XDTlYMTAx\r
\nNDA4NDQxMwVowPjELMAkGA1UEAwwCWVUxXzAjBgNVBAYTAmNuMQowCAYDVQZDAEz\r
\nMQowCAYDVQZDAE0MQowCAYDVQZQDAE1MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8A\r
\nMIIBBgKCAQEAlNzyv9qhA711c/99lNO80/uSXJoL1EkljBtVJB7vqkDf0Ejs20A/r\nfQoHEVTuHams9XLvrlu\r
+Yt0s4QO8hjbnLI9mmerRRJK0pp+tBmCS3ZFoC23c5vz/\r\ny+l0t+YC2JYhvaOF823y0WCz+Nb065nIKH6/\r
duo0ndF+3c5YnkibonBNyDV+DB/\r\nhdkM0nrIq107cNpYDwPfd5YiDL+4Oh+ky1xGLZCObgsX134zTf6E7bxJ1/\r
iDZjwJ\r\nndpf6OUQONmIcT49993YCrMDisjJ2OwW9e41S7D2xy/1xmPwWwnid1WHOKTfK4cyl\r
\r\n2PHaHh3FTXIGYjVgSg3KfujauVOFpZ9bTwIDAQABo2MwYTAfBgNVHSMEGDAWgBTu\r
\r\nY36JXjwX7XiLcwktUto8r24S52DADBgNVHQ4EFgQUyuAS2HonxOwDQIPOgPIMFQ9rr\r
\r\nGiMwEgYDVR0TAQH/BAgwBgEB/wIBADALBgNVHQ8EBAMCAYYDQYJKoZlhcNAQEL\r
\r\nBQADAggEBALEa9Hf5iGCFKLpf30KCBelEgJ3ZxLSBOgsn8UkulB62FyUgnneAmY\r
\r\nnuWHY0xbamIs8Dgt1GtQrfh3kKq2rfjdasFvrQnAQkjin61O16nbCbWS2H+sqy7Ae\r
\r\nrTJZWefx1eAv8XH7g491C5Rb5TGykk/bFm7RvGhr35ri+nlcqiDmjO44zHr1aPvm\r
\r\nns4vA06UQFvLWfY2wiynZ6f+PuvsPraL7kQVJqsel8TyPzMWL/hc3VkXEX6gqPm\r
\r\nnbzTYPaxa63FCETXtXNldf/QWX71/pUtQ2U57mHi+xjNk8/Spf1y4zH1rANkmw\r
\r\nntBjeKGRpH44Kir3wsbdXRYbBe7POZo=Ur\n-----END CERTIFICATE-----",
"certificate_chain" : "-----BEGIN CERTIFICATE-----\r
\nMIIDCzCCAlugAwIBAgIKKsxpOVE4imyq4zANBgkqhkiG9w0BAQsFADBOMQowCAYD\r
\nVQZDDAE3MQswCQYDVQZGQwEwJDTjEjMA4GA1UECwA2UjIjaHVhbmRlEQMA4GA1UEBwwH\r
\nQ2hlbmddkTEPMA0GA1UECgwGSVhd2VpMB4XDTrMTA2NDMxMDA0NDMxMDA0XDTlYMTAx\r
\nNTAyNTMzMwVowTjEKMAgGA1UEAwwBNzELMAkGA1UEBhMCQ04xEDAQBgNVBAGMB1Np\r
\nY2h1YW4xEDAQBgNVBAcMB0NoZW5nZHUxXzANBgNVBAoMBkh1YXdlTCCASlwdQYJ\r
\n\r\nKoZlhcNAQEBAQADAggEPADCAQoCggEBAMH7+ovgT/xb8fBLAG0yBs9QERnfgdLL\r
\r\n5BFgljNP0Ashw2k5EaWq1qDf6o4AqGfJhPd2kLy5ZW7C3q6vuqTD3Uj3tX98N2\r
\r\ns1JgmLExX7A5dskv6hsoKAmrjGdDBEs2Jl/2FRnxO8uFnOuSLqvPUvLR7c\r
\r\n\r\nldioDq4WqVyl4sXAOuq7xBS8GoTsGLANn8eYHVNsZcSZ9E0qEiWx3WqhPh9Ncto949\r
\r\n\r\nVuDVqkQ9QJfJo/\r
yEO6+KhxqyVDWQwdl3UsyzjqGtFzKQksLUQ0AUec4IsK/VWypG\r\n\r\nnu34jEkaWGv72CmFGoJEK/K/\r
WoYyzKyCmnS3Wcz4ETlIRG5fb7aqP56sCAwEAAANT\r\n\r\nr\nMFewHwYDVR0JBgBgwFoAU7mN+iv48F\r
+14i3MCrV/LaPEWWudgWYDVR0OBBEYFO5j\r\n\r\nrfnolePBFteltzAq1S2jxFlrnYMA8GA1UEwEB/\r
wQFMCA8wDQYJKoZlhcNAQEL\r

```

```
\nBQADggEBACHJruSBkb8gA0VajkTZWN7QOVUoJPA2TdOmIlnkzxyR5sXkOmsllHLp\r\njzze9LBKbkMl4/  
ZfWvLUde7wKJzV208E1c3mf0iZFqRJOMs+o/DStVw/ap+98ML\r\n4oeVjk2y/bn7lQTL2bvnEi/  
+iSzmz1ClInRUyfEWBW2aVFgJrm/ZaFTiEb5jldzm\r\nns75YNCvln3eKp+yOQ8fyG7mKvvn3nlRKfMTv+  
+bLLUh9or/e/phWkUj0gtSyDEn\r  
\nyOnVuhxyveLwoag27U8THe5E4Ygrrg98v2eGNFyGMmtsXXKNgFSf5FBqvyED9d61\r\nnZ86vYp/  
N2dbauF7uUUaX5RbtFANYFU0=\r\n-----END CERTIFICATE-----"  
}
```

Status code: 400

Invalid request parameters.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 401

Token required for the requested page.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 403

Authentication failed.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 404

No resources available or found.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 500

Internal service error.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.

Status Code	Description
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.1.11 Importing a CA Certificate

Function

This API is used to import a CA certificate. To use this API, the following conditions must be met:

- The certificate of the subordinate CA is in the **Pending activation** status.
- The certificate body you want to import must meet the following requirements:
 - When the certificate is issued, its certificate signature request must be exported from the PCA system.
 - Although the certificate chain is optional, importing the complete certificate chain is recommended so that you can export a complete certificate chain later.
 - The certificate body and certificate chain must be in PEM format.

URI

POST /v1/private-certificate-authorities/{ca_id}/import

Table 4-259 Path Parameters

Parameter	Mandatory	Type	Description
ca_id	Yes	String	ID of the CA certificate you want to import. Minimum: 36 Maximum: 36

Request Parameters

Table 4-260 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Table 4-261 Request body parameters

Parameter	Mandatory	Type	Description
certificate	Yes	String	Certificate content Minimum: 1 Maximum: 32768
certificate_chain	No	String	Certificate chain content Minimum: 0 Maximum: 2097152

Response Parameters

Status code: 400

Table 4-262 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-263 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-264** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-265** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500

Table 4-266 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to import a CA certificate, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
POST https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/4c0e772e-a30c-4029-b929-b7acb04143f7/import
```

```
{
  "certificate" : "-----BEGIN CERTIFICATE-----*****-----END CERTIFICATE-----",
  "certificate_chain" : "-----BEGIN CERTIFICATE-----*****-----END CERTIFICATE-----"
}
```

Example Responses

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
}
```

```
{  
  "error_msg" : "XXX"  
}
```

Status code: 500

Internal service error.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
204	Request succeeded, but no response body returned.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.1.12 Restoring a CA

Function

This API is used to restore a CA. After a CA is restored, its status changes from **Pending deletion** to **Disabled**.

 NOTE

Note: Only a CA in the **Pending deletion** status can be restored.

URI

POST /v1/private-certificate-authorities/{ca_id}/restore

Table 4-267 Path Parameters

Parameter	Mandatory	Type	Description
ca_id	Yes	String	ID of the CA certificate you want to restore. Minimum: 36 Maximum: 36

Request Parameters

Table 4-268 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 400

Table 4-269 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-270 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-271** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-272** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-273** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to restore a CA, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
POST https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/4c0e772e-a30c-4029-b929-b7acb04143f7/restore
```

Example Responses

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
204	Request succeeded, but no response body returned.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.1.13 Revoking a subordinate CA

Function

Reason for revocation.

 NOTE

If you do not want to provide the revocation reason, set the request body to `{}`. Otherwise, an error will be reported.

URI

POST `/v1/private-certificate-authorities/{ca_id}/revoke`

Table 4-274 Path Parameters

Parameter	Mandatory	Type	Description
ca_id	Yes	String	ID of the sub-CA you want to revoke. Minimum: 36 Maximum: 36

Request Parameters

Table 4-275 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Table 4-276 Request body parameters

Parameter	Mandatory	Type	Description
reason	No	String	Reason for revocation. The options are as follows: • UNSPECIFIED : Default value. No reason is specified for revocation. • KEY_COMPROMISE : The certificate key material has been leaked. • CERTIFICATE_AUTHORITY_COMPROMISE : Key materials of the CA have been leaked in the certificate chain. • AFFILIATION_CHANGED : The subject or other information in the certificate has been changed. • SUPERSEDED : The certificate has been replaced. • CESSATION_OF_OPERATION : The entity in the certificate or certificate chain has ceased to operate. • CERTIFICATE_HOLD : The certificate should not be considered valid currently and may take effect in the future. • PRIVILEGE_WITHDRAWN : This certificate no longer has permissions on the properties it claims. • ATTRIBUTE_AUTHORITY_COMPROMISE : The authority which determines appropriate attributes for a Certificate may have been compromised. NOTE If you do not want to provide the revocation reason, set the request body to {}. Otherwise, an error will be reported.

Parameter	Mandatory	Type	Description
			Enumeration values: • UNSPECIFIED • KEY_COMPROMISE • CERTIFICATE_AUTHORITY_COMPROMISE • AFFILIATION_CHANGED • SUPERSEDED • CESSATION_OF_OPERATION • CERTIFICATE_HOLD • PRIVILEGE_WITHDRAWN • ATTRIBUTE_AUTHORITY_COMPROMISE

Response Parameters

Status code: 400

Table 4-277 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-278 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-279** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-280** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-281** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to revoke a subordinate CA, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
POST https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/  
6434f74f-2d13-4e6a-89eb-93ee313f1a43/revoke
```

```
{  
  "reason" : "KEY_COMPROMISE"  
}
```

Example Responses

Status code: 400

Invalid request parameters.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 401

Token required for the requested page.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 403

Authentication failed.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 404

No resources available or found.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 500

Internal service error.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
204	Request succeeded, but no response body returned.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.2 Private Certificate Management

4.2.2.1 Querying the List of Private Certificates

Function

This API is used to query the private certificate list.

URI

GET /v1/private-certificates

Table 4-282 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	The number of returned records. The default value is 10 . Minimum: 0 Maximum: 1000

Parameter	Mandatory	Type	Description
name	No	String	The name of the private certificate. The set of certificates whose names contain the name field is returned. Minimum: 1 Maximum: 64
offset	No	Integer	Index position. The query starts from the next data record indexed by this parameter. Minimum: 0
status	No	String	The private certificate status. You can query private certificates by status. • ISSUED: The certificate is issued. • REVOKED: The certificate is revoked. • EXPIRED: The certificate expired.
sort_key	No	String	Sorting attribute. The following attributes are available now: • create_time: Time the certificate was created (default) • common_name: The certificate name • issuer_name: The name of the CA who issued the certificate. • not_after: The certificate expiration time
sort_dir	No	String	Sorting direction. The options are as follows: • DESC: descending order (default) • ASC: ascending order

Request Parameters

Table 4-283 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 200

Table 4-284 Response body parameters

Parameter	Type	Description
total	Integer	Total number of private certificates. Minimum: 0 Maximum: 1000000
certificates	Array of Certificates objects	For details, see data structure for the Certificates field.

Table 4-285 Certificates

Parameter	Type	Description
certificate_id	String	ID of the private certificate Minimum: 36 Maximum: 36
status	String	Certificate status: • ISSUED: The certificate is issued. • EXPIRED: The certificate expired. • REVOKED: The certificate is revoked.
issuer_id	String	ID of the parent CA. Minimum: 36 Maximum: 36
issuer_name	String	The name of the parent CA certificate. Minimum: 1 Maximum: 64
key_algorithm	String	Key algorithm

Parameter	Type	Description
signature_algorithm	String	Signature algorithm
freeze_flag	Integer	Freezing tag: • 0: The certificate is not frozen. • Other values: The certificate is frozen (The type of value is reserved).
gen_mode	String	Certificate generation method. • GENERATE: The certificate is generated through the PCA system. • IMPORT: The certificate is imported externally. • CSR: The CSR is imported externally and issued by the internal CA. The private key is not managed in PCA.
serial_number	String	Serial number. Minimum: 1 Maximum: 64
create_time	Long	Time the certificate was created. The value is a timestamp in milliseconds.
delete_time	Long	Time the certificate was deleted. The value is a timestamp in milliseconds.
not_before	Long	Time the certificate was created. The value is a timestamp in milliseconds.
not_after	Long	Time the certificate expires. The value is a timestamp in milliseconds.
distinguished_name	DistinguishedName object	Certificate name. For details, see data structure for the DistinguishedName field.

Table 4-286 DistinguishedName

Parameter	Type	Description
common_name	String	Common certificate name (CN). Minimum: 1 Maximum: 64

Parameter	Type	Description
country	String	Country code, which must comply with the regular expression "[A-Za-z]{2}". Minimum: 2 Maximum: 2
state	String	State or city name. Minimum: 1 Maximum: 128
locality	String	Country/Region. Minimum: 1 Maximum: 128
organization	String	Organization name. Minimum: 1 Maximum: 64
organizational_unit	String	Organization Unit (OU). Minimum: 1 Maximum: 64

Status code: 400

Table 4-287 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-288 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-289** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-290** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500

Table 4-291 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to query the private certificate list, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
GET https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificates
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "total": 2,
  "certificates": [ {
    "signature_algorithm": "SHA256",
    "issuer_id": "ef5d84d1-4f52-47d2-b1c8-a91a672487a0",
    "issuer_name": "12",
    "not_after": 1665539214000,
    "not_before": 1634295475000,
    "status": "ISSUED",
    "freeze_flag": 0,
    "gen_mode": "GENERATE",
    "serial_number": "202110151057541266081861",
    "distinguished_name": {
      "country": "cn",
      "state": "guizhou",
      "locality": "guiyang",
      "organization": "hw",
      "organizational_unit": "IT",
      "common_name": "test.huawei.com"
    },
    "key_algorithm": "RSA4096",
    "create_time": 1634295475000,
    "delete_time": null,
    "certificate_id": "6434f74f-2d13-4e6a-89eb-93ee313f1a43"
  }, {
    "signature_algorithm": "SHA256",
    "issuer_id": "ef5d84d1-4f52-47d2-b1c8-a91a672487a0",
    "issuer_name": "12",
    "not_after": 1665539214000,
    "not_before": 1634110315000,
    "status": "ISSUED",
    "freeze_flag": 0,
    "gen_mode": "GENERATE",
    "serial_number": "202110130731541908887138",
    "distinguished_name": {
```

```
{
  "country": "cn",
  "state": "sichuan",
  "locality": "chengdu",
  "organization": "hw",
  "organizational_unit": "HR",
  "common_name": "hr.huawei.com"
},
{
  "key_algorithm": "RSA4096",
  "create_time": 1634110316000,
  "delete_time": null,
  "certificate_id": "1cbb5a52-806b-469c-b182-7446e1851a1c"
}
}]
}
```

Status code: 400

Invalid request parameters.

```
{
  "error_code": "PCA.XXX",
  "error_msg": "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code": "PCA.XXX",
  "error_msg": "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code": "PCA.XXX",
  "error_msg": "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code": "PCA.XXX",
  "error_msg": "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code": "PCA.XXX",
  "error_msg": "XXX"
}
```

Status Codes

Status Code	Description
200	Request succeeded.

