

# Enterprise Project Management Service

## API Reference

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# 1

## Before You Start

Welcome to Enterprise Project Management Service (EPS). EPS allows you to manage resources and personnel by enterprise project.

This document describes how to use application programming interfaces (APIs) to perform operations on enterprise projects, such as querying, creating, and modifying enterprise projects. For details about all supported operations, see [API Overview](#).

Before using EPS APIs, ensure that you are familiar with EPS concepts. For details, see [What is Enterprise Project Management Service?](#).

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

### Resources Supported by EPS

You can obtain the cloud services and resources supported by EPS by calling the API for [querying services supported by EPS](#). The **provider** field indicates the cloud service name, and the **resource\_type** field indicates the resource type.

### Endpoints

An endpoint is the **request address** for calling an API. Endpoints vary depending on services and regions. The endpoint for EPS is [eps.myhuaweicloud.eu](https://eps.myhuaweicloud.eu).

### Concepts

- Account

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

- User

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

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

- Region

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

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

- AZ

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

- Project

A project corresponds to a region. Default projects are defined. Users can be granted permissions in a default project to access all resources under their accounts in the region associated with the project. If you need more refined access control, create subprojects under a default project and add resources to subprojects. Then you can assign users the permissions required to access only the resources in the specific subprojects.

- Enterprise Project

Enterprise projects group and manage resources across regions. Resources in different enterprise projects are logically isolated.

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

# 2 API Overview

You can use EPS APIs to query enterprise project version information and manage enterprise projects.

**Table 2-1** API description

API	Description
Querying API Versions	Query all API versions of an enterprise project.
Querying an API Version	Query details about the API version of an enterprise project.
Listing Enterprise Projects	Query the list of enterprise projects authorized by the current user.
Creating an Enterprise Project	Create enterprise projects and manage cloud resources by enterprise project.
Querying Enterprise Project Details	Query details about a specified enterprise project.
Modifying Enterprise Projects	Modify an enterprise project. The default enterprise project (default) cannot be modified.
Enabling Enterprise Projects	This API is used to enable existing enterprise projects.
Disabling Enterprise Projects	This API is used to disable existing enterprise projects. The default enterprise project cannot be disabled.
Querying the Enterprise Project Quota	Query the enterprise project quota.
Listing Resources in an Enterprise Project	Query resources added to an enterprise project.

API	Description
Migrating Resources	Migrate resources to a target enterprise project.
Querying Supported Services	Querying services supported by enterprise projects

# 3 API Calling

## 3.1 Making an API Request

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

### Request URI

A request URI is in the following format:

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

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

**Table 3-1** URI parameter description

Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.
Endpoint	Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from "Regions and Endpoints". For example, the endpoint of IAM in region <b>Dublin</b> is <b>iam.myhuaweicloud.eu</b> .
resource-path	Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the <b>resource-path</b> of the API used to obtain a user token is <b>/v3/auth/tokens</b> .

Parameter	Description
query-string	Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of <i>Parameter name=Parameter value</i> . For example, <code>?limit=10</code> indicates that a maximum of 10 data records will be displayed.

IAM is a global service. You can create an IAM user using the endpoint of IAM in any region. For example, to create an IAM user in the **EU-Dublin** region, obtain the endpoint of IAM (**iam.myhuaweicloud.eu**) for this region and the **resource-path** (`/v3.0/OS-USER/users`) in the URI of the API for [creating an IAM user](#). Then construct the URL as follows:

`https://iam.myhuaweicloud.eu/v3.0/OS-USER/users`

#### NOTE

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

## Request Methods

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

**Table 3-2** HTTP methods

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

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

`POST https://iam.myhuaweicloud.eu/v3.0/OS-USER/users`

## Request Header

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

Common request header fields are as follows.

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

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

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

#### NOTE

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

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

The following shows an example request of the API for [creating an IAM user](#) when AK/SK authentication is used:

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

## (Optional) Request Body

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

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

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

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

```
POST https://iam.myhuaweicloud.eu/v3.0/OS-USER/users
Content-Type: application/json
```

```
X-Sdk-Date: 20240416T095341Z
Authorization: SDK-HMAC-SHA256 Access=*****,
SignedHeaders=content-type;host;x-sdk-date,
Signature=*****"

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

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

## 3.2 Authentication

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

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

### Token Authentication



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

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

You can obtain a token by calling the [Obtaining a User Token](#) API.

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

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

EPS is a global service. When you call the API, set **auth.scope** in the request body to **domain**. For details about how to obtain the user token, see [Obtaining a User Token](#).

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "domain_id": "accountid",
          "name": "username",
          "password": "*****",
          "email": "email",
          "description": "IAM User Description"
        }
      }
    }
  }
}
```

```
        "name": "username", // IAM user name
        "password": "*****", // IAM user password
        "domain": {
            "name": "domainname" // Name of an IAM account
        }
    },
    "scope": {
        "domain": {
            "name": "xxxxxxx" // Tenant name
        }
    }
}
```

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

```
POST https://iam.eu-west-101.myhuaweicloud.com/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

## AK/SK Authentication

### NOTE

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

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

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

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

### NOTE

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

## 3.3 Response

### Status Code

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

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

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

## Response Header

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

[Figure 3-1](#) shows the response header fields for the API used to [create an IAM user](#). The **X-Subject-Token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.



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

**Figure 3-1** Header fields of the response to the request for creating an IAM user

```
"X-Frame-Options": "SAMEORIGIN",
"X-IAM-ETag-id": "2562365939-d8f6f12921974cb097338ac11fceac8a",
"Transfer-Encoding": "chunked",
"Strict-Transport-Security": "max-age=31536000; includeSubdomains;",
"Server": "api-gateway",
"X-Request-Id": "af2953f2bcc67a42325a69a19e6c32a2",
"X-Content-Type-Options": "nosniff",
"Connection": "keep-alive",
"X-Download-Options": "noopen",
"X-XSS-Protection": "1; mode=block;",
"X-IAM-Trace-Id": "token_[REDACTED]_null_af2953f2bcc67a42325a69a19e6c32a2",
>Date": "Tue, 21 May 2024 09:03:40 GMT",
"Content-Type": "application/json; charset=utf8"
```

## (Optional) Response Body

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

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

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

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

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

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

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

# 4 Getting Started

This section describes how to create an enterprise project by invoking the API of EPS.

## NOTE

The validity period of a token obtained from IAM is 24 hours. If you want to use a token for authentication, cache it to avoid frequently calling the IAM API.

## Involved APIs

To use token authentication, you need to obtain a token and add **X-Auth-Token** to the request header of API calls.

- API for obtaining tokens from IAM
- API for creating an enterprise project

## Procedure

1. Obtain the token by following instructions in [Authentication](#).
2. Send POST <https://EPS Endpoint/v1.0/enterprise-projects>.

Add **Content-Type** and **X-Auth-Token** to the request header.

Specify the following parameters in the request body:

