

Cloud Search Service

API Reference

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1 Before You Start

1.1 Overview

Welcome to *Cloud Search Service API Reference*. Cloud Search Service (CSS) provides hosted, distributed search engine services. It is fully compatible with open-source Elasticsearch and supports multi-condition retrieval, statistics, and reporting of structured and unstructured texts.

This document provides CSS API description, syntax, parameters, and examples. CSS provides APIs for cluster management and snapshot management. You can call these APIs to easily create, query, delete, restart, and scale clusters.

1.2 API Calling

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

1.3 Endpoints

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

1.4 Restrictions and Limitations

- The number of CSS clusters you can create is determined by the quota. To view or increase the quota, see Quotas.
- For more constraints, see the API descriptions.

1.5 Concepts

- Account

An account is created after you register with the cloud platform. It has full access permissions on its resources and cloud services, such as resetting password and granting permissions. The account is a payment entity and should not be used to perform routine management. For security purposes, create IAM users and grant them permissions for routine management.

- User

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

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

- Region

A region is a geographic area in which cloud resources are deployed.

Availability zones (AZs) in the same region can communicate with each other over an intranet, while AZs in different regions are isolated from each other.

By creating cloud resources in different regions, you can design applications to better meet customer requirements and comply with local laws and regulations.

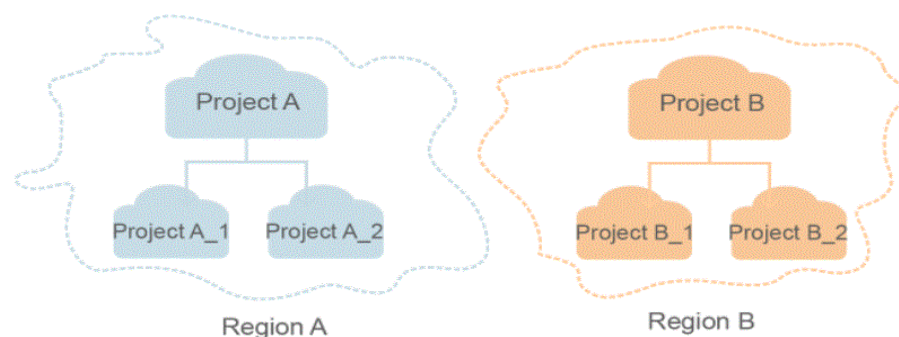
- AZ

An AZ comprises of one or multiple 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

Projects group and isolate resources (including compute, storage, and network resources) across physical regions. A default project is provided for each region, and subprojects can be created under each default project. Users can be granted permissions to access all resources in a specific project. If you need more refined access control, create sub-projects under a default project and purchase resources in sub-projects. Then you can assign users the permissions required to access only the resources in the specific sub-projects.

Figure 1-1 Project isolation model



- Checkpoint: When an application consumes data, the latest SN of the consumed data is recorded as a checkpoint. When the data is consumed again, the consumption can be continued based on this checkpoint.

- APP: Multiple applications can access data in the same stream. Checkpoints generated for each application are used to record the consumed data in the stream by each application.

1.6 Supported Cluster Versions

In CSS, Elasticsearch 7.6.2 and 7.9.3 and Kibana 7.6.2 and 7.9.3 are supported.

2 API Overview

CSS APIs comply with RESTful API design specifications. You can use the functions listed in [Table 2-1](#) through calling APIs.

Table 2-1 API description

Type	Description
Cluster Management APIs	These APIs are used to create clusters, scale out clusters, view cluster details, and obtain instance specifications.
Log Management APIs	These APIs are used to enable, disable, modify, and query logs.
Public Network Access APIs	These APIs are used to enable, disable, and modify the public network access of a cluster.
Snapshot Management APIs	Snapshots can be used to back up and restore data. You can use snapshot management APIs to create, restore, or delete a snapshot.
Parameter Configuration APIs	These APIs can be used to modify the parameter configurations of a cluster.

3 Calling APIs

3.1 Making an API Request

This section describes the structure of a RESTful API request, and uses the API for Obtaining a User Token as an example to describe how to call an API. A token is a user's access credential, which contains the user identity and permission information. The obtained token is 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}

Table 3-1 Request URL

Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS .
Endpoint	Domain name or IP address of the server running the REST service. The endpoint varies between services in different regions. It can be obtained from Endpoints .
resource-path	API access path for performing a specified operation. Obtain the value from the URI of the API. For example, the resource-path of the API for obtaining a user token is /v3/auth/tokens .
query-string	Query parameter, which is optional. Ensure that a question mark (?) is included before a query parameter that is in the format of " Parameter name=Parameter value ". For example, limit=10 indicates that a maximum of 10 pieces of data is to be viewed.

For example, to obtain an IAM token in a region, obtain the endpoint of IAM for this region and the **resource-path (/v3/auth/tokens)** in the URI of the API used to obtain a user token. Then, construct the URI as follows:

```
https://<iam-endpoint>/v3/auth/tokens
```

 NOTE

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

Request Methods

HTTP-based request methods, which are also called operations or actions, specify the type of operations that you are requesting.

- **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**: requests a server resource header.
- **PATCH**: requests the server to update partial content of a specified resource. If the target resource does not exist, PATCH may create a resource.

If **POST** is displayed in the URI of the API for obtaining a user token, the request is as follows:

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

Request Header

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

Table 3-2 lists common request header fields.

Table 3-2 Common request headers

Parameter	Mandatory	Description
Content-Type	Yes	Message body type (or format). You are advised to use the default value application/json .
X-Auth-Token	No (Mandatory for token-based authentication)	User token. User token is the response to the API for obtaining a user token (only this API does not require authentication). After the request is processed, the value of X-Subject-Token in the response header (Header) is the token value.

Parameter	Mandatory	Description
X-Language	No	Request language

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

```
POST https://{iam-endpoint}/v3/auth/tokens
Content-Type: application/json
```

Request Body

A request body conveys information other than the request header and is generally sent in a structured format defined by the request header field **Content-Type**.

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

In the case of the API used to obtain a user token, the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Replace *username*, *domainname*, ******* (login password), and *xxxxxxxxxxxxxxxxxxxx* (project ID) with the actual values. To learn how to obtain a project ID, see [Obtaining a Project ID and Name](#).

NOTE

The **scope** parameter defines the application scope of the token, indicating that the obtained token can access only the resources in the specified project.

```
POST https://{iam-endpoint}/v3/auth/tokens
Content-Type: application/json
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username", //Username
          "password": "*****", //Login password
          "domain": {
            "name": "domainname" //Name of the account to which the user belongs
          }
        }
      }
    },
    "scope": {
      "project": {
        "id": "xxxxxxxxxxxxxxxxxxxx" //Project ID
      }
    }
  }
}
```

If all data required by a request is available, you can send the request to call an API through [curl](#), [Postman](#), or coding. For the API of obtaining a user token, **x-**

subject-token in the response header is the desired user token. Then, you can use the token to authenticate the calling of other APIs.

3.2 Authentication

CSS supports token authentication.

Authentication Using Tokens

NOTE

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

A token specifies certain permissions in a computer system. Authentication using a token adds the token to a request as its header during API calling to obtain permissions to operate APIs through IAM.

The API for obtaining a token is **POST [https://{IAM endpoint}/v3/auth/tokens](#)**. For details about how to obtain IAM endpoints, see [Endpoints](#).