Status Code	Description
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.2.2 Applying for a Certificate

Function

This API is used to apply for a certificate.

URI

POST /v1/private-certificates

Request Parameters

Table 4-292 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Table 4-293 Request body parameters

Parameter	Mandatory	Type	Description
issuer_id	Yes	String	ID of the parent CA. Minimum: 36 Maximum: 36

Parameter	Mandatory	Type	Description
key_algorithm	Yes	String	Key algorithm. The options are as follows: • RSA2048: RSA algorithm with the key length of 2048 bits • RSA4096: RSA algorithm with the key length of 4096 bits • EC256: Elliptic Curve Digital Signature Algorithm (ECDSA) with the key length of 256 bits • EC384: Elliptic Curve Digital Signature Algorithm (ECDSA) with the key length of 384 bits
signature_algorithm	Yes	String	Signature hash algorithm. The options are as follows: • SHA256 • SHA384 • SHA512
distinguished_name	Yes	CertDistinguishedName object	Certificate name. For details, see data structure for the CertDistinguishedName field.
validity	Yes	Validity object	Certificate validity. For details, see data structure for the Validity field.

Parameter	Mandatory	Type	Description
key_usages	No	Array of strings	Key usage. For details, see 4.2.1.3 in RFC 5280. • digitalSignature: The key is used as a digital signature. • nonRepudiation: The key can be used for non-repudiation. • keyEncipherment: The key can be used for key encryption. • dataEncipherment: The key can be used for data encryption. • keyAgreement: The key can be used for key negotiation. • keyCertSign: The key can issue a certificate. • cRLSign: The key can issue a certificate revocation list (CRL). • encipherOnly: The key is used only for encryption. • decipherOnly: The key is used only for decryption.
subject_alternative_names	No	Array of SubjectAlternativeName objects	Alternative name for the subject. For details, see data structure for the SubjectAlternativeName field. • Array size: [0, 20]
extended_key_usage	No	ExtendedKeyUsage object	Extended Key Usage. For details, see data structure for the ExtendedKeyUsage field.
customized_extension	No	CustomizedExtension object	Customized extension information. For details, see data structure for the CustomizedExtension field.

Table 4-294 CertDistinguishedName

Parameter	Mandatory	Type	Description
common_name	Yes	String	Common certificate name (CN). Minimum: 1 Maximum: 64
country	No	String	Country code, which must comply with the regular expression "[A-Za-z]{2}". If not passed in, the value corresponding to the parent CA is inherited by default. Minimum: 2 Maximum: 2
state	No	String	State or city name. If not passed in, the value corresponding to the parent CA is inherited by default. Minimum: 1 Maximum: 128
locality	No	String	Country/Region. If not passed in, the value corresponding to the parent CA is inherited by default. Minimum: 1 Maximum: 128
organization	No	String	Organization name. If not passed in, the value corresponding to the parent CA is inherited by default. Minimum: 1 Maximum: 64
organizational_unit	No	String	Organization Unit (OU). If not passed in, the value corresponding to the parent CA is inherited by default. Minimum: 1 Maximum: 64

Table 4-295 Validity

Parameter	Mandatory	Type	Description
type	Yes	String	Validity period type, which is mandatory. The options are as follows: • YEAR: Year (12 months) • MONTH: Month (31 days) • DAY: Day • HOURL: Hour
value	Yes	Integer	The certificate validity period. The value of this parameter varies depending on the value of type : • Root CA certificates: no longer than 30 years • Subordinate CA or private certificates: no longer than 20 years
start_from	No	Integer	Start time. The options are as follows: • The value is a timestamp in milliseconds. For example, 1645146939688 indicates 2022-02-18 09:15:39. • The value of start_from cannot be earlier than the result of the value of current_time minus 5 minutes.

Table 4-296 SubjectAlternativeName

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the alternative name. Currently, only DNS , IP , DNS , and URI are allowed. • DNS • IP • EMAIL • URI

Parameter	Mandatory	Type	Description
value	Yes	String	Value of the corresponding alternative name type. - DNS type. Length range: 0 to 253 characters - IP address type. Length range: 0 to 39 characters - EMAIL type. Length range: 0 to 256 characters - URI address type. Length range: 0 to 253 characters

Table 4-297 ExtendedKeyUsage

Parameter	Mandatory	Type	Description
server_auth	No	Boolean	Server authentication. The OID is 1.3.6.1.5.5.7.3.1. true false NOTE Enable this enhanced key usage for the server certificate. The default value is false. Default: false
client_auth	No	Boolean	Client authentication. The OID is 1.3.6.1.5.5.7.3.2 true false NOTE Enable this enhanced key usage for the client certificate. The default value is false. Default: false
code_signing	No	Boolean	Signing of downloadable executable code client authentication. The OID is 1.3.6.1.5.5.7.3.3. true false NOTE The default value is false. Default: false

Parameter	Mandatory	Type	Description
email_protection	No	Boolean	Email protection. The OID is 1.3.6.1.5.5.7.3.4. • true • false NOTE The default value is false. Default: false
time_stamping	No	Boolean	Binding the hash of an object to a time. The OID is 1.3.6.1.5.5.7.3.8. • true • false NOTE The default value is false. Default: false

Table 4-298 CustomizedExtension

Parameter	Mandatory	Type	Description
object_identifier	No	String	Object identifier NOTE The value of this parameter must be a dot-decimal notation string that complies with the ASN1 specifications, for example, 1.3.6.1.4.1.2011.4.99. Minimum: 1 Maximum: 64
value	No	String	Custom attribute content Minimum: 1 Maximum: 64

Response Parameters

Status code: 200

Table 4-299 Response body parameters

Parameter	Type	Description
certificate_id	String	ID of the certificate being issued. Minimum: 36 Maximum: 36

Status code: 400

Table 4-300 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-301 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403

Table 4-302 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-303** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-304** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to apply for a certificate, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

POST https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificates

```
{
  "key_algorithm" : "RSA2048",
  "distinguished_name" : {
    "country" : "CN",
    "state" : "Sichuan",
    "locality" : "Chengdu",
    "organization" : "Huawei",
    "organizational_unit" : "CloudBU",
    "common_name" : "TestCert"
  },
  "subject_alternative_names" : [ {
    "type" : "IP",
    "value" : "156.127.116.38"
  } ],
  "signature_algorithm" : "SHA256",
  "validity" : {
    "type" : "YEAR",
    "value" : 3
  },
  "issuer_id" : "2cb2878b-6cd1-460d-bd25-afe655159bdc",
  "key_usages" : [ "digitalSignature", "nonRepudiation" ]
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "certificate_id" : "ae9a326a-b61e-4446-854d-cda30ffe31f5"
}
```

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
}
```

```
"error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.2.3 Issuing a certificate via CSR

Function

This API is used to issue a certificate via CSR. The constraints are as follows:

- The default parameters are as follows:
 - Default CA parameters:
 - **keyUsage**: The options are **digitalSignature**, **keyCertSign**, and **cRLSign**. The parameters in the CSR are preferentially used.
 - **SignatureHashAlgorithm**: **SHA384**
 - **PathLength**: **0** (user-defined)
 - Private certificates
 - **keyUsage**: The options are **digitalSignature** and **keyAgreement**. The parameters in the CSR are preferentially used.
 - **SignatureHashAlgorithm**: **SHA384**
- If **type** is set to **INTERMEDIATE_CA**, the created subordinate CA certificate has the following features:

- It does not use the CA quota. When you query the CA list, this certificate is not included.
- Only the following two APIs can be used to obtain its information:
 - To obtain its details: GET /v1/private-certificate-authorities/{ca_id}
 - To export it: POST /v1/private-certificate-authorities/{ca_id}/export
- The value of **certificate_id** returned by this API is the value of **ca_id** for the subordinate CA.
- It cannot issue certificates as its key is on the user side.
- If **type** is set to **ENTITY_CERT**, the created private certificate has the following features:
 - It uses the private certificate quota. When you query the private certificate list, this certificate is included.
 - The usage of this certificate is the same as that of other private certificates except that the exported certificate does not contain the key information (the key is on the client).

 NOTE

Note: Use `\r\n` or `\n` to replace the newline characters to convert the CSR into a string. For details, see the example request. Note: The organization information, public key algorithm, and public key content of a certificate are included in the CSR file and cannot be obtained through APIs.

URI

POST /v1/private-certificates/csr

Request Parameters

Table 4-305 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Table 4-306 Request body parameters

Parameter	Mandatory	Type	Description
issuer_id	Yes	String	ID of the parent CA. Minimum: 36 Maximum: 36

Parameter	Mandatory	Type	Description
csr	Yes	String	Certificate signature request. Use \r\n or \n to replace the newline characters in the CSR. The replacement is not required if this API is requested through the console. Maximum: 5120
validity	Yes	Validity object	Certificate validity. For details, see data structure for the Validity field.
type	No	String	Certificate type. This parameter is used to distinguish subordinate CA certificates from private certificates. • ENTITY_CERT: A private certificate is issued. It is the default value. • INTERMEDIATE_CA: A subordinate CA certificate is issued.
path_length	No	Integer	Path length. This parameter is valid only when a subordinate CA is issued. Minimum: 0 Maximum: 6
subject_alternative_names	No	Array of SubjectAlternativeName objects	The alternative name for the subject (This parameter is reserved and ignored at the backend). For details, see data structure for the SubjectAlternativeName field.

Table 4-307 Validity

Parameter	Mandatory	Type	Description
type	Yes	String	Validity period type, which is mandatory. The options are as follows: • YEAR: Year (12 months) • MONTH: Month (31 days) • DAY: Day • HOURL: Hour
value	Yes	Integer	The certificate validity period. The value of this parameter varies depending on the value of type : • Root CA certificates: no longer than 30 years • Subordinate CA or private certificates: no longer than 20 years
start_from	No	Integer	Start time. The options are as follows: • The value is a timestamp in milliseconds. For example, 1645146939688 indicates 2022-02-18 09:15:39. • The value of start_from cannot be earlier than the result of the value of current_time minus 5 minutes.

Table 4-308 SubjectAlternativeName

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the alternative name. Currently, only DNS , IP , DNS , and URI are allowed. • DNS • IP • EMAIL • URI

Parameter	Mandatory	Type	Description
value	Yes	String	Value of the corresponding alternative name type. • DNS type. Length range: 0 to 253 characters • IP address type. Length range: 0 to 39 characters • EMAIL type. Length range: 0 to 256 characters • URI address type. Length range: 0 to 253 characters

Response Parameters

Status code: 200

Table 4-309 Response body parameters

Parameter	Type	Description
certificate_id	String	ID of the certificate being issued. Minimum: 36 Maximum: 36

Status code: 400

Table 4-310 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-311 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-312** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-313** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500

Table 4-314 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to issue a certificate via CSR, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

POST <https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificates/csr>

```
{
  "csr" : "-----BEGIN CERTIFICATE REQUEST-----\n
MIICcATCCAbECAQAwXjELMAkGA1UEBhMCQ04xEDAOBgNVBAgTB3NpY2hhbW4xEDAO\
BgNVBAcTB2N0ZW50ZHUuXzAjBgNVBAoTAkhxMQswCQYDVQQLSEwJVDERMA8GA1UE\
l\nA XMldGVzdC5jb2WwggEiMAOGCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQCZ4q5z\
\\nxqK/L/FC9x2jESeUW5GB6zSSrVxT0WLTCTv9d1LtWBLsRlinATYTYiP1pNo4/pBq\
\\nHIM3liUDkc896CJerYINzOIJTaV4GjCZvPrxSHU5toJvIDfIBsY+gnzbT1oI/y0r\
\\n3yb9dx7eeF5rPR+U8RTw+Ov/ZNRb+0CY30hrXMrWjp5dtLGTlr5EFYxIKNOPCkR\\n
+6BGyJnC9PW5uqwsykFbgMRkcBaNAxa59dRhMF50pvx2Vs929vFrMi+ofDELUOqz\
\\n1vyjaEA3pn3AGJGXzgrGNbSfz12ixgGLes4cQD21GCIAWgnBQ7b1ru2V8ImUfyh0\
\\nyvTEyHJTufBq+257AgMBAAGGjJAKBgkqhkiG9w0BCQ4xFzAVMBMGA1UdEQQMMAQc\
\\nCHRIc3QuY29tMA0GCSqGSIb3DQEBCwUAA4IBAQBKfjZuYsz4s0wb1POIWn41eiAB\
\\np53qb63QKWILN9z8dLktcdSl3IPfcFPZpv++QPtn3LR9rJKBawusk6SPXbvOGgS\
\\n5J+6eM8kVW2O3gHFgoaMcPYvtiO7ekG6o25qx6+Rj84wbFDmpOiCc8AwrLEBwzYV\
\\np1zaprWQu6PxBulkYPa3FLcntDdi7B67r0YTPxVvo1K7vHYFboDvPz7xG57QIFIM\
\\nwGd1OegariMT3N8gBOzLZc+jqLpxgo4xoNqBHM6oDEmKLDWdzU4ljpuGK9had99k\
\\nvQ5vft/Qra3v1uq2lOm/G92b0uA9Y1t2bMHobTAnuXL0HmY9XcLdzpC3f8h8\\n
-----END CERTIFICATE REQUEST-----",
  "validity" : {
    "type" : "YEAR",
    "value" : 3
  },
  "issuer_id" : "2cb2878b-6cd1-460d-bd25-afe655159bdc"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "certificate_id" : "e3e10fc6-5dff-4a70-9cb5-320d258a6215"
}
```

Status code: 400

Invalid request parameters.

```
{
  "error code": "PCA.XXX",

```

```
{  
  "error_msg" : "XXX"  
}
```

Status code: 401

Token required for the requested page.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 403

Authentication failed.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 404

No resources available or found.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 500

Internal service error.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.2.4 Parsing a CSR

Function

This API is used to parse a CSR.

URI

POST /v1/private-certificates/csr/parse

Request Parameters

Table 4-315 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Table 4-316 Request body parameters

Parameter	Mandatory	Type	Description
csr	Yes	String	Certificate signature request. Use \r\n or \n to replace the newline characters in the CSR. The replacement is not required if this API is requested through the console. Maximum: 5120

Response Parameters

Status code: 200

Table 4-317 Response body parameters

Parameter	Type	Description
key_algorithm	String	Key algorithm.
key_algorithm_length	String	Length of the key algorithm, in bits.
signature_algorithm	String	Signature algorithm with a specific signature and hash algorithm, for example, SHA256withRSA .