```
{  
    "name": "enterprise_project1",  
    "description": "description"  
}
```

If the request is responded, **enterprise\_project** is returned.

If the request fails, an error code and error information are returned. For details, see [Error Code Description](#).

## NOTE

For details about the elements and return values of response messages, see [Creating an Enterprise Project](#).

# 5 Enterprise Project Management APIs

## 5.1 API Version Querying

### 5.1.1 Querying API Versions

#### Function

This API is used to query the versions of EPS APIs.

#### Calling Method

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

#### URI

GET /

#### Request Parameters

None

#### Response Parameters

**Status code: 200**

**Table 5-1** Response body parameters

Parameter	Type	Description
versions	Array of <a href="#">VersionDetail</a> objects	Version list.

**Table 5-2** VersionDetail

Parameter	Type	Description
id	String	Version ID, for example, v1.0.
links	Array of <a href="#">Link</a> objects	API URL.
version	String	If the APIs of this version support minor versions, the latest minor version is returned. If minor versions are not supported, an empty string is returned.
status	String	Version status. Possible values are as follows: CURRENT: primary version. SUPPORTED: earlier version which is still supported. DEPRECATED: deprecated version which may be deleted later.
updated	String	Version release time, which is a UTC time. For example, the release time of v1.0 is 2016-12-09T00:00:00Z.
min_version	String	If the APIs of this version support minor versions, the earliest minor version is returned. If minor versions are not supported, an empty string is returned.

**Table 5-3** Link

Parameter	Type	Description
href	String	API URL.
rel	String	Self.

**Status code: 400**

**Table 5-4** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessag e object</a>	Error request information.

**Table 5-5** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 401**

**Table 5-6** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-7** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 403**

**Table 5-8** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-9** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 404**

**Table 5-10** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-11** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 405**

**Table 5-12** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-13** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 406**

**Table 5-14** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-15** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 408**

**Table 5-16** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-17** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 409**

**Table 5-18** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-19** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 410**

**Table 5-20** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-21** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 412**

**Table 5-22** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-23** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 429**

**Table 5-24** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-25** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 500**

**Table 5-26** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-27** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 501**

**Table 5-28** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-29** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 503**

**Table 5-30** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-31** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

None

## Example Responses

**Status code: 200**

OK

```
{
  "versions" : [ {
    "id" : "v1.0",
    "links" : [ {
      "rel" : "self",
      "href" : "https://*API URL*/v1.0"
    } ],
    "version" : "",
    "status" : "CURRENT",
    "updated" : "2016-12-09T00:00:00Z",
    "min_version" : ""
  } ]
}
```

## Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed

Status Code	Description
406	Not Acceptable
408	Request Timeout
409	Conflict
410	Gone
412	Precondition Failed
429	Too Many Requests
500	Internal Server Error
501	Not Implemented
503	Service Unavailable

## Error Codes

See [Error Codes](#).

### 5.1.2 Querying an API Version

#### Function

This API is used to querying details about an API version.

#### Calling Method

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

#### URI

GET /{api\_version}

**Table 5-32** Path Parameters

Parameter	Mandatory	Type	Description
api_version	Yes	String	Version ID, for example, v1.0.

## Request Parameters

**Table 5-33** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	EPS is a global service. When calling the IAM API to obtain a user token, set <b>scope</b> to <b>domain</b> . The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

**Status code: 200**

**Table 5-34** Response body parameters

Parameter	Type	Description
version	<a href="#">VersionDetail</a> object	Version details.

**Table 5-35** VersionDetail

Parameter	Type	Description
id	String	Version ID, for example, v1.0.
links	Array of <a href="#">Link</a> objects	API URL.
version	String	If the APIs of this version support minor versions, the latest minor version is returned. If minor versions are not supported, an empty string is returned.
status	String	Version status. Possible values are as follows:  CURRENT: primary version.  SUPPORTED: earlier version which is still supported.  DEPRECATED: deprecated version which may be deleted later.
updated	String	Version release time, which is a UTC time. For example, the release time of v1.0 is 2016-12-09T00:00:00Z.

Parameter	Type	Description
min_version	String	If the APIs of this version support minor versions, the earliest minor version is returned. If minor versions are not supported, an empty string is returned.

**Table 5-36** Link

Parameter	Type	Description
href	String	API URL.
rel	String	Self.

**Status code: 400**

**Table 5-37** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-38** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 401**

**Table 5-39** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-40** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 403**

**Table 5-41** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-42** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 404**

**Table 5-43** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-44** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 405**

**Table 5-45** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-46** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 406**

**Table 5-47** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-48** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 408**

**Table 5-49** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-50** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 409**

**Table 5-51** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-52** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 410**

**Table 5-53** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-54** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 412**

**Table 5-55** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-56** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 429**

**Table 5-57** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-58** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 500**

**Table 5-59** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-60** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 501**

**Table 5-61** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-62** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 503**

**Table 5-63** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-64** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

None

## Example Responses

### Status code: 200

OK

```
{  
  "version": {  
    "id": "v1.0",  
    "links": [ {  
      "rel": "self",  
      "href": "https://*API URL*/v1.0"  
    } ],  
    "version": "",  
    "status": "CURRENT",  
    "updated": "2016-12-09T00:00:00Z",  
    "min_version": ""  
  }  
}
```

## Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
408	Request Timeout
409	Conflict
410	Gone
412	Precondition Failed
429	Too Many Requests
500	Internal Server Error
501	Not Implemented
503	Service Unavailable

## Error Codes

See [Error Codes](#).

## 5.2 Enterprise Project Management

### 5.2.1 Listing Enterprise Projects

#### Function

This API is used to query the list of enterprise projects that can be managed by a user. The user can add resources to an enterprise project in the list.

#### Calling Method

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

#### URI

GET /v1.0/enterprise-projects

**Table 5-65** Query Parameters

Parameter	Mandatory	Type	Description
id	No	String	Enterprise project ID. The value 0 indicates the default enterprise project.
name	No	String	Enterprise project name. Fuzzy search is supported.
status	No	Integer	Enterprise project status. 1: enabled; 2: disabled.
limit	No	Integer	The default number of records to be queried is 1000. The maximum value is 1000 and the minimum value is 1.
offset	No	Integer	Index position. The query starts from the next data record specified by offset. The value must be a number and cannot be a negative number. The default value is 0.
sort_key	No	String	Keyword by which the results to return are sorted. Keywords, such as updated_at and name, are supported. By default, the keyword created_at is used.

Parameter	Mandatory	Type	Description
sort_dir	No	String	Result sorting order. The default value is desc. desc: descending order. asc: ascending order.
type	No	String	Specifies the project type to be queried.

## Request Parameters

**Table 5-66** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the user token. EPS is a global service. Therefore, when calling the IAM API to obtain a user token, set the <b>scope</b> field to <b>domain</b> . The value of <b>X-Subject-Token</b> in the response header is the user token.
X-Domain-Id	No	String	User domainId. Note: If the user uses aksk to call, this parameter needs to be passed.
X-Security-Token	No	String	Security token (session token) of your temporary security credentials. If a temporary security credential is used, this header is required.

## Response Parameters

Status code: 200

**Table 5-67** Response body parameters

Parameter	Type	Description
enterprise_projects	Array of <b>EpDetail</b> objects	Enterprise project list.
total_count	Integer	Total number of enterprise projects.

**Table 5-68** EpDetail

Parameter	Type	Description
id	String	Enterprise project ID.
name	String	Enterprise project name.
description	String	Enterprise project description.
status	Integer	Enterprise project status. 1: enabled; 2: disabled.
created_at	String	UTC time when the enterprise project was created, for example, 2018-05-18T06:49:06Z.
updated_at	String	UTC time when the enterprise project was modified, for example, 2018-05-28T02:21:36Z.
type	String	Project type. prod: commercial project; poc: test project

**Status code: 400**

**Table 5-69** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-70** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 401**

**Table 5-71** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-72** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 402**

**Table 5-73** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-74** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 403**

**Table 5-75** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.
error_code	String	Error code.
error_msg	String	Error message.
encoded_authorization_message	String	Detailed rejection reason after encoding (encryption).
details	Array of <a href="#">RespErrorMessage objects</a>	PDP5 error information and dependent cloud service error information.

**Table 5-76** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 404**

**Table 5-77** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-78** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 405**

**Table 5-79** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-80** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 406**

**Table 5-81** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-82** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 407**

**Table 5-83** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-84** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 408**

**Table 5-85** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-86** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 409**

**Table 5-87** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-88** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 500**

**Table 5-89** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-90** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 501**

**Table 5-91** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-92** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 502**

**Table 5-93** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-94** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 503**

**Table 5-95** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-96** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 504**

**Table 5-97** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-98** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

None

## Example Responses

**Status code: 200**

OK