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username", //Username
          "password": "*****", //Login password
          "domain": {
            "name": "domainname" //Name of the account that the user belongs to
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "xxxxxxx" //Project name
      }
    }
  }
}
```

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

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

3.3 Returned Values

Status Code

After sending a request, you will receive a response containing the 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](#).

If status code 201 is returned for the calling of the API for obtaining a user token, the request is successful.

Response Header

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

Figure 3-1 shows the response header for the API of obtaining a user token, where **x-subject-token** is the desired user token. Then, you can use the token to authenticate the calling of other APIs.

Figure 3-1 Header of the response to the request for obtaining a user token

```
connection → keep-alive
content-type → application/json
date → Tue, 12 Feb 2019 06:52:13 GMT
server → Web Server
strict-transport-security → max-age=31536000; includeSubdomains;
transfer-encoding → chunked
via → proxy A
x-content-type-options → nosniff
x-download-options → noopen
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token → MIIYXQYJKoZIhvcNAQcCoIIYJCCEGoCAQExDTALBglghkgB8QMEAgEwgharBgkqhkiG9w0BBwGgghacBIIWmHsidG9rZW4iOnsiZXhwaXJlc19hdCI6IjwMTktMDItMTNUMC
fj3KJs6YgKnpVNRbW2eZ5eb78SZOkqjACgklqO1wi4JlGzrpd18LGXK5tdfdq4lqHCYb8P4NaY0NYejcAgz/VeFYtLWT1GSO0zxKZmlQHqJ82HBqHdglZO9fuEbL5dMhdavj+33wEI
xHRCe9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXl1jipPEGA270g1FrucOL6jagglFkNPQuFSOU8+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUbpvGw-oPNFYxJECKnoH3Hrozv0vN--n5d6Nbxg==
x-xss-protection → 1; mode=block;
```

Response Body

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

The following shows part of the response body for the API of obtaining a user token.

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

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

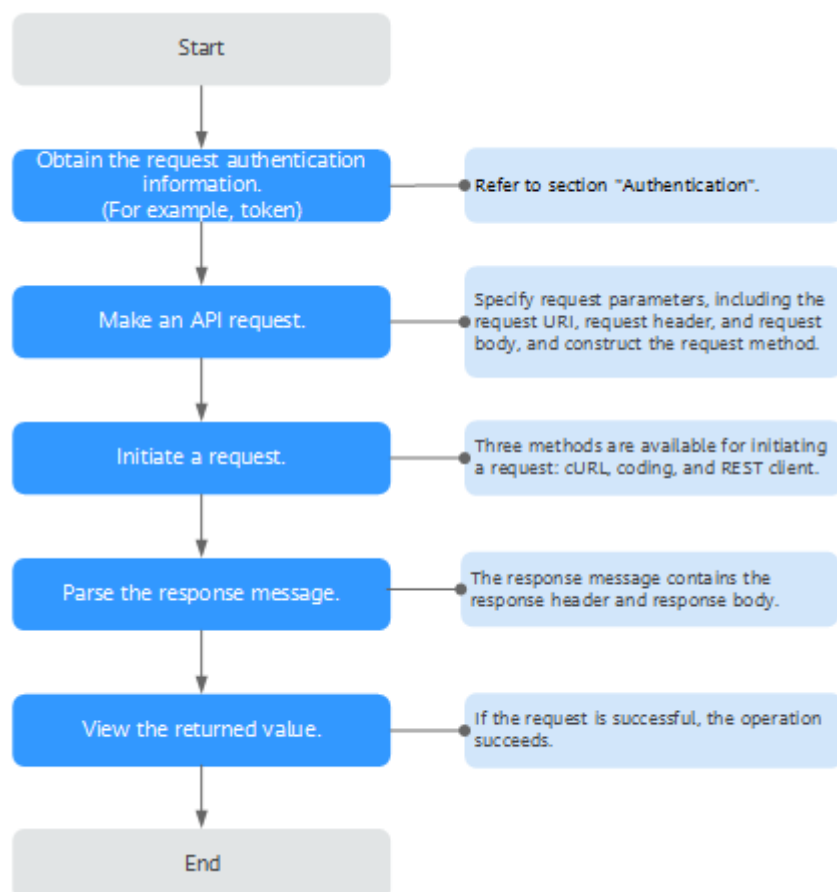
```
{
  "error_msg": "The format of message is error",
  "error_code": "AS.0001"
}
```

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

4 Getting Started

This section describes how to create a CSS cluster by using APIs. [Figure 4-1](#) illustrates the API calling process.

Figure 4-1 API calling process



NOTE

The token obtained on IAM is valid for only 24 hours. If you want to use one token for authentication, you can cache it to avoid frequent calling.

Involved APIs

If you use a token for authentication, you must obtain the token and add **X-Auth-Token** to the request header of the API when making an API call.

- API for obtaining tokens from IAM
- API for creating CSS clusters

Procedure

1. Obtain the token. Send **POST https://IAM endpoint/v3/auth/tokens**.
Obtain the token by following instructions in [Authentication](#).
The value of **X-Subject-Token** in the response header is the user token.
2. Add **Content-type** and **X-Auth-Token** to the request header.
 - **Content-Type**: specifies the request body type or format. Its default value is **application/json**.
 - **X-Auth-Token**: Enter the user token obtained in 1.

3. Send a cluster creation request and specify the following parameters in the request body:

```
POST /v1.0/6204a5bd270343b5885144cf9c8c158d/clusters
{
  "cluster": {
    "name": "ES-Test",
    "backupStrategy": {
      "period": "16:00 GMT+08:00",
      "prefix": "snapshot",
      "keepday": 7
    },
    "instanceNum": 3,
    "instance": {
      "flavorRef": "ess.spec-2u16g",
      "volume": {
        "volume_type": "COMMON",
        "size": 100
      },
      "nics": {
        "vpclId": "fccd753c-91c3-40e2-852f-5ddf76d1a1b2",
        "netId": "af1c65ae-c494-4e24-acd8-81d6b355c9f1",
        "securityGroupId": "7e3fed21-1a44-4101-ab29-34e57124f614"
      }
    }
  }
}
```

View the response message. The following is an example response:

```
{
  "cluster": {
    "id": "ef683016-871e-48bc-bf93-74a29d60d214",
    "name": "ES-Test"
  }
}
```

If the request is successful, 200 OK is returned.

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

5 Cluster Management

5.1 Creating a cluster

Function

This API is used to create a cluster.

URI

POST /v1.0/{project_id}/clusters

Table 5-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 5-2 Request body parameters

Parameter	Mandatory	Type	Description
cluster	Yes	CreateClusterBody object	Cluster object.

Table 5-3 CreateClusterBody

Parameter	Mandatory	Type	Description
instance	Yes	CreateClusterInstanceBody object	Instance.
datastore	Yes	CreateClusterDatastoreBody object	Search engine.
name	Yes	String	Cluster name It can contain 4 to 32 characters. Only digits, letters, hyphens (-), and underscores (_) are allowed. The value must start with a letter.
instanceNum	Yes	Integer	Number of clusters. The value range is 1 to 32.
backupStrategy	No	CreateClusterBackupStrategyBody object	Automatic snapshot creation policy, which is disabled by default. The automatic snapshot creation policy is enabled only if backupStrategy is not left blank.
httpsEnable	No	Boolean	Whether communication is encrypted on the cluster. The value can be true or false . By default, communication encryption is disabled. If httpsEnable is set to true , authorityEnable must be set to true . • true: Communication is encrypted on the cluster. • false: Communication is not encrypted on the cluster. This parameter is supported in clusters 6.5.4 or later.

Parameter	Mandatory	Type	Description
authorityEnable	No	Boolean	Whether to enable authentication. The value can be true or false. Authentication is disabled by default. • true indicates that authentication is enabled for the cluster. • true indicates that authentication is enabled for the cluster. This parameter is supported in clusters 6.5.4 or later.
adminPwd	No	String	Password of the cluster user admin in security mode. This parameter is mandatory only if authorityEnable is set to true. • The administrator password must meet the following requirements: – The password can contain 8 to 32 characters. – Passwords must contain at least three of the following character types: uppercase letters, lowercase letters, digits, and special characters (~!@#\$%^&*()-_+=\ [{ }];,;<.>/?). • Weak password verification is required for a security cluster. You are advised to set a strong password.
enterprise_project_id	No	String	Enterprise project ID. When creating a cluster, associate the enterprise project ID with the cluster. The value can contain a maximum of 36 characters. It is string 0 or in UUID format with hyphens (-). Value 0 indicates the default enterprise project.

Parameter	Mandatory	Type	Description
tags	No	Array of CreateClusterTagsBody objects	Cluster tag.

Table 5-4 CreateClusterInstanceBody

Parameter	Mandatory	Type	Description
flavorRef	Yes	String	Instance flavor. For details about the current instance flavor, see the name attribute in Obtaining the Instance Specifications List .
volume	Yes	CreateClusterInstanceVolumeBody object	Volume information. If flavorRef is set to a local disk flavor, leave this parameter blank. Currently, the following local disk flavors are supported: • ess.spec-i3small • ess.spec-i3medium • ess.spec-i3.8xlarge.8 • ess.spec-ds.xlarge.8 • ess.spec-ds.2xlarge.8 • ess.spec-ds.4xlarge.8
nics	Yes	CreateClusterInstanceNicsBody object	Subnet ID.

Parameter	Mandatory	Type	Description
availability_zone	No	String	AZ. A single AZ is created when this parameter is not specified. Separate multiple AZs with commas (,), for example, az1,az2. AZs must be unique. The number of nodes must be greater than or equal to the number of AZs. If the number of nodes is a multiple of the number of AZs, the nodes are evenly distributed to each AZ. If the number of nodes is not a multiple of the number of AZs, the absolute difference between node quantity in any two AZs is 1 at most.

Table 5-5 CreateClusterInstanceVolumeBody

Parameter	Mandatory	Type	Description
volume_type	Yes	String	Volume type. • COMMON: common I/O • HIGH: high I/O • ULTRAHIGH: Ultra-high I/O
size	Yes	Integer	Volume size. The value must be greater than 0 and a multiple of 4 and 10. For details about the local disk size, see the diskrange attribute in Obtaining the Instance Specifications List. Unit: GB

Table 5-6 CreateClusterInstanceNicsBody

Parameter	Mandatory	Type	Description
vpclId	Yes	String	VPC ID, which is used for configuring cluster network.
netId	Yes	String	Subnet ID (network ID).

Parameter	Mandatory	Type	Description
securityGroupId	Yes	String	Security group ID.

Table 5-7 CreateClusterDatastoreBody

Parameter	Mandatory	Type	Description
version	Yes	String	Elasticsearch engine version. For details, see CSS Supported Cluster Versions .
type	Yes	String	Engine type. Currently, only Elasticsearch is supported.

Table 5-8 CreateClusterBackupStrategyBody

Parameter	Mandatory	Type	Description
period	Yes	String	Time when a snapshot is automatically created every day. Snapshots can only be created on the hour. The time format is the time followed by the time zone, specifically, HH:mm z . In the format, HH:mm refers to the hour time and z refers to the time zone. For example, 00:00 GMT+08:00 and 01:00 GMT+08:00 .
prefix	Yes	String	Prefix of a snapshot that is automatically created, which is manually entered. Enter up to 32 characters and start with a lowercase letter. Lowercase letters, digits, hyphens (-), and underscores (_) are allowed.
keepday	Yes	Integer	Number of days for which automatically created snapshots are retained. Value range: 1 to 90
bucket	No	String	Name of the OBS bucket used for backup.
basePath	No	String	Storage path of the snapshot in the OBS bucket.

Parameter	Mandatory	Type	Description
agency	No	String	IAM agency used to access OBS. If none of the bucket , basePath , and agency parameters are specified, the system automatically creates an OBS bucket and an IAM agency. Otherwise, the configured parameters will take effect.

Table 5-9 CreateClusterTagsBody

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The value can contain 1 to 36 characters. It can only contain digits, letters, hyphens (-), and underscores (_).
value	Yes	String	Tag value. The value can contain 0 to 43 characters. It can only contain digits, letters, hyphens (-), and underscores (_).

Response Parameters

Status code: 200

Table 5-10 Response body parameters

Parameter	Type	Description
cluster	CreateClusterClusterResponse object	Cluster object. [For a pay-per-use cluster, only the cluster parameter is returned.] (tag:hc,hws)

Table 5-11 CreateClusterClusterResponse

Parameter	Type	Description
id	String	Cluster ID.
name	String	Cluster name

Example Requests

Example request for creating a pay-per-use cluster.

```
POST /v1.0/6204a5bd270343b5885144cf9c8c158d/clusters

{
  "cluster" : {
    "name" : "ES-Test",
    "datastore" : {
      "version" : "x.x.x",
      "type" : "elasticsearch"
    },
    "backupStrategy" : {
      "period" : "16:00 GMT+08:00",
      "prefix" : "snapshot",
      "keepday" : 7
    },
    "instanceNum" : 4,
    "instance" : {
      "flavorRef" : "ess.spec-XuXg",
      "volume" : {
        "volume_type" : "COMMON",
        "size" : 100
      },
      "nics" : {
        "vpclId" : "fccd753c-xxx-xxx-xxx-5ddf78d1a1b2",
        "netId" : "af1c65ae-xxx-xxx-xxx-81d6b365c9f1",
        "securityGroupId" : "7e3fed21-xxx-xxx-xxx-34e51124f614"
      },
      "availability_zone" : "xx-xxx-xx"
    },
    "httpsEnable" : true,
    "authorityEnable" : true,
    "adminPwd" : "xxxxxx",
    "enterprise_project_id" : "3e1c74a0-xxx-xxx-xxxx-c6b9e46cf81b",
    "tags" : [ {
      "key" : "k1",
      "value" : "v1"
    }, {
      "key" : "k2",
      "value" : "v2"
    } ]
  }
}
```

Example Responses

Status code: 200

Request succeeded.

Example response for creating a pay-per-use cluster.