Parameter	Type	Description
public_key	String	Public key content. NOTE The newline characters have been replaced with \r\n. Minimum: 0 Maximum: 4096
distinguished_name	DistinguishedName object	Certificate name. For details, see data structure for the DistinguishedName field.

Table 4-318 DistinguishedName

Parameter	Type	Description
common_name	String	Common certificate name (CN). Minimum: 1 Maximum: 64
country	String	Country code, which must comply with the regular expression "[A-Za-z]{2}". Minimum: 2 Maximum: 2
state	String	State or city name. Minimum: 1 Maximum: 128
locality	String	Country/Region. Minimum: 1 Maximum: 128
organization	String	Organization name. Minimum: 1 Maximum: 64
organizational_unit	String	Organization Unit (OU). Minimum: 1 Maximum: 64

Status code: 400

Table 4-319 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-320 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403

Table 4-321 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404

Table 4-322 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-323** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to parse a CSR, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

POST https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificates/csr/parse

```
{
  "csr" : "-----BEGIN CERTIFICATE REQUEST-----\n
MIICyTCCABECAQAwXjELMAkGA1UEBhMCQ04xEDAOBgNVBAgTB3NpY2hdW4xEDAO\n
BgNVBACTB2NoZW5nZHUxCzAJBgNVBAoTAkhXMQswCQYDVQQLZWwJJVDERMA8GA1UE\n
AxMldGVzdC5jb20wggiEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQCZ4q5z\n
\\nxqK/L/FC9x2jESeUW5GB6zS5rVxT0WLTCTv9d1LtWBLsRIinATYTYiP1pNo4/pBq\n
\\nHlM3liUDk896CJerYINzOlijTaV4GjCZvPrxSHU5toJvIdfBsY+gnzbT1ol/y0r\n
\\n3yb9dx7eeF5rPR+U8RTw+Ov/ZNRb+0CY30hrXMDrWjp5dtLGTlr5EFYxlKNOPCkR\n
\\n+6BGyJnC9PWSuqwsykFbgMRkcBaNAxa59dRhMF50pvx2Vs929vFrMi+ofDELUOqz\n
\\n1vyjaEA3pn3AGJGXZgrGNbSfz12ixgGLes4cQD21GCIWgnBQ7b1ru2V8ImUfyh0\n
\\nyvTEyHJTufbQ+257AgMBAAgGjAkBgqhkiG9w0BCQ4xFzAVMBMGA1UdEQQMMAQc\n
\\nCHRLc3QuY29tMA0GCSqGSIb3DQEBCwUAA4IBAQBFjZuYsz4s0wb1POIWn41eiAB\n
\\np53qb63QKWILN9z8dLktcdSl3IPfcfPZpXv++QPtn3LR9rJKBawusk6SPXbvOGgS\n
\\n5J+6eM8kVW2O3gHFgoaMcPYvtiO7ekG6o25qx6+Rj84wbFdmPoiCc8AwrLEBwzYV\n
\\np1zaprWQu6PxBulkYPa3FLcntDdi7B67r0YtpxVvo1K7vHYFboDvPz7xG57QIFIM\n
\\nwGd1OegariMT3N8gBOzLZc+jqLpxgo4xoNqBHM06DEmKLdWdzU4ljpuGK9had99k\n
\\nvQ5vft/Qra3v1uq2lOm/G92b0uA9Y1t2bMHobTAnuXL0HmY9XclzdpC3f8h8\n
\\n-----END CERTIFICATE REQUEST-----"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "distinguished_name" : {
    "country" : "CN",
    "state" : "sichuan",
    "locality" : "chengdu",
    "organization" : "HW",
    "organizational_unit" : "IT",
    "common_name" : "test.com"
  },
  "public_key" : "-----BEGIN PUBLIC KEY-----\r
\nMIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAx1EX1JfOXquoFDjVi67T\r
\npF4kFwetNnLwC0ZQtOK3fftX4/rkHwdGdsYAalzLz2ltlgbtLJHeKaNnjLqTL8bn\r
\n0DVIxwww6ZP6VaxpfKXaj76GxDdvb5kp8yRFUAK8N2YQ0UicsFoXn2CAx1dOtAaNF\r
\nO+HwooRnp6GekZaRSYS2bk4olkQ83/2WkkTGC+tAmjSFG7AIY8jaO5RgX40YGANh\r
\nU9UGOo8xCxux8k2dsXRnY+fxRiLWphiT2ij4CYURagETbKuRl9WOI+HFVkmIU/0p\r
\nn3FWqB0RdrRTEcAC+S5fmW75E85rAMh9f65wa/6eWcM6vlnby4Bbm1mcdR3olgKJ\r
\nnUQIDAQAB\r\n-----END PUBLIC KEY-----\r
\n",
  "key_algorithm" : "RSA",
  "key_algorithm_length" : 2048,
  "signature_algorithm" : "SHA256withRSA"
}
```

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
}
```

```
"error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.2.5 Querying the Private Certificate Quota

Function

This API is used to query the private certificate quota.

URI

GET /v1/private-certificates/quotas

Request Parameters

Table 4-324 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 200

Table 4-325 Response body parameters

Parameter	Type	Description
quotas	Quotas object	Certificate quota. For details, see data structure for the Quotas field.

Table 4-326 Quotas

Parameter	Type	Description
resources	Array of Resources objects	Resource quota list. For details, see data structure for the Resources field.

Table 4-327 Resources

Parameter	Type	Description
type	String	Certificate type CERTIFICATE_AUTHORITY: CA certificate. CERTIFICATE: private certificate.
used	Integer	Used quota
quota	Integer	Total quota CERTIFICATE_AUTHORITY: 100 CERTIFICATE: 100,000

Status code: 400**Table 4-328** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-329 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403

Table 4-330 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404

Table 4-331 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500

Table 4-332 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to query the private CA quota, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

GET https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificates/quotas

Example Responses

Status code: 200

Request succeeded.

```
{
  "quotas" : {
    "resources" : [ {
      "type" : "CERTIFICATE",
      "used" : 25,
      "quota" : 100000
    } ]
  }
}
```

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
}
```

```
{  
  "error_msg" : "XXX"  
}
```

Status code: 404

No resources available or found.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 500

Internal service error.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.2.6 Querying Certificate Details

Function

This API is used to query details about a certificate.

URI

GET /v1/private-certificates/{certificate_id}

Table 4-333 Path Parameters

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	ID of the private certificate you want to query. Minimum: 36 Maximum: 36

Request Parameters

Table 4-334 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 200

Table 4-335 Response body parameters

Parameter	Type	Description
certificate_id	String	ID of the private certificate Minimum: 36 Maximum: 36
status	String	Certificate status: • ISSUED: The certificate is issued. • EXPIRED: The certificate expired. • REVOKED: The certificate is revoked.
issuer_id	String	ID of the parent CA. Minimum: 36 Maximum: 36
issuer_name	String	The name of the parent CA certificate. Minimum: 1 Maximum: 64
key_algorithm	String	Key algorithm
signature_algorithm	String	Signature algorithm

Parameter	Type	Description
freeze_flag	Integer	Freezing tag: ● 0: The certificate is not frozen. ● Other values: The certificate is frozen (The type of value is reserved).
gen_mode	String	Certificate generation method. ● GENERATE: The certificate is generated through the PCA system. ● IMPORT: The certificate is imported externally. ● CSR: The CSR is imported externally and issued by the internal CA. The private key is not managed in PCA.
serial_number	String	Serial number. Minimum: 1 Maximum: 64
create_time	Long	Time the certificate was created. The value is a timestamp in milliseconds.
delete_time	Long	Time the certificate was deleted. The value is a timestamp in milliseconds.
not_before	Long	Time the certificate was created. The value is a timestamp in milliseconds.
not_after	Long	Time the certificate expires. The value is a timestamp in milliseconds.
distinguished_name	DistinguishedName object	Certificate name. For details, see data structure for the DistinguishedName field.

Table 4-336 DistinguishedName

Parameter	Type	Description
common_name	String	Common certificate name (CN). Minimum: 1 Maximum: 64
country	String	Country code, which must comply with the regular expression "[A-Za-z]{2}". Minimum: 2 Maximum: 2

Parameter	Type	Description
state	String	State or city name. Minimum: 1 Maximum: 128
locality	String	Country/Region. Minimum: 1 Maximum: 128
organization	String	Organization name. Minimum: 1 Maximum: 64
organizational_unit	String	Organization Unit (OU). Minimum: 1 Maximum: 64

Status code: 400**Table 4-337** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401**Table 4-338** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403

Table 4-339 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404

Table 4-340 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500

Table 4-341 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to query details about a certificate, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
GET https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificates/  
6434f74f-2d13-4e6a-89eb-93ee313f1a43
```

Example Responses

Status code: 200

Request succeeded.

```
{  
  "signature_algorithm": "SHA256",  
  "issuer_id": "ef5d84d1-4f52-47d2-b1c8-a91a672487a0",  
  "issuer_name": "HW CA",  
  "not_after": 1665539214000,  
  "not_before": 1634295475000,  
  "status": "ISSUED",  
  "freeze_flag": 0,  
  "gen_mode": "GENERATE",  
  "serial_number": "202110151057541266081861",  
  "distinguished_name": {  
    "country": "cn",  
    "state": "guizhou",  
    "locality": "guiyang",  
    "organization": "hw",  
    "organizational_unit": "IT",  
    "common_name": "test.huawei.com"  
  },  
  "key_algorithm": "RSA4096",  
  "create_time": 1634295475000,  
  "delete_time": null,  
  "certificate_id": "6434f74f-2d13-4e6a-89eb-93ee313f1a43"  
}
```

Status code: 400

Invalid request parameters.

```
{  
  "error_code": "PCA.XXX",  
  "error_msg": "XXX"  
}
```

Status code: 401

Token required for the requested page.

```
{  
  "error_code": "PCA.XXX",  
  "error_msg": "XXX"  
}
```

Status code: 403

Authentication failed.

```
{  
  "error_code": "PCA.XXX",  
  "error_msg": "XXX"  
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.2.7 Deleting a Certificate

Function

This API is used to delete a certificate.

URI

DELETE /v1/private-certificates/{certificate_id}

Table 4-342 Path Parameters

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	ID of the private certificate you want to delete. Minimum: 36 Maximum: 36

Request Parameters

Table 4-343 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 400

Table 4-344 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-345 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403

Table 4-346 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-347** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-348** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to delete a certificate, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
DELETE https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificates/  
6434f74f-2d13-4e6a-89eb-93ee313f1a43
```

Example Responses

Status code: 400

Invalid request parameters.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 401

Token required for the requested page.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 403

Authentication failed.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 404

No resources available or found.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 500

Internal service error.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
204	Request succeeded, but no response body returned.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.

Status Code	Description
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.2.8 Exporting a Certificate

Function

This API is used to export a certificate.

- There are two methods for different compression statuses:
 - If **is_compressed** is set to **true**, a compressed file package is returned. The package name is in the format of *Certificate name_Lowercase letters of the type field.zip*, for example, **test_apache.zip**.
 - If **type** is set to **APACHE**, the compressed package contains three files: **server.key** (key file in PEM format), **chain.crt** (certificate chain in PEM format), and **server.crt** (certificate in PEM format).
 - If **type** is set to **IIS**, the compressed package contains two files: **keystorePass.txt** (keystore password) and **server.pfx** (PFX certificate). The certificate and certificate chain are contained in the same file).
 - If **type** is set to **NGINX**, the compressed package contains two files: **server.key** (key file in PEM format) and **server.crt** (content in PEM format). The certificate and certificate chain are contained in the same file).
 - If **type** is set to **TOMCAT**, the compressed package contains two files: **keystorePass.txt** (keystore password) and **server.jks** (JKX certificate). The certificate and certificate chain are contained in the same file).
 - If **type** is set to **OTHER**, the compressed package contains three files: **server.key** (key file in PEM format), **chain.pem** (certificate chain), and **server.pem** (certificate).
 - If **is_compressed** is set to **false**, a certificate in JSON format is returned, including the following parameters:
 - If **type** is set to **APACHE**, **NGINX**, or **OTHER**, the following parameters are returned:
 - **certificate**: indicates the certificate content in PEM format.
 - **certificate_chain**: indicates the certificate chain in PEM format.
 - **private_key**: indicates the certificate private key in PEM format.

- If **type** is set to "IIS" or "TOMCAT", it is not defined currently.

NOTE

Only certificates in the **Issued** status can be exported.

URI

POST /v1/private-certificates/{certificate_id}/export

Table 4-349 Path Parameters

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	ID of the private certificate you want to export. Minimum: 36 Maximum: 36

Request Parameters

Table 4-350 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Table 4-351 Request body parameters

Parameter	Mandatory	Type	Description
is_compressed	Yes	String	Whether to compress. • true • false

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the server on which the certificate is installed. The options are as follows: • APACHE: This parameter is recommended if you want to use the certificate for an Apache server. • NGINX: This parameter is recommended if you want to use the certificate for an Nginx server. • IIS: This parameter is recommended if you want to use the certificate for a Windows IIS server. • TOMCAT: This parameter is recommended if you want to use the certificate for a Tomcat server. • OTHER: This parameter is recommended if you want to download a certificate in PEM format.

Response Parameters

Status code: 200

Table 4-352 Response body parameters

Parameter	Type	Description
private_key	String	Private key content
certificate	String	Certificate content
certificate_chain	String	Certificate chain content.

Status code: 400

Table 4-353 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-354 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403

Table 4-355 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404

Table 4-356 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-357** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to export a certificate, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
POST https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificates/  
6434f74f-2d13-4e6a-89eb-93ee313f1a43/export
```

```
{  
  "type" : "other",  
  "is_compressed" : false  
}
```

Example Responses

Status code: 200

Request succeeded.