```
{  
  "enterprise_projects" : [ {  
    "id" : "6fbcf2f3-3164-4d32-9a3e-a8886dc38c24",  
    "name" : "auto_test",  
    "description" : "hello world!",  
    "status" : 1,  
    "type" : "prod",  
    "created_at" : "2018-05-18T06:49:06Z",  
    "updated_at" : "2018-05-28T02:21:36Z"  
  } ],  
  "total_count" : 1  
}
```

## Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
407	Proxy Authentication Required
408	Request Timeout
409	Conflict
500	Internal Server Error
501	Not Implemented
502	Bad Gateway
503	Service Unavailable
504	Gateway Timeout

## Error Codes

See [Error Codes](#).

### 5.2.2 Creating an Enterprise Project

#### Function

This API is used to create an enterprise project.

#### Calling Method

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

#### URI

POST /v1.0/enterprise-projects

## Request Parameters

**Table 5-99** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. EPS is a global service. Therefore, when calling the IAM API to obtain a user token, set the <b>scope</b> field to <b>domain</b> . The value of <b>X-Subject-Token</b> in the response header is the user token.
X-Security-Token	No	String	Security token (session token) of your temporary security credentials. If a temporary security credential is used, this header is required.

**Table 5-100** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	The value can contain up to 255 characters consisting of letters, digits, underscores (_), and hyphens (-). The name cannot be "default" (case insensitive) and must be unique.
description	No	String	A description can contain a maximum of 512 characters.
type	No	String	Enterprise project type.

## Response Parameters

Status code: 201

**Table 5-101** Response body parameters

Parameter	Type	Description
enterprise_project	<a href="#">EpDetail object</a>	Enterprise project.

**Table 5-102 EpDetail**

Parameter	Type	Description
id	String	Enterprise project ID.
name	String	Enterprise project name.
description	String	Enterprise project description.
status	Integer	Enterprise project status. 1: enabled; 2: disabled.
created_at	String	UTC time when the enterprise project was created, for example, 2018-05-18T06:49:06Z.
updated_at	String	UTC time when the enterprise project was modified, for example, 2018-05-28T02:21:36Z.
type	String	Project type. prod: commercial project; poc: test project

**Status code: 400**

**Table 5-103 Response body parameters**

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-104 RespErrorMessage**

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 401**

**Table 5-105 Response body parameters**

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-106** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 402**

**Table 5-107** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-108** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 403**

**Table 5-109** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.
error_code	String	Error code.
error_msg	String	Error message.
encoded_authorization_message	String	Detailed rejection reason after encoding (encryption).
details	Array of <a href="#">RespErrorMessage objects</a>	PDP5 error information and dependent cloud service error information.

**Table 5-110** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 404**

**Table 5-111** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-112** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 405**

**Table 5-113** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-114** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 406**

**Table 5-115** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-116** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 409**

**Table 5-117** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-118** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 500**

**Table 5-119** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-120** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 501**

**Table 5-121** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-122** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 502**

**Table 5-123** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-124** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 503**

**Table 5-125** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-126** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 504**

**Table 5-127** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-128** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

```
POST https://{{Endpoint}}/v1.0/enterprise-projects
{
  "name" : "enterprise_project1",
  "description" : "Specifies the description.",
  "type" : "prod"
}
```

## Example Responses

**Status code: 201**

Created

```
{
  "enterprise_project" : {
    "id" : "5aa119a8-d25b-45a7-8d1b-88e127885635",
```

```
"name" : "enterprise_project1",
"description" : "Specifies the description.",
"type" : "prod",
"status" : 1,
"created_at" : "2016-03-28T00:00:00Z",
"updated_at" : "2016-03-28T00:00:00Z"
}
```

## Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
409	Conflict
500	Internal Server Error
501	Not Implemented
502	Bad Gateway
503	Service Unavailable
504	Gateway Timeout

## Error Codes

See [Error Codes](#).

### 5.2.3 Querying an Enterprise Project

#### Function

This API is used to query details about an enterprise project.

#### Calling Method

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

## URI

GET /v1.0/enterprise-projects/{enterprise\_project\_id}

**Table 5-129** Path Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	Yes	String	Enterprise project ID. You can obtain the value by calling the API for listing enterprise projects.

## Request Parameters

**Table 5-130** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. EPS is a global service. Therefore, when calling the IAM API to obtain a user token, set the <b>scope</b> field to <b>domain</b> . The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

**Status code: 200**

**Table 5-131** Response body parameters

Parameter	Type	Description
enterprise_project	<a href="#">EpDetail object</a>	Enterprise project.

**Table 5-132** EpDetail

Parameter	Type	Description
id	String	Enterprise project ID.
name	String	Enterprise project name.
description	String	Enterprise project description.

Parameter	Type	Description
status	Integer	Enterprise project status. 1: enabled; 2: disabled.
created_at	String	UTC time when the enterprise project was created, for example, 2018-05-18T06:49:06Z.
updated_at	String	UTC time when the enterprise project was modified, for example, 2018-05-28T02:21:36Z.
type	String	Project type. prod: commercial project; poc: test project

**Status code: 400**

**Table 5-133** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-134** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 401**

**Table 5-135** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-136** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

**Status code: 402**

**Table 5-137** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-138** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 403**

**Table 5-139** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-140** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 404**

**Table 5-141** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-142** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 405**

**Table 5-143** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-144** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 406**

**Table 5-145** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-146** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 407**

**Table 5-147** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-148** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 408**

**Table 5-149** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-150** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 409**

**Table 5-151** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-152** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 410**

**Table 5-153** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-154** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 500**

**Table 5-155** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-156** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 501**

**Table 5-157** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-158** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 502**

**Table 5-159** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-160** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 503**

**Table 5-161** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-162** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 504**

**Table 5-163** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-164** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

None

## Example Responses

**Status code: 200**

OK