```
{
  "cluster" : {
    "id" : "ef683016-871e-48bc-bf93-74a29d60d214",
    "name" : "ES-Test"
  }
}
```


Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

5.2 Querying the Cluster List

Function

This API is used to query and display the cluster list and cluster status.

URI

GET /v1.0/{project_id}/clusters

Table 5-12 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Table 5-13 Query Parameters

Parameter	Mandatory	Type	Description
start	No	Integer	The start value of the query. The default value is 1, indicating that the query starts from the first cluster.

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of clusters to be queried. The default value is 10, indicating that the information about 10 clusters is queried at a time.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-14 Response body parameters

Parameter	Type	Description
totalSize	Integer	Number of clusters
clusters	Array of ClusterList objects	List of cluster objects.

Table 5-15 ClusterList

Parameter	Type	Description
datastore	ClusterListDatastore object	Search engine.
instances	Array of ClusterListInstances objects	List of node objects.
publicKibanaResp	publicKibanaRespBody object	Kibana public network access information.
elbWhiteList	elbWhiteListResp object	EIP whitelist.
updated	String	Last modification time of a cluster. The format is ISO8601: CCYY-MM-DDThh:mm:ss .
name	String	Cluster name
publicIp	String	Public IP address information.

Parameter	Type	Description
created	String	Cluster creation time. The format is ISO8601: CCYY-MM-DDThh:mm:ss . The returned cluster list is sorted by creation time in descending order. The latest cluster is displayed at the top.
id	String	Cluster ID.
status	String	Cluster status. ● 100: Creating ● 200: Available ● 303: Unavailable, for example, due to a creation failure.
endpoint	String	IP address and port number of the user used to access the VPC.
vpId	String	ID of a VPC.
subnetId	String	Subnet ID.
securityGroupId	String	Security group ID.
bandwidthSize	Integer	Public network bandwidth. Unit: Mbit/s
httpsEnable	Boolean	Communication encryption status. ● false: Communication encryption is not enabled. ● true: Communication encryption is enabled.
authorityEnable	Boolean	Whether to enable authentication. ● true: Authentication is enabled for the cluster. ● false: Authentication is not enabled for the cluster.
diskEncrypted	Boolean	Whether disks are encrypted. ● true: Disks are encrypted. ● false: Disk are not encrypted.
backupAvailable	Boolean	Whether the snapshot function is enabled. ● true: The snapshot function is enabled. ● false: The snapshot function is disabled.
actionProgress	Object	Cluster behavior progress, which shows the progress of cluster creation and scaling in percentage. CREATING indicates the progress of creation.

Parameter	Type	Description
actions	Array of strings	Current behavior of a cluster. REBOOTING indicates that the cluster is being restarted. GROWING indicates that the cluster is being scaled. RESTORING indicates that the cluster is being restored. SNAPSHOTTING indicates that a snapshot is being created.
enterpriseProjectId	String	ID of the enterprise project that a cluster belongs to. If the user of the cluster does not enable the enterprise project, the setting of this parameter is not returned.
tags	Array of ClusterListTags objects	Cluster tag.
failedReason	ClusterListFailedReasons object	Failure cause. If the cluster is in the available status, this parameter is not returned.

Table 5-16 ClusterListDatastore

Parameter	Type	Description
type	String	Engine type. Currently, only Elasticsearch is supported.
version	String	Version of the CSS cluster engine. For details, see CSS Supported Cluster Versions .

Table 5-17 ClusterListInstances

Parameter	Type	Description
status	String	Node status. ● 100: Creating ● 200: Available ● 303: Unavailable, for example, due to a creation failure.
type	String	Type of the current node.
id	String	Instance ID.
name	String	Instance name.
specCode	String	Node specifications.
azCode	String	AZ of a node.

Parameter	Type	Description
ip	String	Instance IP address.
volume	ClusterVolumeResp object	definitions.ClusterVolumeResp.description

Table 5-18 ClusterVolumeResp

Parameter	Type	Description
type	String	Type of the disk used by the instance.
size	Integer	Instance disk information

Table 5-19 publicKibanaRespBody

Parameter	Type	Description
eipSize	Integer	Bandwidth range. Unit: Mbit/s
elbWhiteListResp	kibanaElbWhiteListResp object	Kibana public network access information.
publicKibanaIp	String	Specifies the IP address for accessing Kibana.

Table 5-20 kibanaElbWhiteListResp

Parameter	Type	Description
enableWhiteList	Boolean	Whether the Kibana access control is enabled. • true: Access control is enabled. • false: Access control is disabled.
whiteList	String	Whitelist of public network for accessing Kibana.

Table 5-21 elbWhiteListResp

Parameter	Type	Description
enableWhiteList	Boolean	Whether the public network access control is enabled. • true: Public network access control is enabled. • false: Public network access control is disabled.
whiteList	String	Whitelist for public network access.

Table 5-22 ClusterListTags

Parameter	Type	Description
key	String	Tag key.
value	String	Tag value.

Table 5-23 ClusterListFailedReasons

Parameter	Type	Description
errorCode	String	Error code. • CSS.6000: A cluster fails to be created. • CSS.6001: A cluster fails to be scaled out. • CSS.6002: A cluster fails to be restarted. • CSS.6004: A node fails to be created in a cluster. • CSS.6005: A service fails to be initialized.
errorMsg	String	Error details.

Example Requests

- Query the first two clusters.
 - Method 1: GET /v1.0/6204a5bd270343b5885144cf9c8c158d/clusters?start=1&limit=2
 - Method 2: GET /v1.0/6204a5bd270343b5885144cf9c8c158d/clusters?limit=2
- Query the first ten clusters.
 - Method 1: GET /v1.0/6204a5bd270343b5885144cf9c8c158d/clusters?start=1&limit=10
 - Method 2: GET /v1.0/6204a5bd270343b5885144cf9c8c158d/clusters?limit=10

Example Responses

Status code: 200

Request succeeded.

```
{
  "totalSize" : 1,
  "clusters" : [ {
    "datastore" : {
      "type" : "elasticsearch",
      "version" : "7.10.2"
    },
    "instances" : [ {
      "status" : "200",
      "type" : "ess",
      "id" : "{INSTANCE_ID}",
      "name" : "css-test-ess-esn-1-1",
      "specCode" : "ess.spec-4u16g",
      "azCode" : "{AZ_CODE}",
      "volume" : {
        "type" : "COMMON",
        "size" : 40
      },
      "ip" : "192.168.0.100"
    } ],
    "publicKibanaResp" : null,
    "elbWhiteList" : {
      "whiteList" : "",
      "enableWhiteList" : false
    },
    "updated" : "2023-01-11T08:19:14",
    "name" : "css-test",
    "publicIp" : null,
    "created" : "2023-01-11T06:48:22",
    "id" : "{CLUSTER_ID}",
    "status" : "200",
    "endpoint" : "192.168.0.100:9200",
    "vpclId" : "{VPC_ID}",
    "subnetId" : "{SUBNET_ID}",
    "securityGroupId" : "{SECURITY_GROUP_ID}",
    "bandwidthSize" : 0,
    "httpsEnable" : false,
    "authorityEnable" : false,
    "diskEncrypted" : false,
    "backupAvailable" : false,
    "actionProgress" : { },
    "actions" : [ ],
    "tags" : [ ]
  }, {
    "datastore" : {
      "type" : "elasticsearch",
      "version" : "7.9.3"
    },
    "instances" : [ {
      "status" : "200",
      "type" : "ess",
      "id" : "{INSTANCE_ID}",
      "name" : "css-9227-ess-esn-1-1",
      "specCode" : "ess.spec-4u16g",
      "azCode" : "{AZ_CODE}",
      "volume" : {
        "type" : "COMMON",
        "size" : 40
      },
      "ip" : "192.168.0.101"
    } ],
    "publicKibanaResp" : null,
    "elbWhiteList" : {
      "whiteList" : "",
      "enableWhiteList" : false
    },
    "updated" : "2023-01-11T08:19:14",
    "name" : "css-new",
```

```
"publicIp" : null,
"created" : "2023-01-11T06:48:22",
"id" : "{CLUSTER_ID}",
"status" : "200",
"endpoint" : "192.168.0.101:9200",
"vpId" : "{VPC_ID}",
"subnetId" : "{SUBNET_ID}",
"securityGroupId" : "{SECURITY_GROUP_ID}",
"bandwidthSize" : 0,
"httpsEnable" : false,
"authorityEnable" : false,
"diskEncrypted" : false,
"backupAvailable" : false,
"actionProgress" : { },
"actions" : [ ],
"tags" : [ ]
}
]
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
404	The requested resource could not be found. Modify the request before retry.

Error Codes

See [Error Codes](#).

5.3 Querying Cluster Details

Function

This API is used to query and display the details of a cluster.