```
{  
  "certificate" : "-----BEGIN CERTIFICATE-----\r\n*****\r\n-----END CERTIFICATE-----",  
  "certificate_chain" : "-----BEGIN CERTIFICATE-----\r\n*****\r\n-----END CERTIFICATE-----\r\n-----BEGIN  
CERTIFICATE-----\r\n*****\r\n-----END CERTIFICATE-----",  
  "private_key" : "-----BEGIN RSA PRIVATE KEY-----\r\n*****\r\n-----END RSA PRIVATE KEY-----\r\n"  
}
```

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.2.9 Revoking a Certificate

Function

This API is used to revoke a certificate.

NOTE

Note: If you do not want to provide the revocation reason, set the request body to `{}`. Otherwise, an error will be reported.

URI

POST `/v1/private-certificates/{certificate_id}/revoke`

Table 4-358 Path Parameters

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	ID of the private certificate you want to revoke. Minimum: 36 Maximum: 36

Request Parameters

Table 4-359 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Table 4-360 Request body parameters

Parameter	Mandatory	Type	Description
reason	No	String	Reason for revocation. The options are as follows: • UNSPECIFIED : Default value. No reason is specified for revocation. • KEY_COMPROMISE : The certificate key material has been leaked. • CERTIFICATE_AUTHORITY_COMPROMISE : Key materials of the CA have been leaked in the certificate chain. • AFFILIATION_CHANGED : The subject or other information in the certificate has been changed. • SUPERSEDED : The certificate has been replaced. • CESSATION_OF_OPERATION : The entity in the certificate or certificate chain has ceased to operate. • CERTIFICATE_HOLD : The certificate should not be considered valid currently and may take effect in the future. • PRIVILEGE_WITHDRAWN : This certificate no longer has permissions on the properties it claims. • ATTRIBUTE_AUTHORITY_COMPROMISE : The authority which determines appropriate attributes for a Certificate may have been compromised. NOTE If you do not want to provide the revocation reason, set the request body to {}. Otherwise, an error will be reported.

Parameter	Mandatory	Type	Description
			Enumeration values: • UNSPECIFIED • KEY_COMPROMISE • CERTIFICATE_AUTHORITY_COMPROMISE • AFFILIATION_CHANGED • SUPERSEDED • CESSATION_OF_OPERATION • CERTIFICATE_HOLD • PRIVILEGE_WITHDRAWN • ATTRIBUTE_AUTHORITY_COMPROMISE

Response Parameters

Status code: 400

Table 4-361 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-362 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-363** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-364** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-365** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36

Parameter	Type	Description
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to revoke a certificate, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
POST https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificates/  
6434f74f-2d13-4e6a-89eb-93ee313f1a43/revoke
```

```
{  
  "reason" : "KEY_COMPROMISE"  
}
```

Example Responses

Status code: 400

Invalid request parameters.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 401

Token required for the requested page.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 403

Authentication failed.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 404

No resources available or found.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
204	Request succeeded, but no response body returned.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.3 Certificate Revocation

4.2.3.1 Checking the Agency Permission

Function

This API is used to check whether you have the agency permission.

 NOTE

Your token must have the **secu_admin** role assigned.

URI

GET /v1/private-certificate-authorities/obs/agencies

Request Parameters

Table 4-366 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 200

Table 4-367 Response body parameters

Parameter	Type	Description
agency_granted	String	OBS agency status • true • false

Status code: 400

Table 4-368 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401

Table 4-369 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403

Table 4-370 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404**Table 4-371** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-372** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to check whether PCA has the OBS agency permission (for accessing OBS buckets and updating the CRL), a token is required in the **X-Auth-Token** field in the request header, and the token must have the permission to access the API and the **secu_admin** permission.

GET https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/obs/agencies

Example Responses

Status code: 200

Request succeeded.

```
{
  "agency_granted" : "true"
}
```

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.

Status Code	Description
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.3.2 Creating an Agency

Function

This API is used to create an OBS agency for PCA to access OBS buckets and update the CRL.

NOTE

Your token must have the **secu_admin** role assigned.

URI

POST /v1/private-certificate-authorities/obs/agencies

Request Parameters

Table 4-373 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 200

Table 4-374 Response body parameters

Parameter	Type	Description
agency_id	String	Authorization ID returned by IAM when an OBS agency is created.

Status code: 400**Table 4-375** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401**Table 4-376** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-377** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404

Table 4-378 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-379** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to create an OBS agency (for accessing OBS buckets and updating the CRL) for PCA, a token is required in the **X-Auth-Token** field in the request header, and the token must have the permission to access the API and the **secu_admin** permission.

POST <https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/obs/agencies>

Example Responses

Status code: 200

Request succeeded.

```
{  
  "agency_id" : "078ade0fc20010004f8fc0034fad529d"  
}
```

Status code: 400

Invalid request parameters.

```
{  
  "error_code" : "PCA.XXX",  
}
```

```
{  
  "error_msg" : "XXX"  
}
```

Status code: 401

Token required for the requested page.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 403

Authentication failed.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 404

No resources available or found.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status code: 500

Internal service error.

```
{  
  "error_code" : "PCA.XXX",  
  "error_msg" : "XXX"  
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.2.3.3 Querying the List of OBS Buckets

Function

This API is used to query the list of OBS buckets.

NOTE

This API can be used only when an agency is created. For details about how to create an agency, see **Certificate Revocation > Creating an Agency** in this document.

URI

GET /v1/private-certificate-authorities/obs/buckets

Request Parameters

Table 4-380 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. For details, see Obtaining a User Token .

Response Parameters

Status code: 200

Table 4-381 Response body parameters

Parameter	Type	Description
total	Integer	Total number of the OBS buckets.
obs_buckets	Array of ObsBuckets objects	For details, see data structure for the ObsBuckets field.

Table 4-382 ObsBuckets

Parameter	Type	Description
bucket_name	String	Bucket name Minimum: 3 Maximum: 63
create_time	Long	Creation time. The value is a timestamp in milliseconds.

Status code: 400**Table 4-383** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 401**Table 4-384** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 403**Table 4-385** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 404

Table 4-386 Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Status code: 500**Table 4-387** Response body parameters

Parameter	Type	Description
error_code	String	Error code Minimum: 3 Maximum: 36
error_msg	String	Error message Minimum: 0 Maximum: 1024

Example Requests

When you use this API to query the list of OBS buckets, a token is required in the **X-Auth-Token** field in the request header. The token must have the permission to access the API.

```
GET https://ccm.ap-southeast-3.myhuaweicloud.com/v1/private-certificate-authorities/obs/buckets
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "total" : 2,
  "obs_buckets" : [ {
    "create_time" : 1554867690718,
    "bucket_name" : "admin1"
  }, {
    "create_time" : 1554949519646,
    "bucket_name" : "admin3"
  } ]
}
```

Status code: 400

Invalid request parameters.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 401

Token required for the requested page.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 403

Authentication failed.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 404

No resources available or found.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "PCA.XXX",
  "error_msg" : "XXX"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameters.
401	Token required for the requested page.
403	Authentication failed.
404	No resources available or found.
500	Internal service error.

Error Codes

See [Error Codes](#).

5 Examples

5.1 Example 1: Deleting an Expired SSL Certificate

Scenario

This topic describes how to delete an expired SSL certificate using the CCM API.

NOTE

- This topic only describes how to delete an SSL certificate from Huawei Cloud. The certificate will still be valid and trusted by web browsers.
- After you submit a certificate deletion application, you cannot cancel it. Exercise caution when performing this operation.

Involved APIs

- [Querying the certificate list](#): Query all SSL certificates under your current account.
- [Deleting a certificate](#): Delete a specific expired SSL certificate.

Procedure

Step 1 Query the certificate list.

- API information
URI format: GET /v3/scm/certificates
For details, see [Querying the Certificate List](#).
- Example request
GET: https://{endpoint}/v3/scm/certificates
Obtain {endpoint} from [Regions and Endpoints](#).
Body:

```
{
  "limit": "2",
  "offset": "0"
}
```

- Example response

```
{
  "certificates" : [ {
    "id" : "scs1554192131150",
    "name" : "test",
    "domain" : "www.zx.com",
    "type" : "OV_SSL_CERT",
    "brand" : "GEOTRUST",
    "expire_time" : "2021-05-27 16:46:25.0",
    "domain_type" : "MULTI_DOMAIN",
    "validity_period" : 12,
    "status" : "ISSUED",
    "domain_count" : 2,
    "wildcard_count" : 0,
    "description" : null
  } ],
  "total_count" : 1
}
```

Step 2 Delete a certificate.

- API information

URI format: DELETE /v3/scm/certificates/{certificate_id}

For details, see [Deleting a Certificate](#).

- Example request

DELETE: https://{endpoint}/v3/scm/certificates/scs1554192131150

Obtain {endpoint} from [Regions and Endpoints](#).

Body:

```
{
  certificate_id:scs1554192131150
}
```

- Example response

```
{ }
```

or

```
{
  "error_code" : "SCM.XXX",
  "error_msg" : "XXX"
}
```

----End

5.2 Example 2: Pushing Your External SSL Certificate to Other Services

Scenario

This topic describes how to import your SSL certificates purchased on other platforms to CCM and push such certificates to your cloud services on Huawei Cloud, such as WAF and CDN, to keep your workloads secure.

Involved APIs

- [Importing a certificate](#): Import an SSL certificate not purchased on CCM into CCM for centralized management.
- [Querying the certificate list](#): Query all certificates under your current account and obtain the ID of the certificate to be pushed.

- **Pushing a certificate:** Push an SSL certificate imported into CCM to other Huawei Cloud services.

Procedure

Step 1 Import the certificate.

- API information
URI format: POST /v3/scm/certificates/import
For details, see [Importing a Certificate](#)
- Example request
POST: https://{endpoint}/v3/scm/certificates/import
Obtain {endpoint} from [Regions and Endpoints](#).
- Example response

```
{
  "certificate_id" : "scs1554192131150"
}
```

Step 2 Query the certificate list.

- API information
URI format: GET /v3/scm/certificates
For details, see [Querying the Certificate List](#).
- Example request
GET: https://{endpoint}/v3/scm/certificates
Obtain {endpoint} from [Regions and Endpoints](#).
Body:

```
{
  "limit": "2",
  "offset": "0"
}
```
- Example response

```
{
  "certificates" : [ {
    "id" : "scs1554192131150",
    "name" : "test",
    "domain" : "www.zx.com",
    "type" : "OV_SSL_CERT",
    "brand" : "GEOTRUST",
    "expire_time" : "2021-05-27 16:46:25.0",
    "domain_type" : "MULTI_DOMAIN",
    "validity_period" : 12,
    "status" : "ISSUED",
    "domain_count" : 2,
    "wildcard_count" : 0,
    "description" : null
  } ],
  "total_count" : 1
}
```

Step 3 Push a certificate.

- API information
URI format: POST /v3/scm/certificates/{certificate_id}/push
For details, see [Pushing a Certificate](#)
- Example request

POST: `https://{endpoint}/v3/scm/certificates/scs1554192131150/push`

Obtain `{endpoint}` from [Regions and Endpoints](#).

- Example response

```
{  
}
```

or

```
{  
  "error_code" : "SCM.XXX",  
  "error_msg" : "XXX"  
}
```

----End

5.3 Example 3: Pushing Your SSL Certificate Purchased Through CCM to Other Services

Scenario

This topic describes how to push a certificate purchased and issued in CCM to WAF and CDN on Huawei Cloud to keep your workloads secure.

Involved APIs

- [Querying the certificate list](#): Query all certificates under your current account and obtain the ID of the certificate to be pushed.
- [Pushing a certificate](#): Push an SSL certificate you have purchased in CCM to other Huawei Cloud services.

Procedure

Step 1 Query the certificate list.

- API information
URI format: `GET /v3/scm/certificates`
For details, see [Querying the Certificate List](#).
- Example request
GET: `https://{endpoint}/v3/scm/certificates`
Obtain `{endpoint}` from [Regions and Endpoints](#).

Body:

```
{  
  "limit": "2",  
  "offset": "0"  
}
```

- Example response

```
{  
  "certificates" : [ {  
    "id" : "scs1554192131150",  
    "name" : "test",  
    "domain" : "www.zx.com",  
    "type" : "OV_SSL_CERT",  
    "brand" : "GEOTRUST",  
    "expire_time" : "2021-05-27 16:46:25.0",  
    "domain_type" : "MULTI_DOMAIN",  
  }  
]
```

```
"validity_period" : 12,  
"status" : "ISSUED",  
"domain_count" : 2,  
"wildcard_count" : 0,  
"description" : null  
} ],  
"total_count" : 1  
}
```

Step 2 Push an SSL certificate to other services.

- API information
URI format: POST /v3/scm/certificates/{certificate_id}/push
For details, see [Pushing a Certificate](#)
- Example request
POST: https://{endpoint}/v3/scm/certificates/scs1554192131150/push
Obtain {endpoint} from [Regions and Endpoints](#).
- Example response