```
{  
    "enterprise_project": {  
        "id": "5aa119a8-d25b-45a7-8d1b-88e127885635",  
        "name": "enterprise_project1",  
        "description": "Specifies the description.",  
        "type": "prod",  
        "status": 1,  
        "created_at": "2016-03-28T00:00:00Z",  
        "updated_at": "2016-03-28T00:00:00Z"  
    }  
}
```

```
        "updated_at" : "2016-03-28T00:00:00Z"  
    }
```

## Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
407	Proxy Authentication Required
408	Request Timeout
409	Conflict
410	Gone
500	Internal Server Error
501	Not Implemented
502	Bad Gateway
503	Service Unavailable
504	Gateway Timeout

## Error Codes

See [Error Codes](#).

### 5.2.4 Modifying an Enterprise Project

#### Function

This API is used to modify an enterprise project. Currently, only the name and description can be modified.

#### Calling Method

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

## URI

PUT /v1.0/enterprise-projects/{enterprise\_project\_id}

**Table 5-165** Path Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	Yes	String	Enterprise project ID, which cannot be 0. You can obtain the value by calling the API for listing enterprise projects.

## Request Parameters

**Table 5-166** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. EPS is a global service. Therefore, when calling the IAM API to obtain a user token, set the <b>scope</b> field to <b>domain</b> . The value of <b>X-Subject-Token</b> in the response header is the user token.
X-Security-Token	No	String	Security token (session token) of your temporary security credentials. If a temporary security credential is used, this header is required.

**Table 5-167** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	The value can contain up to 255 characters consisting of letters, digits, underscores (_), and hyphens (-). The name cannot be "default" (case insensitive) and must be unique.
description	No	String	A description can contain a maximum of 512 characters.
type	No	String	Enterprise project type.

## Response Parameters

Status code: 200

**Table 5-168** Response body parameters

Parameter	Type	Description
enterprise_project	<a href="#">EpDetail object</a>	Enterprise project.

**Table 5-169** EpDetail

Parameter	Type	Description
id	String	Enterprise project ID.
name	String	Enterprise project name.
description	String	Enterprise project description.
status	Integer	Enterprise project status. 1: enabled; 2: disabled.
created_at	String	UTC time when the enterprise project was created, for example, 2018-05-18T06:49:06Z.
updated_at	String	UTC time when the enterprise project was modified, for example, 2018-05-28T02:21:36Z.
type	String	Project type. prod: commercial project; poc: test project

Status code: 400

**Table 5-170** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-171** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 401**

**Table 5-172** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-173** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 402**

**Table 5-174** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-175** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 403**

**Table 5-176** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.
error_code	String	Error code.
error_msg	String	Error message.

Parameter	Type	Description
encoded_authorization_message	String	Detailed rejection reason after encoding (encryption).
details	Array of <b>RespErrorMessage</b> objects	PDP5 error information and dependent cloud service error information.

**Table 5-177** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 404**

**Table 5-178** Response body parameters

Parameter	Type	Description
error	<b>RespErrorMessage</b> object	Error request information.

**Table 5-179** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 405**

**Table 5-180** Response body parameters

Parameter	Type	Description
error	<b>RespErrorMessage</b> object	Error request information.

**Table 5-181** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 406**

**Table 5-182** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-183** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 407**

**Table 5-184** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-185** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 408**

**Table 5-186** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-187** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 409**

**Table 5-188** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-189** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 410**

**Table 5-190** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-191** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 500**

**Table 5-192** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-193** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 501**

**Table 5-194** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-195** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 502**

**Table 5-196** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-197** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 503**

**Table 5-198** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-199** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 504**

**Table 5-200** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-201** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

### Modifying an Enterprise Project

```
PUT https://{Endpoint}/v1.0/enterprise-projects/{enterprise_project_id}

{
  "name" : "enterprise_project1",
  "description" : "Specifies the description."
}
```

## Example Responses

### Status code: 200

OK

```
{
  "enterprise_project" : {
    "id" : "5aa119a8-d25b-45a7-8d1b-88e127885635",
    "name" : "enterprise_project1",
    "description" : "Specifies the description.",
    "status" : 1,
    "type" : "prod",
    "created_at" : "2016-03-28T00:00:00Z",
    "updated_at" : "2016-03-28T00:00:00Z"
  }
}
```

## Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
407	Proxy Authentication Required

Status Code	Description
408	Request Timeout
409	Conflict
410	Gone
500	Internal Server Error
501	Not Implemented
502	Bad Gateway
503	Service Unavailable
504	Gateway Timeout

## Error Codes

See [Error Codes](#).

### 5.2.5 Enabling an Enterprise Project

#### Function

This API is used to enable an enterprise project.

#### Calling Method

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

#### URI

POST /v1.0/enterprise-projects/{enterprise\_project\_id}/action

**Table 5-202** Path Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	Yes	String	Enterprise project ID, which cannot be 0.

## Request Parameters

**Table 5-203** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. EPS is a global service. Therefore, when calling the IAM API to obtain a user token, set the <b>scope</b> field to <b>domain</b> . The value of <b>X-Subject-Token</b> in the response header is the user token.
X-Security-Token	No	String	Security token (session token) of your temporary security credentials. If a temporary security credential is used, this header is required.

**Table 5-204** Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Enabling operation.

## Response Parameters

**Status code: 204**

No Content

**Status code: 400**

**Table 5-205** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-206** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 401**

**Table 5-207** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-208** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 402**

**Table 5-209** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-210** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 403**

**Table 5-211** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.
error_code	String	Error code.
error_msg	String	Error message.

Parameter	Type	Description
encoded_authorization_message	String	Detailed rejection reason after encoding (encryption).
details	Array of <b>RespErrorMessage</b> objects	PDP5 error information and dependent cloud service error information.

**Table 5-212** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 404****Table 5-213** Response body parameters

Parameter	Type	Description
error	<b>RespErrorMessage</b> object	Error request information.

**Table 5-214** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 405****Table 5-215** Response body parameters

Parameter	Type	Description
error	<b>RespErrorMessage</b> object	Error request information.

**Table 5-216** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 406**

**Table 5-217** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-218** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 407**

**Table 5-219** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-220** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 408**

**Table 5-221** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-222** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 409**

**Table 5-223** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-224** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 500**

**Table 5-225** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-226** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 501**

**Table 5-227** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-228** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 502**

**Table 5-229** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-230** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 503**

**Table 5-231** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-232** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 504**

**Table 5-233** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-234** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

Enabling an Enterprise Project

```
POST https://[Endpoint]/v1.0/enterprise-projects/{enterprise_project_id}/action
{
    "action" : "enable"
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
407	Proxy Authentication Required
408	Request Timeout
409	Conflict
500	Internal Server Error
501	Not Implemented
502	Bad Gateway
503	Service Unavailable
504	Gateway Timeout

## Error Codes

See [Error Codes](#).