URI

GET /v1.0/{project_id}/clusters/{cluster_id}

Table 5-24 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Parameter	Mandatory	Type	Description
cluster_id	Yes	String	ID of the cluster you want to query.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-25 Response body parameters

Parameter	Type	Description
datastore	ClusterDetail Datastore object	Search engine.
instances	Array of ClusterDetail Instances objects	List of node objects.
publicKibanaResp	publicKibana RespBody object	Kibana public network access information.
elbWhiteList	elbWhiteList Resp object	Public network access information.
updated	String	Last modification time of a cluster. The format is ISO8601: CCYY-MM-DDThh:mm:ss .
name	String	Cluster name
publicIp	String	Public IP address information.
created	String	Cluster creation time. The format is ISO8601: CCYY-MM-DDThh:mm:ss .
id	String	Cluster ID.
status	String	Cluster status. ● 100: An operation, such as creation, is in progress. ● 200: Available. ● 303: Unavailable, for example, due to a creation failure.

Parameter	Type	Description
endpoint	String	IP address and port number of the user used to access the VPC.
vpclId	String	VPC ID
subnetId	String	Subnet ID
securityGroupId	String	Security group ID.
vpceIp	String	Endpoint IP address.
bandwidthSize	Integer	Public network bandwidth. Unit: Mbit/s
httpsEnable	Boolean	Communication encryption status. ● false: Communication encryption is not enabled. ● true: Communication encryption is enabled.
diskEncrypted	Boolean	Whether disks are encrypted. ● true: Disks are encrypted. ● false: Disk are not encrypted.
authorityEnable	Boolean	Whether to enable authentication. The value can be true or false . Authentication is disabled by default. ● true: Authentication is enabled for the cluster. ● false: Authentication is not enabled for the cluster.
backupAvailable	Boolean	Whether the snapshot function is enabled. ● true: The snapshot function is enabled. ● false: The snapshot function is disabled.
actionProgress	Object	Cluster behavior progress, which shows the progress of cluster creation and scaling in percentage.
actions	Array of strings	Current behavior of a cluster. REBOOTING indicates that the cluster is being restarted. GROWING indicates that the cluster is being scaled. RESTORING indicates that the cluster is being restored. SNAPSHOTTING indicates that a snapshot is being created.

Parameter	Type	Description
enterpriseProjectId	String	ID of the enterprise project that a cluster belongs to. If the user of the cluster does not enable the enterprise project, the setting of this parameter is not returned.
tags	Array of ClusterDetailTags objects	Cluster tag.
failedReason	ClusterDetailFailedReasons object	Failure cause. If the cluster is in the available status, this parameter is not returned.

Table 5-26 ClusterDetailDatastore

Parameter	Type	Description
type	String	Engine type. Currently, only Elasticsearch is supported.
version	String	Version of the CSS cluster engine. For details, see CSS Supported Cluster Versions .

Table 5-27 ClusterDetailInstances

Parameter	Type	Description
status	String	Node status value. ● 100: An operation, such as creation, is in progress. ● 200: Available. ● 303: Unavailable, for example, due to a creation failure.
type	String	Type of the current node.
id	String	Instance ID.
name	String	Instance name.
specCode	String	Node specifications.
azCode	String	AZ of a node.
ip	String	Instance IP address.

Parameter	Type	Description
volume	ShowClusterVolumeRsp object	Instance disk information

Table 5-28 ShowClusterVolumeRsp

Parameter	Type	Description
type	String	Instance disk type
size	Integer	Instance disk size

Table 5-29 publicKibanaRespBody

Parameter	Type	Description
eipSize	Integer	Bandwidth range. Unit: Mbit/s
elbWhiteListResp	kibanaElbWhiteListResp object	Kibana public network access information.
publicKibanaIp	String	Specifies the IP address for accessing Kibana.

Table 5-30 kibanaElbWhiteListResp

Parameter	Type	Description
enableWhiteList	Boolean	Whether the Kibana access control is enabled. ● true: Access control is enabled. ● false: Access control is disabled.
whiteList	String	Whitelist of public network for accessing Kibana.

Table 5-31 elbWhiteListResp

Parameter	Type	Description
enableWhiteList	Boolean	Whether the public network access control is enabled. • true: Public network access control is enabled. • false: Public network access control is disabled.
whiteList	String	Whitelist for public network access.

Table 5-32 ClusterDetailTags

Parameter	Type	Description
key	String	Tag key.
value	String	Tag value.

Table 5-33 ClusterDetailFailedReasons

Parameter	Type	Description
errorCode	String	Error code. • CSS.6000: A cluster fails to be created. • CSS.6001: A cluster fails to be scaled out. • CSS.6002: A cluster fails to be restarted. • CSS.6004: A node fails to be created in a cluster. • CSS.6005: A service fails to be initialized.
errorMsg	String	Error details.

Example Requests

None

Example Responses

Status code: 200

Request succeeded.

```
{
  "datastore" : {
    "type" : "elasticsearch",
    "version" : "x.x.x"
  }
}
```

```
},
"instances": [ {
  "status": "200",
  "type": "ess",
  "id": "3c7fe582-a9f6-46fd-9d01-956bed4a8bbc",
  "name": "ES-1-16-test17-ess-esn-1-1",
  "specCode": "ess.spec-4u16g",
  "azCode": "xx-xxx-xx",
  "ip": "192.168.0.x",
  "volume": {
    "type": "COMMON",
    "size": 40
  }
} ],
"publicKibanaResp": {
  "eipSize": 5,
  "publicKibanaIp": "100.95.158.x",
  "elbWhiteListResp": {
    "whiteList": "11.11.11.11",
    "enableWhiteList": true
  }
},
"updated": "2018-01-16T08:37:18",
"name": "ES-1-16-test17",
"publicIp": "100.95.149.xx:9200",
"elbWhiteList": {
  "whiteList": "10.10.10.10",
  "enableWhiteList": true
},
"created": "2018-01-16T08:37:18",
"id": "5c77b71c-5b35-4f50-8984-76387e42451a",
"status": "200",
"endpoint": "192.168.0.x:9200",
"vpclId": "07e7ab39-xxx-xxx-xxx-d3f28ea7f051",
"subnetId": "025d45f9-xxx-xxx-xxx-e852c6455a5e",
"securityGroupId": "0347aabc-xxx-xxx-xxx-6b10a79701e2",
"vpceIp": "192.168.0.203",
"bandwidthSize": 0,
"diskEncrypted": false,
"httpsEnable": true,
"authorityEnable": true,
"backupAvailable": true,
"actionProgress": { },
"actions": [ ],
"enterpriseProjectId": "3e1c74a0-xxx-xxx-xxx-c6b9e46cf81b",
"tags": [ {
  "key": "k1",
  "value": "v1"
} ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
404	The requested resource could not be found. Modify the request before retry.

Error Codes

See [Error Codes](#).

5.4 Deleting a Cluster

Function

This API is used to delete a cluster. All resources of the deleted cluster, including customer data, will be released. If you want to retain the data in a customer cluster, create a snapshot before deleting the cluster.

URI

DELETE /v1.0/{project_id}/clusters/{cluster_id}

Table 5-34 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster you want to delete.

Request Parameters

None

Response Parameters

None

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.

Status Code	Description
404	The requested resource could not be found. Modify the request before retry.

Error Codes

See [Error Codes](#).

5.5 Renaming a Cluster

Function

This API is used to change the name of a cluster.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/changename

Table 5-35 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster that you want to rename.

Request Parameters

Table 5-36 Request body parameters

Parameter	Mandatory	Type	Description
displayName	Yes	String	New name of a cluster

Response Parameters

None

Example Requests

```
{
  "displayName": "ES-Test-new"
}
```


Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

5.6 Changing the Password of a Cluster

Function

This API is used to change the password of a cluster.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/password/reset

Table 5-37 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose password you want to change.

Request Parameters

Table 5-38 Request body parameters

Parameter	Mandatory	Type	Description
newpassword	Yes	String	Password of the cluster user admin in security mode. This API is available only if authorityEnable is set to true .- Must contain 8 to 32 characters.- Must contain at least three of the following character types: uppercase letters, lowercase letters, digits, and special characters (~!@#\$\$%^&*()-_+=+ [{}];,;<.>/?).

Response Parameters

None

Example Requests

```
{  
  "newpassword" : "xxxxxx"  
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

5.7 Restarting a Cluster

Function

This API is used to restart a cluster. Services will be interrupted during the restart.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/restart

Table 5-39 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster you want to restart.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-40 Response body parameters

Parameter	Type	Description
jobId	Array of strings	ID of a restart task.