```
{  
}
```

or

```
{  
"error_code" : "SCM.XXX",  
"error_msg" : "XXX"  
}
```

----End

6 Permissions and Supported Actions

6.1 Introduction to Permissions Policies and Supported Actions

This section describes fine-grained permissions management for your CCM. If your account does not need individual IAM users, then you may skip over this section.

By default, new IAM users do not have permissions assigned. You need to add a user to one or more groups, and attach permissions policies or roles to these groups. Users inherit permissions from the groups to which they are added and can perform specified operations on cloud services based on the permissions.

Permissions are classified into roles and policies based on the authorization granularity. Roles are a type of coarse-grained authorization mechanism that defines permissions related to user responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

NOTE

Policy-based authorization is useful if you want to allow or deny the access to an API.

An account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API successfully. For example, if an IAM user queries ECSs using an API, the user must have been granted permissions that allow the **ecs:servers:list** action.

Supported Actions

CCM provides system-defined policies that can be directly used in IAM. You can also create custom policies and use them to supplement system-defined policies, implementing more refined access control. Operations supported by policies are specific to APIs. The following are common concepts related to policies:

- **Permission:** A statement in a policy that allows or denies certain operations.

- APIs: REST APIs that can be called in a custom policy
- Actions: Added to a custom policy to control permissions for specific operations.
- Dependent actions: When assigning an action to users, you also need to assign dependent permissions for that action to take effect.
- IAM projects or enterprise projects: Scope of users a permission is granted to. Policies that contain actions supporting both IAM and enterprise projects can be assigned to user groups and take effect in both IAM and Enterprise Management. Policies that only contain actions supporting IAM projects can be assigned to user groups and only take effect for IAM. Such policies will not take effect if they are assigned to user groups in Enterprise Management.

 NOTE

√: supported; x: not supported

CCM supports the following actions that can be defined in custom policies:

- [SSL Certificate Manager \(SCM\)](#)
- [Private Certificate Authority \(PCA\)](#)

6.2 SSL Certificate Manager (SCM)

Authorization information of APIs (v3)

Permission	API	Action	Dependent Permission	IAM Project (Project)	Enterprise Project (Enterprise Project)
Querying the certificate list	GET /v3/scm/certificates	scm:cert:list	-	√	x
Obtaining details of a certificate	GET /v3/scm/certificates/{certificate_id}	scm:cert:get	-	√	x
Deleting a certificate	DELETE /v3/scm/certificates/{certificate_id}	scm:cert:delete	-	√	x

Permission	API	Action	Dependent Permission	IAM Project (Project)	Enterprise Project (Enterprise Project)
Pushing a certificate	POST /v3/scm/certificates/{certificate_id}/push	scm:cert:push	The following action needs to be added when a certificate is to be pushed to CDN: cdn:configuration:queryHttpsConf	√	x
Importing a certificate	POST /v3/scm/certificates/import	scm:cert:upload	-	√	x
Exporting a certificate	POST /v3/scm/certificates/{certificate_id}/export	scm:cert:download	-	√	x

Authorization information of APIs (v2)

Permission	API	Action	Dependent Permission	IAM Project (Project)	Enterprise Project (Enterprise Project)
Querying the certificate list	GET /v2/{project_id}/scm/certlist	scm:cert:list	-	√	x
Querying the certificate details	GET /v2/{project_id}/scm/cert/{cert_id}	scm:cert:get	-	√	x
Querying the certificate type	GET /v2/{project_id}/scm/cert/product	scm:certType:get	-	√	x
Querying the certificate details	GET /v2/{project_id}/scm/product/{product_id}	scm:certProduct:get	-	√	x
Modifying a certificate	PUT /v2/{project_id}/scm/cert/{cert_id}	scm:cert:edit	-	√	x
Deleting a certificate	DELETE /v2/{project_id}/scm/cert/{cert_id}	scm:cert:delete	-	√	x

Permission	API	Action	Dependent Permission	IAM Project (Project)	Enterprise Project (Enterprise Project)
Pushing a certificate	POST /v2/{project_id}/scm/cert/{cert_id}/push	scm:cert:push	The following action needs to be added when a certificate is to be pushed to CDN: cdn:configuration:queryHttpsConf	√	x
Querying push records	GET /v2/{project_id}/scm/cert/{cert_id}/push-history	scm:pushHistory:list	-	√	x
Uploading a certificate	POST /v2/{project_id}/scm/cert/upload	scm:cert:upload	-	√	x

6.3 Private Certificate Authority (PCA)

Authorization information about APIs related to private CAs

Permission	API	Action
Creating a CA	POST /v1/private-certificate-authorities	pca:ca:create
Canceling the scheduled deletion of a CA	POST /v1/private-certificate-authorities/{ca_id}/restore	pca:ca:restore

Permission	API	Action
Querying details about a private CA	GET /v1/private-certificate-authorities/{ca_id}	pca:ca:get
Querying CSR details about a private CA	GET /v1/private-certificate-authorities/{ca_id}/csr	pca:ca:getCsr
Querying the private CA quota	GET /v1/private-certificate-authorities/quotas	pca:ca:quota
Exporting a private CA	POST /v1/private-certificate-authorities/{ca_id}/export	pca:ca:export
Deleting a private CA	DELETE /v1/private-certificate-authorities/{ca_id}	pca:ca:delete
Disabling a private CA	POST /v1/private-certificate-authorities/{ca_id}/disable	pca:ca:disable
Enabling a private CA	POST /v1/private-certificate-authorities/{ca_id}/enable	pca:ca:enable
Activating a private CA	POST /v1/private-certificate-authorities/{ca_id}/activate	pca:ca:active
Importing a CA	POST /v1/private-certificate-authorities/{ca_id}/import	pca:ca:import
Querying the private CA list	GET /v1/private-certificate-authorities	pca:ca:list

Authorization information about APIs related to private certificates

Permission	API	Action
Querying details about a private certificate	GET /v1/private-certificates/{certificate_id}	pca:cert:get
Parsing the CSR of a private certificate	POST /v1/private-certificates/csr/parse	pca:cert:parseCsr
Exporting a private certificate	POST /v1/private-certificates/{certificate_id}/export	pca:cert:export

Permission	API	Action
Querying the private certificate quota	GET /v1/private-certificates/quotas	pca:cert:quota
Creating a private certificate	POST /v1/private-certificates	pca:ca:issueCert
Deleting a private certificate	DELETE /v1/private-certificates/{certificate_id}	pca:ca:delete
Revoking a private certificate	POST /v1/private-certificates/{certificate_id}/revoke	pca:cert:revoke
Creating a private certificate through a CSR	POST /v1/private-certificates/csr	pca:ca:issueCertThroughCSR
Querying the list of private certificates	GET /v1/private-certificates	pca:cert:list

7 Historical APIs

7.1 SCM APIs

7.1.1 Purchasing an SSL Certificate

Function

This API is used to purchase an SSL certificate.

NOTE

The request parameter **agree_privacy_protection** must be set to **true**. Otherwise, the certificate purchase application cannot be submitted.

URI

- URI format
POST /v2/{project_id}/scm/cert/purchase
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request

Request parameters

Parameter	Mandatory	Type	Description
cert_brand	Yes	String	Certificate brand. For example: GLOBALSIGN

Parameter	Mandatory	Type	Description
cert_type	Yes	String	Certificate type. Options: • DV_SSL_CERT • DV_SSL_CERT_BASIC • EV_SSL_CERT • EV_SSL_CERT_PRO • OV_SSL_CERT • OV_SSL_CERT_PRO
domain_type	Yes	String	Domain name type. Options: • SINGLE_DOMAIN: single-domain name type. • MULTI_DOMAIN: multi-domain name type. • WILDCARD: wildcard domain name type.
effective_time	Yes	Integer	Certificate validity period, in years. Options: • 1: Purchase a certificate with a validity period of one year. • 2: Purchase a certificate with a validity period of two years.
domain_numbers	Yes	Integer	Number of domain names. • If domain_type is set to SINGLE_DOMAIN or WILDCARD, the value of domain_numbers is 1. • If domain_type is set to MULTI_DOMAIN, the value of domain_numbers ranges from 2 to 100.
order_number	Yes	Integer	Number of purchased certificates. Value range: 1-1000.

Parameter	Mandatory	Type	Description
agree_privacy_protection	Yes	Boolean	Whether to agree with the privacy statement. • true: Agree with the privacy statement. • false: Disagree with the privacy statement. You can purchase a certificate only when this parameter is set to true .

Response

Response parameters

Parameter	Mandatory	Type	Description
order_id	Yes	String	Order ID.
cert	Yes	Array of cert objects	Certificate list. For details, see Table 7-1 .

Table 7-1 cert

Parameter	Mandatory	Type	Description
cert_id	Yes	String	Certificate ID.

Example

The following describes how to purchase a multi-domain OV certificate issued by GlobalSign. Assume that the domain quantity is 5, and the validity period is one year.

- Example request

```
{
  "cert_brand": "GLOBALSIGN",
  "cert_type": "OV_SSL_CERT ",
  "domain_type": "MULTI_DOMAIN",
  "effective_time": 1,
  "domain_numbers": 5,
  "order_number": 1,
  "agree_privacy_protection": true,
}
```

- Example response

```
{
  "order_id": "CS1803192259ROA8U"
  "cert": [{
    "cert_id": "scs1481110651012",
```

```
    }}  
  }  
  or  
  {  
    "error_code": "SCM.XXXX",  
    "error_msg": "XXXX"  
  }
```

Status Codes

Table 7-2 lists the normal status code returned by the API.

Table 7-2 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.2 Querying the Certificate List

Function

This API is used to query the certificate list based on a certificate name or bound domain name.

NOTICE

This API will be discarded. You are advised to query certificates by referring to [Querying the Certificate Lists](#).

URI

- URI format
GET /v2/{project_id}/scm/certlist?order_status=&content=&sort_key=&sort_dir=&limit=&offset=
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request

Request parameters

Parameter	Mandatory	Type	Description
order_status	No	String	Certificate status. Options: • PAID: The certificate has been paid. • ISSUED: The certificate has been issued. • CHECKING: The certificate application is being reviewed. • CANCELCHECKING: The certificate application cancellation is being reviewed. • UNPASSED: The certificate application fails. • EXPIRED: The certificate has expired. • REVOKING: The certificate revocation application is being reviewed. • REVOKED: The certificate has been revoked. • UPLOAD: The certificate is being hosted. • SUPPLEMENTCHECKING: Additional domain names to be added for a multi-domain certificate is being reviewed. • CANCELSUPPLEMENTING: The cancellation on additional domain names to be added is being reviewed.
content	No	String	Keyword for search.
sort_key	No	String	Sorting criterion. Options: • certExpiredTime: certificate expiration time. • certStatus: certificate status. • certUpdateTime: certificate update time.

Parameter	Mandatory	Type	Description
sort_dir	No	String	Sorting method. Sorting is performed based on the sorting parameter sort_key . Options: • ASC: ascending order. • DESC: descending order.
limit	No	Integer	Maximum number of pieces of certificate information to be displayed on each page. Options: • 10: Each page displays up to 10 pieces of certificate information. • 20: Each page displays up to 20 pieces of certificate information. • 50: Each page displays up to 50 pieces of certificate information.
offset	No	Integer	Offset. Value range: 1-30.

Response

Response parameters

Parameter	Mandatory	Type	Description
total	Yes	Integer	Number of certificates in a list.
free_remain	Yes	Integer	Remaining quota of the free test certificate.
order_list	Yes	Array of order_list objects	Certificate list. For details, see Table 7-3 .

Table 7-3 order_list

Parameter	Mandatory	Type	Description
cert_id	Yes	String	Certificate ID.
cert_name	Yes	String	Certificate name.
domain	Yes	String	Bound domain name.

Parameter	Mandatory	Type	Description
cert_type	Yes	String	Certificate type.
cert_brand	Yes	String	Certificate brand.
domain_type	Yes	String	Domain name type.
purchase_period	Yes	Integer	Validity period.
expired_time	Yes	String	Certificate expiration time.
order_status	Yes	String	Certificate status.
domain_num	Yes	Integer	Number of domain names.
wildcard_number	Yes	Integer	Number of wildcard domain names.
cert_des	Yes	String	Certificate description.

Example

- Example request

None

- Example response

```
{
  "total": 1,
  "free_remain": "19",
  "order_list": [{
    "cert_id": "scs1481110651012",
    "cert_name": "scs-0001",
    "domain": "*.example.com",
    "cert_type": "GE00V01",
    "cert_brand": "GLOBALSIGN",
    "domain_type": "SINGLE_DOMAIN ",
    "purchase_period": 1,
    "expired_time": "15051501510501",
    "order_state": "completed ",
    "domain_num": 10,
    "wildcard_number": 2,
    "cert_des": "*****"
  }]
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

Table 7-4 lists the normal status code returned by the API.

Table 7-4 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.3 Querying Details of a Certificate

Function

This API is used to query details of a certificate.

NOTICE

This API will be discarded. You are advised to obtain certificate details by referring to [Obtaining Details of a Certificate](#).

URI

- URI format
GET /v2/{project_id}/scm/cert/{cert_id}
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

None

Response

Response parameters

Parameter	Mandatory	Type	Description
cert_id	Yes	String	Certificate ID.
order_id	Yes	String	Order ID.
cert_name	Yes	String	Certificate name.

Parameter	Mandatory	Type	Description
cert_type	Yes	String	Certificate type. Example: OV
cert_brand	Yes	String	Certificate brand. Example: GLOBALSIGN
domain_type	Yes	String	Domain name type. Example: MULTI_DOMAIN
domain_name	Yes	String	Domain name bound to a certificate. Example: funnyzx.com;abc.com
domain_number	Yes	Integer	Number of domains. Example: 3
cert_describe	Yes	String	Certificate description.
push_support	Yes	String	Whether a certificate can be pushed.
revoke_reason	Yes	String	Reason for certificate revocation.
domain_name	Yes	String	Domain name bound to a certificate. Multiple domain names are separated by semicolons (;). Example: www.example.com;www.example1.com;www.example2.com
company_name	Yes	String	Company name.
company_province	Yes	String	State or region where a company is located.
company_city	Yes	String	City where a company is located.
applicant_name	Yes	String	Name of a company contact.
applicant_phone	Yes	String	Phone number of a company contact.
applicant_email	Yes	String	Email of a company contact.

Parameter	Mandatory	Type	Description
contact_name	Yes	String	Name of a technical contact.
contact_phone	Yes	String	Phone number of a technical contact.
contact_email	Yes	String	Email of a technical contact.
status	Yes	String	Certificate status.
encrypt_type	Yes	String	Signature encryption algorithm.
country	Yes	String	Country code.
organization_unit	Yes	String	Company department.
DNS_push_status	Yes	String	DNS push status • ON: indicates that the push is successful. • OFF: indicates that the push fails. • NONE: indicates that the push function is not enabled.
auth	Yes	Array of auth objects	Certificate authentication status. For details, see Table 7-5 .

Table 7-5 auth

Parameter	Mandatory	Type	Description
method	Yes	String	Authentication method.
status	Yes	String	Certificate authentication status.
domain_name	Yes	String	Domain name for DNS authentication.
host_record	Yes	String	Host record of DNS authentication.
record_type	Yes	String	Record type of DNS authentication.
record	Yes	String	Record value of DNS authentication.

Example

- Example request
None
- Example response

```
{
  "cert_id": "scs1481110651012",
  "order_id ": "CS1803192259ROA8U",
  "cert_name": "test",
  "cert_type": "OV",
  "cert_brand": "GEOTRUST",
  "domain_type": "MULTI_DOMAIN",
  "domain_name": "funnyzx.com;abc.com",
  "domain_number": 3,
  "cert_describe": "XXXXXXXXX",
  "push_support": "on",
  "revoke_reason": "xxxxxxxxxxx",
  "domain_name": " www.test.com;*example1.com;*example2.com",
  "company_name": "Huawei Technologies Co., Ltd.",
  "company_province": "Guangdong",
  "company_city": "Shenzhen",
  "applicant_name": "Tom",
  "applicant_phone": "13087654321",
  "applicant_email": "example@xx.com",
  "contact_name": "Jacky",
  "contact_phone": "13087654321",
  "contact_email": "example@xx.com",
  "status": "PAID",
  "encrypt_type": "SHA256withRSA2048",
  "country": "CN",
  "organization_unit": "unit",
  "DNS_push_status": "ON",
  "auth": [{
    "method": "DNS",
    "status": " checking ",
    "domain_name": "www.test.com",
    "host_record": "dnsauth",
    "record_type": "TXT",
    "record": "201803272148qwedginciog08"
  }]
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

Table 7-6 lists the normal status code returned by the API.

Table 7-6 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.4 Modifying a Certificate

Function

This API is used to change the name or description of a certificate.

URI

- URI format
PUT /v2/{project_id}/scm/cert/{cert_id}
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

Parameter	Mandatory	Type	Description
modify_key	Yes	String	Change key. The value can be CERT_NAME or DESCRIPTION . • CERT_NAME: indicates the name of a certificate to be modified. • DESCRIPTION: indicates the description of a certificate to be modified.
modify_value	Yes	String	Modification details. • If the change key is CERT_NAME, the value can contain only digits, letters, and hyphens (-). The value is a string of 0 to 63 characters and cannot be null. • When the change key is DESCRIPTION, the value is a string of 0 to 255 characters and can be null.

Response

Response parameters

Parameter	Mandatory	Type	Description
response_info	Yes	String	Request result.

Examples

The following describes how to change the certificate name to **sssaaaa**.

- Example request

```
{
  "modify_key": "CERT_NAME",
  "modify_value": "sssaaaa"
}
```

- Example response

```
{
  "response_info": "success"
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

[Table 7-7](#) lists the normal status code returned by the API.

Table 7-7 Status Code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.5 Querying the Product Type of a Certificate

Function

This API is used to query information about all products that are being sold on SCM.

URI

- URI format
GET /v2/{project_id}/scm/cert/product
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request

Request parameters

None

Response

Response parameters

Parameter	Mandatory	Type	Description
type_list	Yes	Array of type_list objects	Product type list. For details, see Table 7-8 .

Table 7-8 type_list

Parameter	Mandatory	Type	Description
cert_type	Yes	String	Certificate type. • OV_SSL_CERT: Organization Validation (OV) SSL certificate. • EV_SSL_CERT: Extended Validation (EV) SSL certificate.
cert_brand	Yes	String	Certificate brand. GLOBALSIGN : GlobalSign brand.
domain_type	Yes	String	Domain name type. • SINGLE_DOMAIN: single-domain name type. • MULTI_DOMAIN: multi-domain name type. • WILDCARD: wildcard domain name type.
product_id	Yes	String	Product ID.

Parameter	Mandatory	Type	Description
effective_time	Yes	Integer	Certificate validity period (year). 1: The validity period of the certificate is one year. 2: The validity period of the certificate is two years.
product_name	Yes	String	Product name.