### 5.2.6 Disabling an Enterprise Project

#### Function

This API is used to disable an enterprise project.

#### Calling Method

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

#### URI

POST /v1.0/enterprise-projects/{enterprise\_project\_id}/action

**Table 5-235** Path Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	Yes	String	Enterprise project ID. The value cannot be 0.

## Request Parameters

**Table 5-236** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. EPS is a global service. Therefore, when calling the IAM API for obtaining a user token, set scope to domain. The value of X-Subject-Token in the response header is the user token.
X-Security-Token	No	String	Security token (session token) of your temporary security credentials. If a temporary security credential is used, this header is required.

**Table 5-237** Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Disabling operation.

## Response Parameters

**Status code: 204**

No Content

**Status code: 400****Table 5-238** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-239** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 401**

**Table 5-240** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-241** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 402**

**Table 5-242** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-243** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 403**

**Table 5-244** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.
error_code	String	Error code.
error_msg	String	Error message.
encoded_authorization_message	String	Detailed rejection reason after encoding (encryption).
details	Array of <a href="#">RespErrorMessage objects</a>	PDP5 error information and dependent cloud service error information.

**Table 5-245** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 404**

**Table 5-246** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-247** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 405**

**Table 5-248** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-249** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 406**

**Table 5-250** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-251** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 407**

**Table 5-252** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-253** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 408**

**Table 5-254** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-255** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 409**

**Table 5-256** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-257** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 500**

**Table 5-258** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-259** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 501**

**Table 5-260** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-261** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 502**

**Table 5-262** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-263** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 503**

**Table 5-264** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-265** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 504**

**Table 5-266** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-267** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

### Disabling an Enterprise Project

```
POST https://{{Endpoint}}/v1.0/enterprise-projects/{{enterprise_project_id}}/action
```

```
{  
    "action" : "disable"  
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
407	Proxy Authentication Required
408	Request Timeout
409	Conflict
500	Internal Server Error
501	Not Implemented
502	Bad Gateway
503	Service Unavailable
504	Gateway Timeout

## Error Codes

See [Error Codes](#).

### 5.2.7 Querying the Enterprise Project Quota

#### Function

This API is used to query the enterprise project quota.

## Calling Method

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

## URI

GET /v1.0/enterprise-projects/quotas

## Request Parameters

**Table 5-268** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. EPS is a global service. Therefore, when calling the IAM API to obtain a user token, set the <b>scope</b> field to <b>domain</b> . The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

**Status code:** 200

**Table 5-269** Response body parameters

Parameter	Type	Description
quotas	<a href="#">QuotasDetail</a> object	Enterprise project quota.

**Table 5-270** QuotasDetail

Parameter	Type	Description
resources	Array of <a href="#">EpQuotas</a> objects	Resource quota.

**Table 5-271** EpQuotas

Parameter	Type	Description
quota	Integer	Total quota.
type	String	Resource type.

Parameter	Type	Description
used	Integer	Used amount of a quota.

**Status code: 400**

**Table 5-272** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-273** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 401**

**Table 5-274** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-275** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 402**

**Table 5-276** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-277** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 403**

**Table 5-278** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-279** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 404**

**Table 5-280** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-281** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 405**

**Table 5-282** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-283** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 406**

**Table 5-284** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-285** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 407**

**Table 5-286** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-287** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 408**

**Table 5-288** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-289** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 409**

**Table 5-290** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-291** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 500**

**Table 5-292** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-293** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 501**

**Table 5-294** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-295** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 502**

**Table 5-296** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-297** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 503**

**Table 5-298** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-299** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 504**

**Table 5-300** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-301** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

None

## Example Responses

**Status code: 200**

OK

```
{  
    "quotas": {  
        "resources": [ {  
            "type": "enterprise_project",  
            "used": 3,  
            "quota": 100  
        } ]  
    }  
}
```

## Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
407	Proxy Authentication Required
408	Request Timeout
409	Conflict
500	Internal Server Error
501	Not Implemented

Status Code	Description
502	Bad Gateway
503	Service Unavailable
504	Gateway Timeout

## Error Codes

See [Error Codes](#).

### 5.2.8 Migrating Resources

#### Function

This API is used to migrate resources to a target enterprise project.

#### Calling Method

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

#### URI

POST /v1.0/enterprise-projects/{enterprise\_project\_id}/resources-migrate

**Table 5-302** Path Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	Yes	String	ID of the target enterprise project. If enterprise_project_id is set to 0, resources are migrated to the default enterprise project.

## Request Parameters

**Table 5-303** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. EPS is a global service. Therefore, when calling the IAM API to obtain a user token, set the <b>scope</b> field to <b>domain</b> . The value of <b>X-Subject-Token</b> in the response header is the user token.
X-Security-Token	No	String	Security token (session token) of your temporary security credentials. If a temporary security credential is used, this header is required.

**Table 5-304** Request body parameters

Parameter	Mandatory	Type	Description
project_id	No	String	Project ID. This parameter is mandatory when resource_type is set to a region-level resource. If resource_type is set to global, leave this parameter blank or leave it blank.
resource_id	Yes	String	Resource ID.
resource_type	Yes	String	Specifies the resource type. This parameter is case-sensitive. Examples include: ecs, scaling_group, images, disk, vpcs, security-groups, shared_bandwidth, eip, and cdn. For more details, see "Querying Service Supported by EPS".
region_id	No	String	Specifies the region ID. This parameter is mandatory when <b>resource_type</b> is set to <b>bucket</b> .

Parameter	Mandatory	Type	Description
associated	No	Boolean	Whether associated resources are migrated. Currently, only ECS associated EVS disks and EIPs can be migrated.

## Response Parameters

**Status code: 204**

No Content

**Status code: 400**

**Table 5-305** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-306** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 401**

**Table 5-307** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-308** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 402**

**Table 5-309** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-310** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 403**

**Table 5-311** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.
error_code	String	Error code.
error_msg	String	Error message.
encoded_authorization_message	String	Detailed rejection reason after encoding (encryption).
details	Array of <a href="#">RespErrorMessage objects</a>	PDP5 error information and dependent cloud service error information.

**Table 5-312** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 404**

**Table 5-313** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-314** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 405**

**Table 5-315** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-316** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 406**

**Table 5-317** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-318** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 407**

**Table 5-319** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-320** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 408**

**Table 5-321** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-322** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 409**

**Table 5-323** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-324** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 500**

**Table 5-325** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-326** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 501**

**Table 5-327** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-328** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 502**

**Table 5-329** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-330** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 503**

**Table 5-331** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-332** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 504**

**Table 5-333** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-334** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

### Migrating Enterprise Project Resources

```
POST https://{Endpoint}/v1.0/enterprise-projects/{enterprise_project_id}/resources-migrate
```

```
{
  "project_id": "0f02faab61ab497997867b2c9ef193a2",
  "associated": false,
  "resource_type": "eip",
  "resource_id": "e220166e-a6b1-4bb4-9abf-950b367212e8"
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	No Content
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
407	Proxy Authentication Required

Status Code	Description
408	Request Timeout
409	Conflict
500	Internal Server Error
501	Not Implemented
502	Bad Gateway
503	Service Unavailable
504	Gateway Timeout

## Error Codes

See [Error Codes](#).