Example Requests

None

Example Responses

Status code: 200

Request succeeded.

```
{  
  "jobId" : [ "ff8080815fa0fa5a015fa365b6300007" ]  
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
404	The requested resource could not be found. Modify the request before retry.

Error Codes

See [Error Codes](#).

5.8 Scaling Out a Cluster

Function

This API is used to add instances to a cluster (only Elasticsearch instances can be added). This API can only scale out clusters that only have common nodes. Clusters with master, client, or cold data nodes cannot use this API. For details about how to configure the number and storage capacity of instances in a cluster, see [Adding Instances and Expanding Instance Storage Capacity](#).

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/extend

Table 5-41 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster you want to scale out.

Request Parameters

Table 5-42 Request body parameters

Parameter	Mandatory	Type	Description
grow	Yes	ExtendClusterGrowReq object	Detailed description about the cluster scale-out request.

Table 5-43 ExtendClusterGrowReq

Parameter	Mandatory	Type	Description
modifySize	Yes	Integer	Number of instances you want to add. The total number of existing instances and newly added instances in a cluster cannot exceed 32.

Response Parameters

None

Example Requests

```
{
  "grow": {
    "modifySize": 4
  }
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
404	The requested resource could not be found. Modify the request before retry.

Error Codes

See [Error Codes](#).

5.9 Adding Instances and Expanding Instance Storage Capacity

Function

This API is used to add instances of different types and expand instance storage capacity in a cluster. This API is available for clusters with master, client, or cold data nodes.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/role_extend

Table 5-44 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster you want to scale out.

Request Parameters

Table 5-45 Request body parameters

Parameter	Mandatory	Type	Description
grow	Yes	Array of RoleExtendGrowReq objects	Detailed description about the cluster scale-out request.

Table 5-46 RoleExtendGrowReq

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the instance to be scaled out. Select at least one from ess , ess-master , and ess-client . A type can be selected once only. You can only add instances, rather than increase storage capacity, on nodes of the ess-master and ess-client types.
nodesize	Yes	Integer	Number of instances you want to add. The total number of existing instances and newly added instances in a cluster cannot exceed 32.
disksize	Yes	Integer	Storage capacity of the instance you want to add. The total storage capacity of existing instances and newly added instances in a cluster cannot exceed the maximum instance storage capacity allowed when a cluster is being created. Unit: GB - The number of ess and ess-cold nodes must be a multiple of 20. - Storage capacity of ess-master and ess-client nodes cannot be expanded.

Response Parameters

Status code: 200

Table 5-47 Response body parameters

Parameter	Type	Description
id	String	Cluster ID.

Example Requests

```
{  
  "grow" : [ {  
    "type" : "ess-master",
```

```
{
  "nodesize" : 2,
  "disksize" : 0
}, {
  "type" : "ess",
  "nodesize" : 0,
  "disksize" : 40
}, {
  "type" : "ess-client",
  "nodesize" : 1,
  "disksize" : 0
}]
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "4f3deec3-efa8-4598-bf91-560aad1377a3"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
404	The requested resource could not be found. Modify the request before retry.

Error Codes

See [Error Codes](#).

5.10 Changing Specifications

Function

This API is used to modify the specifications of a cluster. Only the nodes of the ESS type can be modified.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/flavor

Table 5-48 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose specifications you want to change.

Request Parameters

Table 5-49 Request body parameters

Parameter	Mandatory	Type	Description
needCheckReplica	No	Boolean	Whether to check replicas. The value can be true or false . The check is enabled by default. • true: Replicas are checked. • false: Replicas are not checked.
newFlavorId	Yes	String	ID of the new flavor. This parameter is obtained by calling the [Obtaining the Instance Specifications List] (ListFlavors.xml) API. The API compares the values of the name attribute and obtains the ID of the flavor higher than the current flavor. Only the node specifications of the same Elasticsearch engine version can be changed.

Response Parameters

None

Example Requests

```
{
  "needCheckReplica" : false,
  "newFlavorId" : "35b060a4-f152-48ce-8773-36559ceb81f2"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

5.11 Obtaining the Instance Specifications List

Function

This API is used to query and display the IDs of supported instance specifications.

URI

GET /v1.0/{project_id}/es-flavors

Table 5-50 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-51 Response body parameters

Parameter	Type	Description
versions	Array of EsflavorsVersionsResp objects	Engine version list.

Table 5-52 EsflavorsVersionsResp

Parameter	Type	Description
version	String	Elasticsearch engine version. For details, see CSS Supported Cluster Versions .
flavors	Array of EsflavorsVersionsFlavorsResp objects	instance flavor list.
type	String	Instance type. The options are ess , ess-cold , ess-master , and ess-client .

Table 5-53 EsflavorsVersionsFlavorsResp

Parameter	Type	Description
cpu	Integer	Number of CPU cores of an instance.
ram	Integer	Memory size of an instance. Unit: GB
name	String	Flavor name
region	String	Available region
diskrange	String	Disk capacity range of an instance
availableAZ	String	AZ
flavor_id	String	Flavor ID

Example Requests

None

Example Responses

Status code: 200

Request succeeded.

```
{
  "versions": [ {
    "flavors": [ {
      "cpu": 4,
      "ram": 32,
      "name": "ess.spec-4u32g",
      "region": "xx-xxx-xx",
      "diskrange": "40,2560",
      "availableAZ": "xx-xxx-xx,xx-xxx-xx",
      "flavor_id": "2d8daf1b-873f-4c2e-a7b9-2f9cbcf2f213"
    }, {
      "cpu": 8,
      "ram": 64,
      "name": "ess.spec-8u64g",
      "region": "xx-xxx-xx",
      "diskrange": "80,5120",
      "availableAZ": "xx-xxx-xx,xx-xxx-xx",
      "flavor_id": "b3d33ec6-d58a-40f0-aa51-4f671ce64b2a"
    }, {
      "cpu": 16,
      "ram": 128,
      "name": "ess.spec-16u128g",
      "region": "xx-xxx-xx",
      "diskrange": "160,10240",
      "availableAZ": "xx-xxx-xx,xx-xxx-xx",
      "flavor_id": "f74419ca-bc91-4558-b4e2-90eeefb37c6e"
    } ],
    "type": "ess",
    "version": "x.x.x"
  } ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
404	The requested resource could not be found. Modify the request before retry.

Error Codes

See [Error Codes](#).

5.12 Querying All Tags

Function

This API is used to query all tags in a specified region.

URI

GET /v1.0/{project_id}/{resource_type}/tags

Table 5-54 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
resource_type	Yes	String	Resource type. Currently, its value can only be css-cluster .

Request Parameters

None

Response Parameters

Status code: 200

Table 5-55 Response body parameters

Parameter	Type	Description
tags	Array of ShowAllTagsTagsResp objects	List of cluster tags

Table 5-56 ShowAllTagsTagsResp

Parameter	Type	Description
key	String	Tag key
values	Array of strings	Tag value

Example Requests

None

Example Responses

Status code: 200

Request succeeded.

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

```
"values" : [ "value1", "value2" ]  
  } ]  
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.
404	The requested resource could not be found. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

5.13 Querying Tags of a Specified Cluster

Function

This API is used to query the tags of a specified cluster.