Example

- Example request
None
- Example response

```
{
  "type_list": [{
    "cert_type": "OV_SSL_CERT",
    "cert_brand": "GLOBAISIGN",
    "domain_type": "SINGLE_DOMAIN",
    "product_id": "00301-106005-0--0",
    "effective_time": 1,
    "product_name": "globalsign.single.ov.2"
  }]
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

Table 7-9 lists the normal status code returned by the API.

Table 7-9 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.6 Querying the Product Details of a Certificate

Function

This API is used to query details about a specified certificate.

URI

- URI format
GET /v2/{project_id}/scm/product/{product_id}
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
product_id	Yes	String	Product ID.

Request

Request parameters

None

Response

Response parameters

Parameter	Mandatory	Type	Description
cert_type	Yes	String	Certificate type. • OV_SSL_CERT: Organization Validation (OV) SSL certificate. • EV_SSL_CERT: Extended Validation (EV) SSL certificate.
cert_brand	Yes	String	Certificate brand. GLOBALSIGN: GlobalSign brand.
domain_type	Yes	String	Domain name type. • SINGLE_DOMAIN: single-domain name type. • MULTI_DOMAIN: multi-domain name type. • WILDCARD: wildcard domain name type.

Parameter	Mandatory	Type	Description
effective_time	Yes	Integer	Certificate validity period, in years. • 1: The validity period of the certificate is one year. • 2: The validity period of the certificate is two years.

Example

- Example request
None
- Example response

```
{
  "cert_type": "OV_SSL_CERT",
  "cert_brand": "GLOBALSIGN",
  "domain_type": "SINGLE_DOMAIN",
  "effective_time": 1
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

Table 7-10 lists the normal status code returned by the API.

Table 7-10 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.7 Applying for a Certificate

Function

This API is used to complete certificate application information, such as the domain name bound to a certificate and the applicant's detailed information.

NOTE

The request parameter **agree_privacy_protection** must be set to **true**. Otherwise, the certificate application information cannot be submitted.

URI

- URI format
POST /v2/{project_id}/scm/cert/{cert_id}/complete
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

Parameter	Mandatory	Type	Description
domain	Yes	String	Domain name bound to a certificate. • If the certificate to be purchased is a single-domain or wildcard domain name certificate, enter the single-domain or wildcard domain name. • If the certificate to be purchased is a multi-domain certificate, select one domain name as the primary domain name. Example: www.example.com

Parameter	Mandatory	Type	Description
sans	No	String	Additional domain name of the certificate that is bound to a multi-domain certificate. Set this parameter only when the certificate to be purchased is a multi-domain certificate and the number of additional domain names can be increased. Multiple domain names must be separated by semicolons (;). Example: www.example.com;www.example1.com;www.example2.com
csr	No	String	Certificate CSR, which must match the domain name.
company_name	Yes	String	Company name. This parameter is mandatory for certificates of the OV and EV types. The value must contain 0 to 63 characters.
company_unit	No	String	Department name. This parameter is optional for certificates of the OV and EV types. The value must contain 0 to 63 characters.
company_province	Yes	String	State or region where a company is located. This parameter is mandatory for certificates of the OV and EV types. The value must contain 0 to 63 characters.

Parameter	Mandatory	Type	Description
company_city	Yes	String	City where a company is located. This parameter is mandatory for certificates of the OV and EV types. The value must contain 0 to 63 characters.
country	Yes	String	Country code. • CN: China • US: United States
applicant_name	Yes	String	Applicant name. The value must contain 0 to 63 characters.
applicant_phone	Yes	String	Phone number of an applicant. Example: 13212345678
applicant_email	Yes	String	Email of an applicant. Example: example@huawei.com
contact_name	No	String	Name of a technical contact. The value must contain 0 to 63 characters.
contact_phone	No	String	Phone number of a technical contact. Example: 13212345678
contact_email	No	String	Email of a technical contact. Example: example@huawei.com
auto_dns_auth	No	Boolean	Whether to push DNS authentication information to Huawei Cloud DNS. • true: DNS authentication information is pushed to Huawei Cloud DNS. • false: DNS authentication information is not pushed to Huawei Cloud DNS.

Parameter	Mandatory	Type	Description
agree_privacy_protection	Yes	Boolean	Whether to agree with the privacy statement. • true: Agree with the privacy statement. • false: Disagree with the privacy statement. You can submit your certificate application only when this parameter is set to true .
domain_method	Yes	String	Domain name verification method • dns: This method is applied to DV, OV, and EV certificates. • file: This method is applied only to IP certificates. • email: This method is applied to OV, and EV certificates.

Response

Response parameters

Parameter	Mandatory	Type	Description
request_info	Yes	String	Request result.

Example

The following describes how to supplement information about a certificate.

- Example request

```
{  "domain": "www.xzz.com",  "company_name": "Huawei Chengdu branch",  "company_province": "Sichuan",  "company_city": "Chengdu",  "applicant_name": "Tom",  "applicant_phone": "13212345678",  "applicant_email": "9997342346@qq.com",  "csr": "",  "sans": "",  "country": "CN",  "company_unit": "Human Resource Dept",  "contact_name": "Jacky",  "contact_phone": "13512345678",
```

```
"contact_email":"jk@jk.ff",
"auto_dns_auth":false,
"agree_privacy_protection":true
}
```

- Example response

```
{
  "request_info":"success"
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

[Table 7-11](#) lists the normal status code returned by the API.

Table 7-11 Status Codes

Status Codes	Status	Description
200	OK	Request processed successfully.

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

7.1.8 Verifying a CSR

Function

This API is used to verify a certificate signing request (CSR) and resolve the domain name.

URI

- URI format
POST /v2/{project_id}/scm/check-csr
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request

Request parameters

Parameter	Mandatory	Type	Description
csr	Yes	String	Certificate signing request.

Response

Response parameters

Parameter	Mandatory	Type	Description
domain_name	Yes	String	Domain name in the CSR.

Example

The following describes how to verify a CSR.

- Example request

```
{
  "csr": "-----BEGIN NEW CERTIFICATE REQUEST-----*****-----END NEW CERTIFICATE REQUEST-----"
}
```

- Example response

```
{
  "domain": "a.example1.com"
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

[Table 7-12](#) lists the normal status code returned by the API.

Table 7-12 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.9 Saving Certificate Information

Function

This API is used to save certificate information entered during certificate application.

NOTE

The request parameter **agree_privacy_protection** must be set to **true**. Otherwise, certificate information cannot be saved.

URI

- URI format
POST /v2/{project_id}/scm/cert/{cert_id}/save
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

Parameter	Mandatory	Type	Description
domain	Yes	String	Domain name bound to a certificate.
sans	No	String	Additional domain names of a multi-domain certificate. Multiple domain names are separated by semicolons (;).
csr	No	String	Certificate csr string, which must match the domain name.
company_name	Yes	String	Company name. This parameter is mandatory for certificates of the OV and EV types. The value must contain 0 to 63 characters.
company_unit	No	String	Department name. This parameter is optional for certificates of the OV and EV types. The value must contain 0 to 63 characters.

Parameter	Mandatory	Type	Description
company_province	Yes	String	State or region where a company is located. This parameter is mandatory for certificates of the OV and EV types. The value must contain 0 to 63 characters.
company_city	Yes	String	City where a company is located. This parameter is mandatory for certificates of the OV and EV types. The value must contain 0 to 63 characters.
country	Yes	String	Country code.
applicant_name	Yes	String	Applicant name. The value must contain 0 to 63 characters.
applicant_phone	Yes	String	Phone number of an applicant. Example: 13212345678
applicant_email	Yes	String	Email of an applicant. Example: example.huawei.com
contact_name	No	String	Name of a technical contact. The value must contain 0 to 63 characters.
contact_phone	No	String	Phone number of a technical contact. Example: 13212345678
contact_email	No	String	Email of a technical contact. Example: example.huawei.com

Parameter	Mandatory	Type	Description
agree_privacy_protection	Yes	Boolean	Whether to agree with the privacy statement. • true: Agree with the privacy statement. • false: Disagree with the privacy statement. You can save certificate information only when this parameter is set to true .

Response

Response parameters

Parameter	Mandatory	Type	Description
request_info	Yes	String	Request result.

Example

The following describes how to save supplemented information about a certificate.

- Example request

```
{
  "domain": "www.xzz.com",
  "company_name": "Huawei Chengdu branch",
  "company_province": "Sichuan",
  "company_city": "Chengdu",
  "applicant_name": "Tom",
  "applicant_phone": "13212345678",
  "applicant_email": "9997342346@qq.com",
  "csr": "",
  "sans": "",
  "country": "CN",
  "company_unit": "Human Resource Dept",
  "contact_name": "Jacky",
  "contact_phone": "13512345678",
  "contact_email": "jk@jk.ff",
  "agree_privacy_protection": true
}
```

- Example response

```
{
  "request_info": "success"
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

Table 7-13 lists the normal status code returned by the API.

Table 7-13 Status codes

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.10 Reading the Information Entered When Applying for a Certificate

Function

This API is used to read the saved information about a certificate.

URI

- URI format
POST /v2/{project_id}/scm/cert/{cert_id}/read
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

None

Response

Response parameters

Parameter	Mandatory	Type	Description
domain_name	Yes	String	Domain name bound to a certificate. Example: www.domain.com

Parameter	Mandatory	Type	Description
sans	Yes	String	Additional domain names of a multi-domain certificate. Multiple domain names are separated by semicolons (;). If a single-domain or wildcard domain certificate is applied for, the value of this parameter is empty.
CSR	Yes	String	Certificate signing request.
country	Yes	String	Country code. Example: • CN: China • US: United States
company_name	Yes	String	Company name.
company_unit	Yes	String	Department name
company_province	Yes	String	State or region where a company is located. Example: Sichuan
company_city	Yes	String	City where a company is located. Example: Chengdu
applicant_name	Yes	String	Applicant name. Example: Tom
applicant_phone	Yes	String	Phone number of an applicant. Example: 13412345678
applicant_email	Yes	String	Email of an applicant. Example: example.huawei.com
contact_name	Yes	String	Name of a technical contact.
contact_phone	Yes	String	Phone number of a technical contact.
contact_email	Yes	String	Email of a technical contact.

Parameter	Mandatory	Type	Description
bl	Yes	String	Whether the picture of bank account opening permit has been uploaded. • 0: The picture of bank account opening permit has not been uploaded. • 1: The picture of bank account opening permit has been uploaded.
tl	Yes	String	Whether the business license of the company has been uploaded. 0 : The business license of the company has not been uploaded. 1 : The business license of the company has been uploaded.

Example

- Example request
None
- Example response

```
{
  "domain_name": "www.xzz.com",
  "sans": "",
  "CSR": null,
  "country": "CN",
  "company_unit": "Human Resource Dept",
  "company_name": "Huawei Chengdu branch",
  "company_province": "Sichuan",
  "company_city": "Chengdu",
  "applicant_name": "Tom",
  "applicant_phone": "13245678932",
  "applicant_email": "1027342346@qq.com",
  "contact_name": "Jacky",
  "contact_phone": "13526456325",
  "contact_email": "jk@jk.ff",
  "bl": "0",
  "tl": "1"
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

Table 7-14 lists the normal status code returned by the API.

Table 7-14 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.11 Canceling an Application

Function

This API is used to cancel an application of certificate reviewing.

URI

- URI format
POST /v2/{project_id}/scm/cert/{cert_id}/cancel-cert
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

None

Response

Response parameters

Parameter	Mandatory	Type	Description
cert_id	Yes	String	Certificate ID.
message	Yes	String	Request result.

Example

- Example request
None

- Example response

```
{
  "cert_id": "scs1481110651012",
  "message": "success"
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

[Table 7-15](#) lists the normal status code returned by the API.

Table 7-15 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.12 Deleting a Certificate

Function

This API is used to delete a certificate, that is, delete a certificate from HUAWEI CLOUD.

NOTICE

This API will be discarded. You are advised to delete a certificate by referring to [Deleting a Certificate](#).

URI

- URI format
DELETE /v2/{project_id}/scm/cert/{cert_id}
- Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

None

Response

Response parameters

Parameter	Mandatory	Type	Description
message	Yes	String	Request result.

Example

- Example request

None

- Example response

```
{  
  "message": "success"  
}
```

or

```
{  
  "error_code": "SCM.XXXX",  
  "error_msg": "XXXX"  
}
```

Status Codes

Table 7-16 lists the normal status code returned by the API.

Table 7-16 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.13 Uploading Authentication Information

Function

This API is used to upload the authentication information picture required for certificate review.

URI

- URI format
POST /v2/{project_id}/scm/cert/{cert_id}/info/{type}/upload_authentication
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
type	Yes	String	Type of the content to be uploaded. • BL: bank account opening permit. • TL: business license of a company.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

None

Response

Response parameters

Parameter	Mandatory	Type	Description
request_info	Yes	String	Request result.

Example

- Example request

```
{  
  <Upload content>  
}
```

- Example response

```
{  
  "request_info": "success"  
}
```

or

```
{  
  "error_code": "SCM.XXXX",  
  "error_msg": "XXXX"  
}
```

Status Codes

Table 7-17 lists the normal status code returned by the API.

Table 7-17 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.14 Downloading a Certificate

Function

This API is used to download a certificate.

NOTICE

This API will be discarded. You are advised to export a certificate by referring to [Exporting a Certificate](#).

URI

- URI format
GET /v2/{project_id}/scm/cert/{cert_id}/cert_file
- Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Requests

Request parameters

None

Responses

Certificate file, which is a compressed package with the .rar extension.

Examples

- Example request
None
- Example response

```
{  
  <Object Content>  
}
```

or

```
{  
  "error_code": "SCM.XXXX",  
  "error_msg": "XXXX"  
}
```

Status Codes

Table 7-18 lists the normal status code returned by the API.

Table 7-18 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.15 Uploading a Certificate

Function

This API is used to upload a certificate to SCM.

URI

- URI format
POST /v2/{project_id}/scm/cert/upload
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request

Request parameters

Parameter	Mandatory	Type	Description
cert_name	Yes	String	Certificate name. The value is a string of 0 to 63 characters.
cert	Yes	String	Certificate chain content.
private_key	Yes	String	Private key of a certificate.

Response

Response parameters

Parameter	Mandatory	Type	Description
cert_id	Yes	String	Certificate ID.

Example

The following describes how to upload a certificate named **test**.

- Example request

```
{
  "cert_name": "test",
  "cert": "-----BEGIN CERTIFICATE----- *** -----END CERTIFICATE-----",
  "private_key": "-----BEGIN RSA PRIVATE KEY----- *** -----END RSA PRIVATEKEY-----"
}
```

- Example response

```
{
  "cert_id": "scs1481110651012"
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

[Table 7-19](#) lists the normal status code returned by the API.

Table 7-19 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.16 Revoking a Certificate

Function

This API is used to revoke a certificate.

URI

- URI format
POST /v2/{project_id}/scm/cert/{cert_id}/revoke
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Parameter	Mandatory	Type	Description
cert_id	Yes	String	Certificate ID.

Request

Request parameters

Parameter	Mandatory	Type	Description
reason	Yes	String	Reason for revoking a certificate. The value is a string of 0 to 63 characters.

Response

Response parameters

Parameter	Mandatory	Type	Description
message	Yes	String	Revocation request result.

Examples

The following uses the certificate revocation reason "certificate information filled incorrectly" as an example.