## 5.3 Querying Services Supported by Enterprise Projects

### 5.3.1 Querying Services Supported by Enterprise Projects

#### Function

Specifies services supported by enterprise projects.

#### Calling Method

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

#### URI

GET /v1.0/enterprise-projects/providers

**Table 5-335** Query Parameters

Parameter	Mandatory	Type	Description
locale	No	String	Specifies the display language.
limit	No	Integer	The number of records to be queried is <b>10</b> by default. The maximum value of <b>limit</b> is <b>200</b> and its minimum value is <b>1</b> .

Parameter	Mandatory	Type	Description
offset	No	Integer	Specifies the index position. The query starts from the next data record specified by <b>offset</b> . The value must be a number and cannot be a negative number. The default value is <b>0</b> .
provider	No	String	Specifies the cloud service name.

## Request Parameters

**Table 5-336** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. EPS is a global service. Therefore, when calling the IAM API to obtain a user token, set the <b>scope</b> field to <b>domain</b> . The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

**Status code: 200**

**Table 5-337** Response body parameters

Parameter	Type	Description
providers	Array of <b>ProviderResponse eBody</b> objects	Specifies cloud services.
total_count	Integer	Specifies the total number of cloud services supported by EPS.

**Table 5-338** ProviderResponseBody

Parameter	Type	Description
provider	String	Specifies the cloud service name.

Parameter	Type	Description
provider_i18n_display_name	String	Specifies the display name of the cloud service. You can set the language by setting the <b>locale</b> parameter.
resource_types	Array of <b>ResourceTypeBody</b> objects	Specifies the resource type list.

**Table 5-339** ResourceTypeBody

Parameter	Type	Description
resource_type	String	Specifies the name of the resource type.
resource_type_i18n_display_name	String	Specifies the display name of the resource type. You can set the language by setting the <b>locale</b> parameter.
regions	Array of strings	Specifies regions supported.
global	Boolean	Specifies whether the resource is a global resource.

**Status code: 400****Table 5-340** Response body parameters

Parameter	Type	Description
error	<b>RespErrorMessage</b> object	Error request information.

**Table 5-341** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 401**

**Table 5-342** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-343** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 402**

**Table 5-344** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-345** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 403**

**Table 5-346** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-347** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 404**

**Table 5-348** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-349** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 405**

**Table 5-350** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-351** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 406**

**Table 5-352** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-353** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 407**

**Table 5-354** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-355** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 408**

**Table 5-356** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-357** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 409**

**Table 5-358** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-359** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 500**

**Table 5-360** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-361** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 501**

**Table 5-362** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-363** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 502**

**Table 5-364** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-365** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 503**

**Table 5-366** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 5-367** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 504**

**Table 5-368** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage</a> object	Error request information.

**Table 5-369** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

Querying services supported by enterprise projects

GET <https://{{Endpoint}}/v1.0/enterprise-projects/providers>

## Example Responses

**Status code: 200**

OK

```
{  
    "providers" : [ {  
        "provider" : "evs",  
        "provider_i18n_display_name" : "Elastic Volume Service",  
        "resource_types" : {  
            "resource_type_i18n_display_name" : "volume",  
            "global" : false,  
            "resource_type" : "disk",  
            "regions" : [ "cn-north-1" ]  
        }  
    },  
    "total_count" : 1  
}
```

## Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
407	Proxy Authentication Required
408	Request Timeout
409	Conflict
500	Internal Server Error
501	Not Implemented
502	Bad Gateway
503	Service Unavailable
504	Gateway Timeout

## Error Codes

See [Error Codes](#).

# 6 User Group Management APIs

## NOTE

- All APIs described in this section are provided by Identity and Access Management (IAM). You can also use the SDKs of IAM to call these APIs.
- For details about the endpoints required for API calling and SDK usage, see [Regions and Endpoints](#) of IAM. For details about error messages, see [IAM Error Codes](#).
- To query user groups associated with an enterprise project, see [Querying User Groups Associated with an Enterprise Project](#).
- To query permissions of a user group associated with an enterprise project, see [Querying the Permissions of a User Group Associated with an Enterprise Project](#).
- To grant permissions to a user group associated with an enterprise project, see [Granting Permissions to a User Group Associated with an Enterprise Project](#).
- To remove permissions of a user group associated with an enterprise project, see [Removing the Permissions of a User Group Associated with an Enterprise Project](#).
- To query enterprise projects associated with a user group, see [Querying the Enterprise Projects Associated with a User Group](#).
- To query enterprise projects associated with an IAM user, see [Querying the Enterprise Projects Associated with an IAM User](#).

# 7

# Permissions Policies and Supported Actions

## 7.1 Introduction

You can use IAM to perform refined permission management for your enterprise projects. If your Huawei Cloud account does not need individual IAM users, you can skip this chapter.

A policy is a set of permissions defined in JSON format. 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. For details about the syntax structure and examples of policies, see [Enterprise Project Permissions](#).

There are fine-grained policies and role-based access control (RBAC) policies. An RBAC policy consists of permissions for an entire service. Users in a group with such a policy assigned are granted all of the permissions required for that service. A fine-grained policy consists of API-based permissions for operations on specific resource types. Fine-grained policies, as the name suggests, allow for more fine-grained control than RBAC policies.

### 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 wants to query ECSs using an API, the user must have been granted permissions that allow the `ecs:servers:list` action.

## Supported Actions

Operations supported by fine-grained policies are specific to APIs. The following are common concepts related to policies:

- Permissions: Statements in a policy that allow or deny certain operations.
- APIs: REST APIs that can be called by a user who has been granted specific permissions.
- Actions: Specific operations that are allowed or denied.
- Related actions: Actions on which a specific action depends. When assigning permissions for the action to a user, you also need to assign permissions for the related actions.
- IAM or enterprise projects: Type of projects for which an action will take effect. Policies that contain actions for both IAM and enterprise projects can be used and take effect for both IAM and Enterprise Management. Policies that only contain actions for IAM projects can be used and only take effect for IAM.

 NOTE

The check mark (✓) and cross symbol (✗) indicate that an action takes effect or does not take effect for the corresponding type of projects.

## 7.2 Enterprise Project Management API Permissions

**Table 7-1** Supported Actions

Permission	API	Action	IA M Pr o j ec t ( P ro j ec t )	Enterpr ise Proj ect (Enter prise Proj ect )
Querying enterprise projects	GET /v1.0/enterprise-projects	eps:enterpriseProjects:list	✓	✓
Creating an enterprise project	POST /v1.0/enterprise-projects	eps:enterpriseProjects:create	✓	✓

Permission	API	Action	IA M Pr o j ec t (P ro je ct)	Enterpr ise Proj ect (Enter prise Proj ect)
Modifying an enterprise project	PUT /v1.0/enterprise-projects/{enterprise_project_id}	eps:enterpriseProjects:update	✓	✓
Enabling or disabling an enterprise project	POST /v1.0/enterprise-projects/{enterprise_project_id}/action	<ul style="list-style-type: none"> <li>Enable: eps:enterpriseProjects:enable</li> <li>Disable: eps:enterpriseProjects:disable</li> </ul>	✓	✓
Searching for resources	POST /v1.0/enterprise-projects/{enterprise_project_id}/resources/filter	eps:resources:list	✓	✓
Adding resources to or removing resources from an enterprise project	POST /v1.0/enterprise-projects/{enterprise_project_id}/resources-migrate	<ul style="list-style-type: none"> <li>Add: eps:resources:add</li> <li>Remove: eps:resources:remove</li> </ul>	✓ ✓	✓ ✓

# 8 Historical APIs

## 8.1 Enterprise Project Management

### 8.1.1 Listing Resources in an Enterprise Project (Discarded)

#### Function

This API is used to query resources added to an enterprise project.