URI

GET /v1.0/{project_id}/{resource_type}/{cluster_id}/tags

Table 5-57 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster you want to query.
resource_type	Yes	String	Resource type. Currently, its value can only be css-cluster .

Request Parameters

None

Response Parameters

Status code: 200

Table 5-58 Response body parameters

Parameter	Type	Description
tags	Array of ShowTagsTagsResp objects	List of cluster tags

Table 5-59 ShowTagsTagsResp

Parameter	Type	Description
key	String	Tag key
value	String	Tag value

Example Requests

None

Example Responses

Status code: 200

Request succeeded.

```
{
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value3"
  } ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.
404	The requested resource could not be found. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

5.14 Adding Tags to a Cluster

Function

This API is used to add tags to a cluster.

URI

POST /v1.0/{project_id}/{resource_type}/{cluster_id}/tags

Table 5-60 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster that you want to add tags to.
resource_type	Yes	String	Resource type. Currently, its value can only be css-cluster .

Request Parameters

Table 5-61 Request body parameters

Parameter	Mandatory	Type	Description
tag	Yes	Tag object	Tag object you want to add.

Table 5-62 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag name.
value	Yes	String	Tag value.

Response Parameters

None

Example Requests

```
{
  "tag": {
    "key": "K1",
    "value": "V1"
  }
}
```



```
}  
}
```

Example Responses

None

Status Codes

Status Code	Description
204	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.
409	The request could not be completed due to a conflict with the current state of the resource. This status code indicates that the resource that the client attempts to create already exists, or the requested update failed due to a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

5.15 Deleting a Cluster Tag

Function

This API is used to delete a cluster tag.

URI

DELETE /v1.0/{project_id}/{resource_type}/{cluster_id}/tags/{key}

Table 5-63 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster that you want to delete tags from.
resource_type	Yes	String	Resource type. Currently, its value can only be css-cluster .

Parameter	Mandatory	Type	Description
key	Yes	String	Name of the tag you want to delete.

Request Parameters

None

Response Parameters

None

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
204	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.
404	The requested resource could not be found. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

5.16 Adding or Deleting Cluster Tags in Batches

Function

This API is used to add tags to or delete tags from a cluster in batches.

URI

POST /v1.0/{project_id}/{resource_type}/{cluster_id}/tags/action

Table 5-64 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster that you want to add tags to or delete tags from in batches.
resource_type	Yes	String	Resource type. Currently, its value can only be css-cluster .

Request Parameters

Table 5-65 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Action type. This attribute is used to identify the required operation type. • create: Tags are added in batches. • delete: Tags are deleted in batches.
tags	Yes	Array of Tag objects	Tag list.
sysTags	No	Array of SysTags objects	System tag list. • The value of key is fixed to _sys_enterprise_project_id. • The value is UUID or 0.0 indicates the default enterprise project.

Table 5-66 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag name.
value	Yes	String	Tag value.

Table 5-67 SysTags

Parameter	Mandatory	Type	Description
key	Yes	String	Tag name.
value	Yes	String	Tag value.

Response Parameters

None

Example Requests

```
{
  "action" : "create",
  "tags" : [ {
    "key" : "K1",
    "value" : "V1"
  }, {
    "key" : "K2",
    "value" : "V2"
  } ]
}
```

Example Responses

None

Status Codes

Status Code	Description
204	Request succeeded.
400	Invalid request. Do not retry the request before modification.
409	The request could not be completed due to a conflict with the current state of the resource. This status code indicates that the resource that the client attempts to create already exists, or the request fails to be processed because of the update of the conflict request.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

5.17 Changing the Specifications of a Specified Node Type

Function

This API is used to modify cluster specifications. The following node types can be changed:

- **ess**: data node
- **ess-cold**: cold data node
- **ess-client**: client node
- **ess-master**: master node

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/{types}/flavor

Table 5-68 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose specifications you want to change.
types	Yes	String	Type of the cluster node you want to modify. • ess: data node • ess-cold: cold data node • ess-client: client node • ess-master: master node

Request Parameters

Table 5-69 Request body parameters

Parameter	Mandatory	Type	Description
needCheckReplica	No	Boolean	Whether to check replicas. The value can be true or false . The check is enabled by default. • true: Replicas are checked. • false: Replicas are not checked. Master and client nodes are not data nodes, so they do not need to check replicas no matter this parameter is set to true or false .
newFlavorId	Yes	String	ID of the new flavor. This parameter is obtained by calling the [Obtaining the Instance Specifications List] (ListFlavors.xml) API. The API compares the values of the name attribute and obtains the ID of the flavor higher than the current flavor. Only the node specifications of the same Elasticsearch engine version can be changed.

Response Parameters

None

Example Requests

```
{
  "needCheckReplica" : false,
  "newFlavorId" : "35b060a4-f152-48ce-8773-36559ceb81f2"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

5.18 Scaling In a Cluster by Removing a Specific Node

Function

This API is used to scale in a cluster by removing a specified node.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/node/offline

Table 5-70 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster you want to scale in.

Request Parameters

Table 5-71 Request body parameters

Parameter	Mandatory	Type	Description
shrinkNodes	Yes	Array of strings	ID of the node you want to remove from a cluster. Obtain the ID attribute in instances by referring to Querying Cluster Details .

Response Parameters

None

Example Requests

```
{  
  "shrinkNodes" : [ "2077bdf3-b90d-412e-b460-635b9b159c11" ]  
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

5.19 Scaling In Nodes of a Specific Type

Function

This API is used to remove instances of different types and reduce instance storage capacity in a cluster.

URI

POST /v1.0/extend/{project_id}/clusters/{cluster_id}/role/shrink

Table 5-72 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster you want to scale in.

Request Parameters

Table 5-73 Request body parameters

Parameter	Mandatory	Type	Description
shrink	Yes	Array of ShrinkNodeReq objects	Type and quantity of nodes you want to remove from a cluster.

Table 5-74 ShrinkNodeReq

Parameter	Mandatory	Type	Description
reducedNodeNum	Yes	Integer	Number of nodes you want to remove from a cluster. • After the scale-in, there has to be at least one node in each AZ under each node type. • In a cross-AZ cluster, the difference between the numbers of the same type nodes in different AZs cannot exceed 1. • For a cluster without master nodes, the number of removed data nodes (including cold data nodes and other types of nodes) in a scale-in must be fewer than half of the original data node number, and the number of remaining data nodes after a scale-in must be greater than the maximum number of index replicas. • For a cluster with master nodes, the number of removed master nodes in a scale-in must be fewer than half of the original master node number. After scale-in, there has to be an odd number of master nodes, and there has to be at least three of them.
type	Yes	String	Node type. • ess: data node • ess-cold: cold data node • ess-client: client node • ess-master: master node

Response Parameters

None

Example Requests

```
{
  "shrink" : [ {
    "type" : "ess",
    "reducedNodeNum" : 1
  } ]
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

5.20 Downloading a Security Certificate

Function

This API is used to download a security certificate.

URI

GET /v1.0/{project_id}/cer/download

Table 5-75 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

None

Response Parameters

None

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
404	The requested resource could not be found. Modify the request before retry.

Error Codes

See [Error Codes](#).