- Example request

```
{
  "reason": "certificate information filled incorrectly",
}
```

- Example response

```
{
  "message": "success"
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

[Table 7-20](#) lists the normal status code returned by the API.

Table 7-20 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.17 Pushing a Certificate

Function

This API is used to push an SSL certificate to other HUAWEI CLOUD services, such as Web Application Firewall (WAF) and Content Delivery Network (CDN).

NOTICE

This API will be discarded. You are advised to push a certificate by referring to [Pushing a Certificate](#).

URI

- URI format
POST /v2/{project_id}/scm/cert/{cert_id}/push
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

Parameter	Mandatory	Type	Description
service_type	Yes	String	Type of the service to which a certificate is pushed. Options: CDN and WAF
remote_project	Yes	String	Region where the target service to which a certificate is pushed.

Response

Response parameters

Parameter	Mandatory	Type	Description
message	Yes	String	Request result.

Example

The following describes how to push a certificate to WAF in region **ap-southeast-1**.

- Example request

```
{
  "service_type": "WAF",
  "remote_project": "ap-southeast-1"
}
```

- Example response

```
{
  "message": "success"
}
```

or

```
{
  "error_code": "SCM.XXXX",
  "error_msg": "XXXX"
}
```

Status Codes

Table 7-21 lists the normal status code returned by the API.

Table 7-21 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.18 Querying Push Records

Function

This API is used to query the last 10 certificate push records, which are to be pushed to another HUAWEI CLOUD service.

URI

- URI format
GET /v2/{project_id}/scm/cert/{cert_id}/push-history

- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

None

Response

Response parameters

Parameter	Mandatory	Type	Description
push_history_list	Yes	Array of push_history_list objects	Push record list. For details, see Table 7-22 .

Table 7-22 push_history_list

Parameter	Mandatory	Type	Description
push_time	Yes	String	Push time, in milliseconds.
push_remote_project	Yes	String	Push project.
push_service	Yes	String	Push service type. WAF: A certificate is pushed to WAF. CDN: A certificate is pushed to CDN.

Example

- Example request

None

- Example response

```
{
  "push_history_list": [
    {
      "push_time": "1556257820000",
      "push_remote_project": null,
      "push_service": "CDN"
    }
  ]
}
```

```
    },  
    {  
      "push_time": "1556257447000",  
      "push_remote_project": "ap-southeast-1",  
      "push_service": "WAF"  
    }  
  ]  
}  
or  
{  
  "error_code": "SCM.XXXX",  
  "error_msg": "XXXX"  
}
```

Status Codes

Table 7-23 lists the normal status code returned by the API.

Table 7-23 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.19 Canceling Authorization for Privacy Information

Function

This API is used to cancel authorization for privacy information and delete the privacy data saved in SCM.

URI

- URI format
DELETE /v2/{project_id}/scm/privacy-protection/{cert_id}
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

None

Response

Response parameters

Parameter	Mandatory	Type	Description
message	Yes	String	Request result.

Example

- Example request
None
- Example response

```
{  
  "message": "success"  
}
```

or

```
{  
  "error_code": "SCM.XXXX",  
  "error_msg": "XXXX"  
}
```

Status Codes

[Table 7-24](#) lists the normal status code returned by the API.

Table 7-24 Status code

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.20 Adding an Additional Domain Name

Function

This API is used to add an additional domain name. If you have a multi-domain SSL certificate and available quota for additional domain names, you can add additional domain names for the certificate after it is issued.

URI

- URI format
POST /v2/{project_id}/scm/cert/{cert_id}/supplement
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

Parameter	Mandatory	Type	Description
ori_sans	Yes	String	Additional domain name bound to a multi-domain certificate. If multiple domain names are displayed, the domain names are separated by semicolons (;). Example: example.domain.com;example.domain1.com
add_sans	No	String	Additional domain name to be added for a multi-domain certificate. If multiple domain names need to be entered, separate the domain names by semicolons (;). Example: example.domain2.com;example.domain3.com
email	No	String	Email of a contact.

Response

Response parameters

Parameter	Mandatory	Type	Description
request_info	Yes	String	Request result.

Example

The following describes how to add an additional domain name **example.domain.com**.

- Example request

```
{
  "ori_sans": "abc.com;xyz.com",
```

```
"add_sans": "example.domain.com",  
"email": "example@xx.com"  
}
```

- Example response

```
{  
  "request_info": "success"  
}
```

or

```
{  
  "error_code": "SCM.XXXX",  
  "error_msg": "XXXX"  
}
```

Status Codes

[Table 7-25](#) lists the normal status code returned by the API.

Table 7-25 Status codes

Status Code	Status	Description
200	OK	Request processed successfully.

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

7.1.21 Querying Domain Name Verification Information

Function

This API is used to query domain name verification details.

URI

- URI format
GET /v2/{project_id}/scm/cert/{cert_id}/domain-verify
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cert_id	Yes	String	Certificate ID.

Request

Request parameters

None.

Response

Response parameters

Parameter	Mandatory	Type	Description
domain_name	Yes	String	Domain name for ownership verification.
domain_email	Yes	String	Email address used for domain name verification.
record_name	Yes	String	Host record
record_value	Yes	String	DNS record
record_type	Yes	String	Record type
domain_method	Yes	String	Verification method
applicant_email	Yes	String	Email of the applicant.
auto_dns_auth	Yes	boolean	Whether the domain name ownership is verified in an automated manner.

Example