#### Calling Method

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

#### URI

POST /v1.0/enterprise-projects/{enterprise\_project\_id}/resources/filter

**Table 8-1** Path Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	Yes	String	Enterprise project ID.

## Request Parameters

**Table 8-2** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. EPS is a global service. Therefore, when calling the IAM API to obtain a user token, set the <b>scope</b> field to <b>domain</b> . The value of <b>X-Subject-Token</b> in the response header is the user token.
X-Security-Token	No	String	Security token (session token) of your temporary security credentials. If a temporary security credential is used, this header is required.

**Table 8-3** Request body parameters

Parameter	Mandatory	Type	Description
projects	No	Array of strings	Project IDs. This parameter is mandatory when resource_types contains a region-level service.
resource_types	Yes	Array of strings	Specifies the resource type list. This parameter is case-sensitive. Examples include: ecs, scaling_group, images, disk, vpcs, security-groups, shared_bandwidth, eip, and cdn. For more details, see "Querying Service Supported by EPS".
offset	No	Integer	Index position. The query starts from the next data record specified by offset. The value must be a number and cannot be a negative number. The default value is 0.

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records to be queried. If this parameter is not passed, the default value 1000 is used. The maximum value is 1000 and the minimum value is 1.
matches	No	Array of <a href="#">Match</a> objects	Search field. key indicates the field to be matched and is fixed at resource_name. value indicates the value to be matched. If this field is not passed, no matching condition will be used.

**Table 8-4** Match

Parameter	Mandatory	Type	Description
key	Yes	String	Key. If the matches parameter is passed, this parameter is mandatory and is fixed at resource_name.
value	Yes	String	Value, which is the resource name. If the matches parameter is passed, this parameter is mandatory and fuzzy search is used by default, for example, message.com. A value can contain a maximum of 255 characters.

## Response Parameters

Status code: 200

**Table 8-5** Response body parameters

Parameter	Type	Description
resources	Array of <a href="#">Resources</a> objects	Resource list.
errors	Array of <a href="#">Errors</a> objects	Resources bound to enterprise projects that failed to be queried.

Parameter	Type	Description
total_count	Integer	Total number of resources in enterprise projects.

**Table 8-6** Resources

Parameter	Type	Description
enterprise_project_id	String	Enterprise project ID.
project_id	String	ProjectID
project_name	String	Project name.
resource_detail	Object	Resource details.
resource_id	String	Resource ID.
resource_name	String	Resource name.
resource_type	String	Resource type.

**Table 8-7** Errors

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
project_id	String	ProjectID
resource_type	String	Resource type.

**Status code: 400**

**Table 8-8** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 8-9** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 401**

**Table 8-10** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 8-11** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 402**

**Table 8-12** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 8-13** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 403**

**Table 8-14** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.
error_code	String	Error code.
error_msg	String	Error message.
encoded_authorization_message	String	Detailed rejection reason after encoding (encryption).
details	Array of <a href="#">RespErrorMessage objects</a>	PDP5 error information and dependent cloud service error information.

**Table 8-15** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 404**

**Table 8-16** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 8-17** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 405**

**Table 8-18** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 8-19** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 406**

**Table 8-20** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 8-21** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 407**

**Table 8-22** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 8-23** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 408**

**Table 8-24** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 8-25** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 409**

**Table 8-26** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 8-27** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 500**

**Table 8-28** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 8-29** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 501**

**Table 8-30** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 8-31** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 502**

**Table 8-32** Response body parameters

Parameter	Type	Description
error	<a href="#">RespErrorMessage object</a>	Error request information.

**Table 8-33** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 503**

**Table 8-34** Response body parameters

Parameter	Type	Description
error	<b>RespErrorMessage object</b>	Error request information.

**Table 8-35** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

**Status code: 504**

**Table 8-36** Response body parameters

Parameter	Type	Description
error	<b>RespErrorMessage object</b>	Error request information.

**Table 8-37** RespErrorMessage

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

## Example Requests

### Listing Resources in an Enterprise Project

```
POST https://{{Endpoint}}/v1.0/enterprise-projects/{{enterprise_project_id}}/resources/filter
```

```
{  
  "projects" : [ "e1eb7c40cbea4c8389cde527594a306d", "2345d321da864d6faf2e762647e19f96" ],  
  "resource_types" : [ "disk" ],  
  "offset" : 0,  
  "limit" : 10,  
  "matches" : [ {  
    "key" : "resource_name",  
    "value" : "lhj"  
  } ]  
}
```

## Example Responses

**Status code: 200**

OK

```
{  
  "resources" : [ {  
    "project_id" : "e1eb7c40cbea4c8389cde527594a306d",  
    "project_name" : "XXXX",  
    "resource_type" : "disk",  
    "resource_id" : "b621f5ae-b5c1-49d7-a660-752c445434b4",  
    "resource_name" : "lhj1-volume-0001",  
    "resource_detail" : null,  
    "enterprise_project_id" : "0"  
  }, {  
    "project_id" : "e1eb7c40cbea4c8389cde527594a306d",  
    "project_name" : "XXXX",  
    "resource_type" : "disk",  
    "resource_id" : "87c9edc9-f66c-48b8-a22f-372b2e22d579",  
    "resource_name" : "lhj2-volume-0002",  
    "resource_detail" : null,  
    "enterprise_project_id" : "0"  
  } ],  
  "errors" : [ ],  
  "total_count" : 2  
}
```

## Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
407	Proxy Authentication Required
408	Request Timeout

Status Code	Description
409	Conflict
500	Internal Server Error
501	Not Implemented
502	Bad Gateway
503	Service Unavailable
504	Gateway Timeout

## Error Codes

See [Error Codes](#).

# A Appendix

## A.1 Status Code

- Normal

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

- Abnormal

Returned Value	Description
400 Bad Request	The server failed to process the request.
401 Unauthorized	You must enter a username and password to access the requested page.
402 Payment Required	This status code is reserved for future use.
403 Forbidden	You are forbidden to access the requested page.
404 Not Found	The server cannot find the requested page.
405 Method Not Allowed	You are not allowed to use the method specified in the request.