```
{
  "domain_name": "huawei.com",
  "domain_email": null,
  "record_name": "_dnsauth. huawei.com",
  "record_value": "202305150000002aurxma1tun2fgzz0jbs9h5lsekf8gloq57mbs78m9jist465m",
  "record_type": "TXT",
  "domain_method": "DNS",
  "applicant_email": "huawei@huawei.com",
  "auto_dns_auth": true
}
```

Status Code

Table 7-26 lists the normal status code returned by the API.

Table 7-26 Status code

Status Code	Code	Description
200	OK	Request processed successfully.

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

A Appendix

A.1 Status Codes

Statues Code to SCM APIs

Status Code	Status	Description
200	OK	Request processed successfully.
202	Accept	The job was successfully delivered. However, it will be postponed because the system is busy currently.
204	No Content	The request is processed successfully and no content is returned.
300	multiple choices	The requested resource has multiple available responses.
400	Bad Request	The request parameter is incorrect.
401	Unauthorized	A username and password are required.
403	Forbidden	The server understood the request, but is refusing to fulfill it.
404	Not Found	The requested resource does not exist or not found.
405	Method Not Allowed	The method specified in the request is not allowed.
406	Not Acceptable	The response generated by the server cannot be accepted by the client.
407	Proxy Authentication Required	You must use the proxy server for authentication. Then, the request can be processed.

Status Code	Status	Description
408	Request Timeout	The request timed out.
409	Conflict	The request cannot be processed due to a conflict.
500	Internal Server Error	Internal service error.
501	Not Implemented	Failed to complete the request. The server does not support the requested function.
502	Bad Gateway	Failed to complete the request, because the server receives an invalid request.
503	Service Unavailable	Failed to complete the request because the system is temporarily abnormal.
504	Gateway Timeout	A gateway timeout error occurs.

Status Codes to Private Certificate Management APIs

Status Codes	Status	Description
200	OK	Request processed successfully.
201	Created	Resource created.
204	NO Content	Request succeeded. No response body is returned.
400	Bad Request	The request parameter is incorrect.
401	Unauthorized	Incorrect or illegal client authentication information.
403	Forbidden	The server understood the request, but is refusing to fulfill it.
404	Not Found	The requested resource does not exist or not found.
500	Internal Server Error	Internal service error.

A.2 Error Codes

A.2.1 SCM Error Codes

Status Code	Error Codes	Error Message	Description	Solution
400	SCM.0003	Tenant has no privilege.	User information is not according with information of cert Owner	Please operate your own certificate.
400	SCM.0005	Incorrect request parameter.	Incorrect request parameter	Enter a valid request parameter.
400	SCM.0006	The uploaded certificate failed to be resolved. Ensure that the uploaded certificate has been issued.	Fail to parse certificate	Please upload the issued certificate.
400	SCM.0008	Abnormal certificate ID	Abnormal certificate ID	Enter a correct certificate ID.
400	SCM.0009	Failed to upload the certificate because no domain name is bound to the certificate.	Failed to upload the certificate. No domain name is bound to the certificate.	Associate the domain name with the certificate before uploading.
400	SCM.0010	This operation is not allowed by the current certificate type or status.	The type or the current status of the certificate does not support this operation.	Enter a certificate type or a certificate status that supports this operation.

Status Code	Error Codes	Error Message	Description	Solution
400	SCM.0011	The max number of free certificates for the current user has been reached, and you cannot continue to purchase free certificates.	The max number of free certificates for the current user has been reached, and you cannot continue to purchase free certificates.	Please dont add further certificates.
400	SCM.0012	The uploaded private key failed to be resolved. Ensure that the certificate has been issued.	The uploaded private key failed to be resolved. Ensure that the uploaded certificate has been issued.	Enter a valid certificate private key.
400	SCM.0014	The uploaded certificate does not match the private key.	The uploaded certificate does not match the uploaded private key.	Upload a valid certificate and private key.
400	SCM.0015	The number or format of domain names entered does not meet the requirements of the your certificate.	The number or format of the domains you entered is not in accordance with requirements of your certificate.	Upload a single-domain or multiple-domain certificate.
400	SCM.0016	Failed to order.	Failed to order.	Please contact technical support.
400	SCM.0020	Incorrect certificate ID.	Incorrect cert ID.	Upload a valid certificate ID.
400	SCM.0023	Modify key format error.	Modify key format error.	Please input nonNull key.
400	SCM.0024	Modify value format error.	Modify value format error.	Please input nonNull value.

Status Code	Error Codes	Error Message	Description	Solution
400	SCM.0025	Exceed the limit	Exceed the limit	The certificate exceeds the re-sign period
400	SCM.0026	Revoke cert error	Revoke cert error	Please contact technical support.
400	SCM.0027	Have no revoke reason	Have no revoke reason	Please input revoke reason.
400	SCM.0028	Push cert error	Push cert error	Please contact technical support.
400	SCM.0030	Certificates cannot be pushed to this service.	Unsupported push service error	Enter a correct service name to which the certificate is pushed.
400	SCM.0031	Certificate parsing error.	Parse certificate error.	Upload a correct certificate.
400	SCM.0032	Incorrect certificate name.	Invalid certificate name.	Enter a valid certificate name.
400	SCM.0033	Csr not bind domain.	Csr not bind domain.	Enter a valid csr with domain.
400	SCM.0034	Csr parse error.	Csr parse error.	Enter a valid csr.
400	SCM.0035	Csr domain not match input domain.	Csr domain not match input domain.	Keep the domain names the same
400	SCM.0036	Domain number not match product.	Domain number not match product.	Please enter the correct number of domain names
400	SCM.0039	The updated quota value must be greater than the currently used quota.	The updated quota value must be greater than the currently used quota.	Please input correct quota value.
400	SCM.0042	Cert has expired.	Cert has expired.	Please dont upload expired cert.

Status Code	Error Codes	Error Message	Description	Solution
400	SCM.0044	Permission denied,please obtain {0} permission.	Permission denied,please obtain {0} permission.	Please obtain permission first.
400	SCM.0049	Cert brand error.	Cert brand error.	Please enter cert brand.
400	SCM.0050	Cert type error.	Cert type error.	Please enter correct cert type.
400	SCM.0051	Domain type error.	Domain type error.	Please enter correct domain type.
400	SCM.0052	Cert effective time error.	Cert effective time error.	Please enter correct cert.
400	SCM.0059	The certificate private key is empty.	No certificate private key found.	Contact the customer service.
400	SCM.0060	Order number error.	Order number error.	Please enter right order number.
400	SCM.0061	Region parameter error.	Region parameter error.	Please enter right region.
400	SCM.0063	Duplicate domain error.	Duplicate domain error.	Please enter unique domain.
400	SCM.0064	The order is executing.	The order is executing.	Please do not place repeated orders.
400	SCM.0065	File size exceeds limit.	File size exceeds limit.	Please enter the correct size file.
400	SCM.0066	Current domain type not allowed to operate.	Current domain type not allowed to operate.	Contact the customer service.
400	SCM.0067	Sans changed.	Sans changed.	Please enter correct sans.
400	SCM.0068	Unsupported region.	Unsupported region.	Please contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	SCM.0070	Incorrect format of the domain bound to the certificate to be uploaded.	The format of the domain bound to the certificate is incorrect.	Upload a valid certificate.
400	SCM.0072	SCM does not support this status.	SCM does not support this status.	Please contact technical support.
400	SCM.0073	Help content format error.	Help content format error.	Please enter right content.
400	SCM.0074	Cert is not renewal paid.	Cert is not renewal paid.	Please contact technical support.
400	SCM.0075	Invalid region id.	Invalid region id.	Please enter valid region id.
400	SCM.0076	DIGICERT DV basic not support to renew.	DIGICERT DV basic not support to renew.	Contact the customer service.
400	SCM.0079	Subject of CaCert not match issuer of Cert	Subject of CaCert not match issuer of Cert	Please contact technical support.
400	SCM.0080	Required param cert_info is null or empty.	Required param cert_info is null or empty.	Please enter nonNull cert info.
400	SCM.0081	Required param cert_info is null or empty.	Required param cert_info is null or empty.	Please enter nonNull cert info.
400	SCM.0082	Invalid validity_period, should be 12.	Invalid validity_period, should be 12.	Please enter valid filed.
400	SCM.0083	Required param first_name is null or empty.	Required param first_name is null or empty.	Please enter nonNull filed.

Status Code	Error Codes	Error Message	Description	Solution
400	SCM.0085	Required param phone is null or empty.	Required param phone is null or empty.	Please enter nonNull filed.
400	SCM.0086	Required param email is null or empty.	Required param email is null or empty.	Please enter nonNull filed.
400	SCM.0095	Run RmsApiController failed.	Run RmsApiController failed.	Please contact technical support.
400	SCM.0101	The cert not support to auto deploy.	The cert not support to auto deploy.	Contact the customer service.
400	SCM.0102	This resource has been open to auto deploy.	This resource has been open to auto deploy.	Please do not repeat the operation.
400	SCM.0103	This resource is not exist.	This resource is not exist.	Please do not operate resource that do not exist.
400	SCM.0104	This region is not support.	This region is not support.	Please do not operate unsupported region.
400	SCM.0105	The cert has associated the auto deployed resources.	The cert has associated the auto deployed resources.	Contact the customer service.
400	SCM.0106	The resource domain is not equals the cert.	The resource domain is not equals the cert.	Please enter right domain.
400	SCM.0108	Domain format is invalid.	Domain format is invalid.	Please enter right domain.
400	SCM.0109	Cert chain length must be more than 1.	Cert chain length must be more than 1.	Please contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	SCM.0201	Failed to push to ELB.	Failed to push to ELB. Error message returned.	Contact the customer service.
400	SCM.0202	Insufficient ELB permissions	Insufficient ELB permissions	Configure required ELB permissions.
400	SCM.0204	ELB does not support this region.	ELB does not support this region.	Please choose other supported region.
400	SCM.0211	Failed to push to CDN.	Failed to push to CDN. Error message returned.	Contact the customer service.
400	SCM.0212	Insufficient CDN permissions	Insufficient CDN permissions	Configure required CDN permissions.
400	SCM.0221	Failed to push to WAF.	Failed to push to WAF. Error message returned.	Contact the customer service.
400	SCM.0222	Insufficient WAF permissions	WAF permission denied	Configure required WAF permissions.
400	SCM.0224	WAF does not support this region.	WAF does not support this region.	Please choose other supported region.
400	SCM.0225	Insufficient WAF quota.	Insufficient WAF quota.	Contact the customer service.
400	SCM.0301	Tag is not found.	Tag is not found.	Contact the customer service.
400	SCM.0302	Tag quota is upper limit.	Tag quota is upper limit.	Please dont add tag.
400	SCM.0303	Match tag invalid.	Match tag invalid.	Please add valid tag.
400	SCM.0304	Field action is error.	Field action is error.	Contact the customer service.
400	SCM.0305	Tag value is invalid.	Tag value is invalid.	Please enter valid tag value.

Status Code	Error Codes	Error Message	Description	Solution
400	SCM.0306	Tag key is invalid.	Tag key is invalid.	Please enter valid tag key.
400	SCM.0309	Tag value length is invalid.	Tag value length is invalid.	Please enter tag value with valid length.
400	SCM.0310	Tag key length is invalid.	Tag key length is invalid.	Please enter tag key with valid length.
400	SCM.0311	Tag key list is invalid.	Tag key list is invalid.	Please enter valid tag key list.
400	SCM.0312	Tag value list is invalid.	Tag value list is invalid.	Please enter valid tag value list.
400	SCM.0313	Tag list is invalid.	Tag list is invalid.	Please enter valid tag list.
400	SCM.0314	Match resourceId invalid.	Match resourceId invalid.	Contact the customer service.
400	SCM.0318	Tag limit invalid.	Tag limit invalid.	Please enter valid parameter.
400	SCM.0319	Tag offset invalid.	Tag offset invalid.	Please enter valid parameter.
400	SCM.0321	Invalid param sys_tags.	Invalid param sys_tags.	Please enter valid parameter.
400	SCM.0323	Invalid tag parameter.	Invalid tag parameter.	Please enter valid parameter.
400	SCM.0401	Gm cert is not support to be pushed.	Gm cert is not support to be pushed.	Please contact technical support.
400	SCM.0501	The parameter cannot be null or the parameter is wrong. Currently only supports:	The parameter cannot be null or the parameter is wrong. Currently only supports:	Only Support WAF/CDN/ELB.
400	SCM.0502	The certificate ID list cannot be empty.	The certificate ID list cannot be empty.	Please enter nonNull certificate ID list.

Status Code	Error Codes	Error Message	Description	Solution
400	SCM.0505	Parameter error, parameter is null or its list size is out of range, additional info:{0}	Parameter error, parameter is null or its list size is out of range	Please enter list with length less than 51 and more than 0
400	SCM.0506	There is no corresponding certificate ID under the tenant, and the set of certificate IDs that cannot be found:{0}	There is no corresponding certificate ID under the tenant	Please contact technical support.
400	SCM.0507	The list parameter cannot have duplicate elements	The list parameter cannot have duplicate elements, parameter name:{0}	Please enter unique parameter.
400	SCM.0508	Parameter error, the following certificates do not support querying deployed resources:{0}	Parameter error, the following certificates do not support querying deployed resources	Please enter valid cert.
401	SCM.0092	Decrypt jwt token failed.	Decrypt jwt token failed.	Please contact technical support.
401	SCM.1000	The token of the request fails to be authenticated	The token of the request fails to be authenticated	Enter a correct token.
401	SCM.1004	Failed to apply for OBT.	Failed to apply for OBT.	Apply for OBT.
401	SCM.1009	Your account is restricted.	The account is restricted	Contact the administrator for unfreezing.

Status Code	Error Codes	Error Message	Description	Solution
401	SCM.1010	Your account is frozen.	The account is frozen	Contact the administrator for unfreezing.
401	SCM.4002	You do not have permission to perform this operation.	You do not have permission to perform this operation.	Contact the administrator to obtain the permission.
403	SCM.0001	Service is not open.	Service is not open	Please contact technical support.
403	SCM.0002	Incorrect tenant ID.	Incorrect tenant ID or domain ID	Ensure that the projectId that matches the projectId in X-Auth-Token.
403	SCM.0040	The max number of free certificates for the current user has been reached, and you cannot continue to purchase free certificates.	The max number of free certificates for the current user has been reached, and you cannot continue to purchase free certificates.	Please stop buying free cert.
403	SCM.0322	Invalid user token, user role don't contain op_service.	Invalid user token, user role don't contain op_service.	Contact the customer service.
403	SCM.1019	The user role has no permission to access the interface	The user role has no permission to access the interface	Please contact technical support.
404	SCM.0069	No projects found.	No projects found.	Select a valid project.
404	SCM.0094	Resource not found.	Resource not found.	Please contact technical support.
500	SCM.0004	Fail to get ca response.	Fail to request from ca	Please contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	SCM.0007	Failed to download the certificate.	Failed to download the certificate.	Contact the customer service.
500	SCM.0013	The uploaded certificate chain failed to be resolved. Ensure that the certificate has been issued.	The uploaded certificate chain failed to be resolved. Ensure that the uploaded certificate has been issued.	Enter a correct certificate chain.
500	SCM.0017	product wrong.	product wrong.	Please contact technical support.
500	SCM.0019	CSB response error.	CSB response error.	Please contact technical support.
500	SCM.0037	Failed to encrypt the certificate.	Failed to encrypt the certificate.	Contact the customer service.
500	SCM.0038	Cert decrypt fail.	Cert decrypt fail.	Please contact technical support.
500	SCM.0062	DNS query fail.	DNS query fail.	Please contact technical support.
500	SCM.0071	SCM does not support this resourceType.	SCM does not support this resourceType.	Please contact technical support.
500	SCM.0087	Request cert failed.	Request cert failed.	Please contact technical support.
500	SCM.0091	Connect jwt server failed.	Connect jwt server failed.	Please contact technical support.
500	SCM.0093	Invalid jwt token.	Invalid jwt token.	Please contact technical support.
500	SCM.0097	Encode next token failed.	Encode next token failed.	Please contact technical support.
500	SCM.0098	Decode next token failed.	Decode next token failed.	Please contact technical support.
500	SCM.0099	Invalid domain id.	Invalid domain id.	Please enter valid domain id.
500	SCM.0100	UnKnown error.	UnKnown error.	Please contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	SCM.0203	Failed to push to ELB.	Failed to push to ELB.	Contact the customer service.
500	SCM.0213	Failed to push to CDN.	CDN push failed	Contact the customer service.
500	SCM.0223	Failed to push to WAF.	WAF push failed	Contact the customer service.
500	SCM.0324	Calculate digest failure.	Calculate digest failure.	Please contact technical support.
500	SCM.0402	Encrypt cert content or private key is null.	Encrypt cert content or private key is null.	Please contact technical support.
500	SCM.0504	Service internal error, please contact technical support.	Service internal error, please contact technical support.	Please contact technical support.
500	SCM.4001	An error occurred when accessing the PDP API.	Failed to obtain fine-grained permission.	Contact the customer service.

A.2.2 PCA Error Codes

Status Code	Error Codes	Error Message	Description	Solution
400	PCA.00020001	Incorrect parameter.	Incorrect parameter.	Please confirm whether the input parameters are correct.
400	PCA.00020101	Incorrect certificate distinguished name.	Incorrect certificate distinguished name.	Please confirm whether all fields in the parameter distinguished_name meet the requirements.

Status Code	Error Codes	Error Message	Description	Solution
400	PCA.00020102	Invalid key algorithm. Only RSA2048, RSA4096, EC256, and EC384 are supported.	Invalid key algorithm. Only RSA2048, RSA4096, EC256, and EC384 are supported.	Please confirm whether the key algorithm input is correct.
400	PCA.00020103	Invalid signature hash algorithm. Only SHA256, SHA384, and SHA512 are supported.	Invalid signature hash algorithm. Only SHA256, SHA384, and SHA512 are supported.	Please confirm whether the entered signature hash algorithm is correct.
400	PCA.00020109	Invalid validity period type or value. Only year, month, or day supported.	Invalid validity period type or value. Only year, month, or day supported.	Please confirm whether the validity period type and value entered are correct.
400	PCA.00020110	Incorrect domain name.	Incorrect domain name.	Please confirm that the length of the entered domain name is in the range of [1,64] and conforms to the domain name rules.
400	PCA.00020111	Invalid IP. Enter an IPv4 address.	Invalid IP. Enter an IPv4 address.	Please confirm that the IP address conforms to IPv4 rules.
400	PCA.00020112	Invalid alternative name type of the certificate subject. Enter an IP or DNS.	Invalid alternative name type of the certificate subject. Enter an IP or DNS.	Please confirm that the type is IP or DNS.

Status Code	Error Codes	Error Message	Description	Solution
400	PCA.0002020 1	Invalid CA ID. Valid CA IDs use a hexadecimal xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx format.	Invalid CA ID. Valid CA IDs use a hexadecimal xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx format.	Please enter the correct CA certificate ID.
400	PCA.0002020 2	Invalid CA type. Only root CA and subordinate CA are supported.	Invalid CA type. Only root CA and subordinate CA are supported.	Invalid CA type. Only root CA and subordinate CA are supported.
400	PCA.0002020 3	Invalid CA path length. The value range is [0, 6].	Invalid CA path length. The value range is [0, 6].	Please confirm whether the length of the entered CA path is correct. The value range of the CA path is [0,6].
400	PCA.0002020 4	Invalid CRL configuration.	Invalid CRL configuration.	Please check whether the entered certificate revocation list configuration is correct, including the OBS bucket name, CRL file name and the value range of the update cycle [7,30].
400	PCA.0002030 1	Invalid certificate ID. Valid certificate IDs use a hexadecimal xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx format.	Invalid certificate ID. Valid certificate IDs use a hexadecimal xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx format.	Please enter the correct certificate ID.

Status Code	Error Codes	Error Message	Description	Solution
400	PCA.00020401	Incorrect certificate signature request.	Incorrect certificate signature request.	Please check that the certificate signing request is correct.
400	PCA.00020402	Incorrect certificate. Please contact technical support.	Incorrect certificate. Please contact technical support.	Please contact technical support.
400	PCA.00020403	Incorrect certificate chain.	Incorrect certificate chain.	Please confirm that the certificate chain entered meets the requirements: 1. The format should be correct. When requesting through API, you need to use " " or "\r " instead of line feed; 2. The certificate chain should be complete. Some intermediate CA certificates cannot be missing. The order is: intermediate CA >... > Root ca.
400	PCA.00020404	Invalid status. The status can only be Pending activation, Activated, Disabled, Pending deletion, or Expired.	Invalid status. The current support status is PENDING, ACTIVED, DISABLED, DELETED, and EXPIRED.	Please enter a valid status value. The currently supported status values are: PENDING, ACTIVED, DISABLED, DELETED, EXPIRED.

Status Code	Error Codes	Error Message	Description	Solution
401	PCA.00000101	Access Denied. No permissions granted for this OBT.	Access Denied. No permissions granted for this OBT.	Please apply for public beta permission.
401	PCA.00010001	Incorrect X-Auth-Token in the request header.	Incorrect X-Auth-Token in the request header.	Please check: 1. Check whether the token is obtained according to the interface provided by the Identity and Access Management(IAM); 2. Check whether the token has expired. If the problem is not solved after checking the above conditions, please contact technical support.
401	PCA.00010002	Account frozen. Please contact technical support.	Account frozen. Please contact technical support.	Please contact technical support.
401	PCA.00010003	Access denied. Real-name authentication failed or account in arrears.	Access denied. Real-name authentication failed or account in arrears.	Please confirm whether the account has been authenticated by real name and whether it is in arrears. If it is still not resolved, please contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
401	PCA.00010004	Insufficient permissions. Contact administrator.	Insufficient permissions. Contact administrator.	Please contact the account administrator to confirm the account permissions. If the problem is still not resolved, please contact technical support.
403	PCA.00000006	Obtaining OBS buckets failed. Please contact technical support.	Obtaining OBS buckets failed. Please contact technical support.	Please contact technical support.
403	PCA.00030001	CA or certificate quantity exceeds quota.	CA or certificate quantity exceeds quota.	Please check whether the number of CAs that have been created or the number of certificates that have been applied for has reached the maximum value. If you need to increase the quota, please contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
403	PCA.00030201	Operation not allowed in the current status.	Operation not allowed in the current status.	There are restrictions on the operations that the CA or certificate is allowed to perform in different states, please check the conditions of the operations: 1. Disable CA: CA status must be in "ACTIVED" or "EXPIRED" status; 2. Enable CA: CA status must be in "DISABLED" status; 3. Delete CA: CA status must be in "PENDING" or "DISABLED" status; 4. Restore CA: CA status needs to be in "DELETED" status; 5. Export the CSR of the CA: the CA status needs to be in the "PENDING" state; 6. Export CA certificate: CA status needs to be in "ACTIVED" or "EXPIRED" status; 7. Activate CA: The CA status needs to be in the "PENDING" state;

Status Code	Error Codes	Error Message	Description	Solution
				8. Applying for a certificate: The issuing CA status needs to be in the "ACTIVED" status; 9. Export certificate: The certificate status needs to be in the "ISSUED" status. If the problem is not resolved after checking the operating conditions, please contact technical support.
403	PCA.00030202	CA or certificate frozen. Contact administrator.	CA or certificate frozen. Contact administrator.	Please contact technical support.
403	PCA.00030301	Certificate public key and private key does not match.	Certificate public key and private key does not match.	If this error message appears when importing a CA certificate, please check whether the CSR of the generated certificate is derived from the CA.
404	PCA.00030102	CA or certificate is not found.	CA or certificate is not found.	Please confirm that the CA or certificate already exists.

Status Code	Error Codes	Error Message	Description	Solution
404	PCA.00030103	Issuer CA is not found	Issuer CA is not found	Please confirm that the specified issuing CA has been created and the status is "ACTIVED".
500	PCA.00000001	Unknown error. Please contact technical support.	Unknown error. Please contact technical support.	Please contact technical support.
500	PCA.00000002	Parameter processing failed. Please contact technical support.	Parameter processing failed. Please contact technical support.	Please contact technical support.
500	PCA.00000003	Certificate processing failed. Please contact technical support.	Certificate processing failed. Please contact technical support.	Please contact technical support.
500	PCA.00000004	Key processing failed. Please contact technical support.	Key processing failed. Please contact technical support.	Please contact technical support.
500	PCA.00000005	Authentication failed. Please contact technical support.	Authentication failed. Please contact technical support.	Please contact technical support.

A.3 Obtaining a Project ID

Obtaining a Project ID by Calling an API

You can obtain the project ID by calling the API for [Querying Project Information 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](#).

In the following example, **id** indicates the project ID.

```
{
  "projects": [
    {
      "domain_id": "65382450e8f64ac0870cd180d14e684b",
      "is_domain": false,
      "parent_id": "65382450e8f64ac0870cd180d14e684b",
      "name": "xxxxxxx",
      "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"
  }
}
```

Obtaining a Project ID from the Console

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

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

Figure A-1 Viewing project IDs