Returned Value	Description
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 so that the request can be processed.
408 Request Timeout	The request timed out.
409 Conflict	The request could not be processed due to a conflict.
410 Gone	<p>The requested resource is no longer available.</p> <p>The requested resource has been deleted permanently.</p>
412 Precondition Failed	The server does not meet one of the preconditions that the requester puts on the request.
429 TooManyRequests	The client has sent more requests than the rate limit allowed within a given amount of time, or the server has received more requests than it is able to process within a given amount of time. In this case, the client should repeat requests after the time specified in the <b>Retry-After</b> header of the response expires.
500 Internal Server Error	Failed to complete the request. because of a service error.
501 Not Implemented	Failed to complete the request. because the server does not support the requested function.
502 Bad Gateway	Failed to complete the request. because the request is invalid.
503 Service Unavailable	Failed to complete the request. The service is unavailable.
504 Gateway Timeout	A gateway timeout error occurred.

## A.2 Error Codes

Status Code	Error Codes	Error Message	Description	Solution
400	EPS.0002	Bad request.	Invalid request data.	Check request parameters.
400	EPS.0007	Invalid enterprise project name.	Invalid enterprise project name.	Check the enterprise project name.
400	EPS.0008	Invalid enterprise project description.	Invalid enterprise project description.	Check the enterprise project description.
400	EPS.0009	The number of enterprise project exceeds the upper limit.	Too many enterprise projects.	Too many enterprise projects.
400	EPS.0011	Invalid domain ID.	Invalid domain ID.	Check the domain ID.
400	EPS.0012	The default enterprise project cannot be modified.	The default enterprise project cannot be modified.	The default enterprise project cannot be modified.
400	EPS.0013	Invalid action.	Invalid operation type.	Check the operation type.
400	EPS.0014	The disabled enterprise project cannot be modified.	Disabled enterprise projects cannot be modified.	Disabled enterprise projects cannot be modified.
400	EPS.0015	The default enterprise project does not support the operation.	Unsupported operation type.	Unsupported operation type.
400	EPS.0017	Invalid limit.	Invalid parameter.	Check the parameter.
400	EPS.0018	Invalid offset.	Invalid parameter.	Check the parameter.

Status Code	Error Codes	Error Message	Description	Solution
400	EPS.0020	Empty project list.	No enterprise projects specified.	No enterprise projects specified.
400	EPS.0021	Duplicated elements in the project list.	Duplicate project IDs.	Duplicate project IDs.
400	EPS.0022	Invalid project ID.	Invalid project ID.	Check the project ID.
400	EPS.0023	Empty resource type list.	No resource types specified.	Check the resource type list.
400	EPS.0024	Duplicated elements in the resource type list.	Duplicate resource types.	Check the resource type.
400	EPS.0025	Invalid element in the resource type list.	Invalid resource type.	Check the resource type.
400	EPS.0026	Invalid element in the project list.	Invalid project ID.	Check the project ID.
400	EPS.0027	Invalid element in the matches list.	Invalid project ID.	Check the project ID.
400	EPS.0028	Duplicated keys in the matches list.	Invalid parameter.	Check the request parameter.
400	EPS.0029	Invalid key in the matches list.	Invalid parameter.	Check the request parameter.
400	EPS.0030	Invalid value in the matches list.	Invalid parameter.	Check the request parameter.
400	EPS.0031	Invalid resource type.	Invalid resource type.	Check the resource type.
400	EPS.0032	Invalid resource ID.	Invalid resource ID.	Check the resource ID.

Status Code	Error Codes	Error Message	Description	Solution
400	EPS.0033	unsupported project or resource type.	Unsupported resource type or project.	Check the resource type or project.
400	EPS.0034	The disabled enterprise project cannot have the resources added.	Resources cannot be added to disabled enterprise projects.	Resources cannot be added to disabled enterprise projects.
400	EPS.0035	Invalid query param of with supported region or resource type.	Invalid parameter.	Check the request parameter.
400	EPS.0036	Failed to stop this enterprise project because you have incomplete orders.	Enterprise projects with pending orders cannot be disabled.	Enterprise projects with pending orders cannot be disabled.
400	EPS.0037	Incorrect enterprise project status.	Incorrect enterprise project status.	Contact service support personnel.
400	EPS.0038	Operation failed. No project ID is allowed in Global service resource types.	Invalid parameter.	Check the request parameter.
400	EPS.0040	Request remoteAddr is not match.	Invalid request address.	Check the request address.
400	EPS.0042	The request body length is too long. The maximum length allowed is 200 KB.	The request body cannot exceed 200 KB.	The request body cannot exceed 200 KB.
400	EPS.0044	Invalid enterprise project id.	Invalid enterprise project ID.	Check the enterprise project ID.

Status Code	Error Codes	Error Message	Description	Solution
400	EPS.0049	Invalid json.	Incorrect JSON format.	Contact service support personnel.
401	EPS.0003	Unauthorized user.	Unauthorized request.	Check the authentication token.
403	EPS.0004	Permission error.	Insufficient permissions.	Check your permissions.
403	EPS.0006	The request is too much, try again later.	Too many requests.	Try again later.
403	EPS.0039	You do not have permissions to perform this operation. The required permission is:	Insufficient permissions.	Check your permissions.
404	EPS.0005	Requested resources not found.	The resource does not exist.	Contact the service support personnel to check whether the API has been registered.
404	EPS.0069	The enterprise project is not exist.	Enterprise project does not exist.	Check the enterprise project ID.
409	EPS.0010	The enterprise project name already exists.	The enterprise project already exists.	Check the enterprise project name.
409	EPS.0016	Failed to disable the enterprise project because it contains AS groups.	The enterprise project cannot be disabled because it contains AS resources.	Remove the AS resources from the enterprise project and try again.
409	EPS.0041	Conflict.	Internal conflict.	Try again later.
409	EPS.0043	Name already exists.	The name already exists.	Check the name.

Status Code	Error Codes	Error Message	Description	Solution
500	EPS.0000	The system is busy, please try again later.	System busy. Try again later.	Contact service support personnel.
500	EPS.0001	System error.	System error.	Contact service support personnel.
500	EPS.0019	Query timed out.	Query timed out.	Try again later.
500	EPS.0045	Method args exist null.	One or more parameters are null.	Check parameters.
500	EPS.0046	Method return value is null.	The return value of Method is null.	Contact service support personnel.
500	EPS.0047	Invalid namespace.	Invalid namespace.	Contact service support personnel.
500	EPS.0048	Unexpected datasource error.	An unexpected database occurred.	Contact service support personnel.

## A.3 Obtaining a Project ID

### Scenarios

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

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

### Obtain the Project ID by Calling an API

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

The API is **GET https://{{Endpoint}}/v3/projects**. The {{Endpoint}} can be obtained from Regions and Endpoints. For details about API authentication, see [Authentication](#).

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

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

## Obtain a Project ID from the Console

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

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

## A.4 Obtaining the Domain-Level Token

The following example shows how to obtain the domain-level token.

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

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

 NOTE

- The validity period of a token is 24 hours. Cache the token to prevent frequent API calling.
- To avoid token expiration during an API call, ensure that the time taken to complete a call is shorter than the time left before a token expires.

## A.5 IAM Error Codes

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

For details about IAM error codes, see [IAM Error Codes](#).