6 Log Management

6.1 Enabling the Log Function

Function

This API is used to enable the log function.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/logs/open

Table 6-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose log function you want to enable.

Request Parameters

Table 6-2 Request body parameters

Parameter	Mandatory	Type	Description
agency	Yes	String	Agency name. You can create an agency to allow CSS to call other cloud services.
logBasePath	Yes	String	Storage path of backed up logs in the OBS bucket.
logBucket	Yes	String	Name of the OBS bucket for storing logs.

Response Parameters

None

Example Requests

```
{
  "agency" : "css_obs_agency",
  "logBasePath" : "css/log",
  "logBucket" : "000-words"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

6.2 Disabling the Log Function

Function

This API is used to disable the log function.

URI

PUT /v1.0/{project_id}/clusters/{cluster_id}/logs/close

Table 6-3 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose log function you want to disable.

Request Parameters

None

Response Parameters

None

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

6.3 Querying the Job List

Function

This API is used to query the job list in the logs of a cluster.

URI

GET /v1.0/{project_id}/clusters/{cluster_id}/logs/records

Table 6-4 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster you want to query.

Request Parameters

None

Response Parameters

Status code: 200

Table 6-5 Response body parameters

Parameter	Type	Description
clusterLogRecord	Array of clusterLogRecord objects	Cluster log entity object.

Table 6-6 clusterLogRecord

Parameter	Type	Description
id	String	Log task ID, which is generated based on the system UUID.
clusterId	String	Cluster ID.
createAt	String	Creation time. Format: Unix timestamp.
logPath	String	Storage path of backed up logs in the OBS bucket.

Parameter	Type	Description
status	String	Task status. ● RUNNING: The line is being backed up. ● SUCCESS: The backup succeeded. ● FAIL: The backup failed.
finishedAt	Long	End time. If the creation has not been completed, the end time is null . Format: Unix timestamp.
jobTypes	String	Task type. ● Manual: Manual backup. ● Auto: Automatic backup.
failedMsg	String	Error information. If the task did not fail, the value of this parameter is null .
jobId	String	Task ID.

Example Requests

None

Example Responses

Status code: 200

Request succeeded.

```
{
  "clusterLogRecord" : [ {
    "id" : "d455a541-597e-4846-a6be-baad0ea361b1",
    "clusterId" : "4213d908-f5dc-4633-8401-cfd7175fca0c",
    "createAt" : 1656042837000,
    "logPath" : "css-backup-1610678043608/css/log",
    "status" : "RUNNING",
    "finishedAt" : null,
    "jobTypes" : "Manual",
    "failedMsg" : null,
    "jobId" : "2c9080df7c171342017c5e0884f8011c"
  } ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.

Status Code	Description
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

6.4 Querying Basic Log Configurations

Function

This API is used to query basic log configurations.

URI

GET /v1.0/{project_id}/clusters/{cluster_id}/logs/settings

Table 6-7 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster you want to query.

Request Parameters

None

Response Parameters

Status code: 200

Table 6-8 Response body parameters

Parameter	Type	Description
logConfiguration	logConfiguration object	Log configuration entity object.

Table 6-9 logConfiguration

Parameter	Type	Description
id	String	Log backup ID, which is generated using the system UUID.
clusterId	String	Cluster ID.
obsBucket	String	Name of the OBS bucket for storing logs.
agency	String	Agency name. You can create an agency to allow CSS to call other cloud services.
updateAt	Long	Update time. Format: Unix timestamp.
basePath	String	Storage path of backed up logs in the OBS bucket.
autoEnable	Boolean	Whether to enable automatic backup. • true: Automatic backup is enabled. • false: Automatic backup is disabled.
period	String	Start time of automatic log backup. If autoEnable is set to false , the value of this parameter is null . Format: GMT
logSwitch	Boolean	Whether to enable the log function. • true: The log function is enabled. • false: The log function is disabled.

Example Requests

None

Example Responses

Status code: 200

Request succeeded.

```
{
  "logConfiguration" : {
    "id" : "d455a541-597e-4846-a6be-baad0ea361b1",
    "clusterId" : "4213d908-f5dc-4633-8401-cfd7175fca0c",
    "obsBucket" : "css-auto-test",
    "agency" : "css_obs_agency",
    "updateAt" : 1633663681055,
    "basePath" : "css/log",
    "autoEnable" : false,
    "period" : "00:00 GMT+08:00",
    "logSwitch" : true
  }
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

6.5 Modifying Basic Log Configurations

Function

This API is used to modify basic log configurations.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/logs/settings

Table 6-10 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose basic log configurations you want to modify.

Request Parameters

Table 6-11 Request body parameters

Parameter	Mandatory	Type	Description
agency	Yes	String	Agency name. You can create an agency to allow CSS to call other cloud services.
logBasePath	Yes	String	Storage path of backed up logs in the OBS bucket.
logBucket	Yes	String	Name of the OBS bucket for storing logs.

Response Parameters

None

Example Requests

```
{
  "agency" : "css_obs_agency",
  "logBasePath" : "css/log",
  "logBucket" : "000-words"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

6.6 Enabling the Automatic Log Backup Policy

Function

This API is used to enable the automatic log backup policy.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/logs/policy/update

Table 6-12 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose log backup policy you want to enable.

Request Parameters

Table 6-13 Request body parameters

Parameter	Mandatory	Type	Description
period	Yes	String	Backup start time. Format: GMT

Response Parameters

None

Example Requests

```
{
  "period" : "00:00 GMT+08:00"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

6.7 Disabling the Automatic Log Backup Policy

Function

This API is used to disable the automatic log backup policy.

URI

PUT /v1.0/{project_id}/clusters/{cluster_id}/logs/policy/close

Table 6-14 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose automatic log backup policy you want to disable.

Request Parameters

None

Response Parameters

None

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

6.8 Backing Up Logs

Function

This API is used to back up logs.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/logs/collect

Table 6-15 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose logs you want to back up.

Request Parameters

None

Response Parameters

None

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

6.9 Searching for Logs

Function

This API is used to query log information.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/logs/search

Table 6-16 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster you want to query.

Request Parameters

Table 6-17 Request body parameters

Parameter	Mandatory	Type	Description
instanceName	Yes	String	Node name. Obtain the name attribute in instances by referring to Querying Cluster Details .
level	Yes	String	Log level. The levels of logs that can be queried are INFO , ERROR , DEBUG , and WARN .
logType	Yes	String	Log type. The types of logs that can be queried are deprecation , indexingSlow , searchSlow , and instance .

Response Parameters

Status code: 200

Table 6-18 Response body parameters

Parameter	Type	Description
logList	Array of logList objects	Log list.

Table 6-19 logList

Parameter	Type	Description
content	String	Log content.
date	String	Date.

Parameter	Type	Description
level	String	Log level.

Example Requests

```
{
  "instanceName" : "css-4312-ess-esn-1-1",
  "level" : "INFO",
  "logType" : "instance"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "logList" : [ {
    "content" : "xxxxxx",
    "date" : "2021-10-08T03:55:54,718",
    "level" : "INFO"
  } ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

7 Public Network Access

7.1 Enabling Public Network Access

Function

This API is used to enable public network access.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/public/open

Table 7-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose public network access you want to enable.

Request Parameters

Table 7-2 Request body parameters

Parameter	Mandatory	Type	Description
eip	Yes	BindPublicReqEip object	EIP information.

Table 7-3 BindPublicReqEip

Parameter	Mandatory	Type	Description
bandWidth	Yes	BindPublicReqEipBandWidth object	Public network bandwidth.

Table 7-4 BindPublicReqEipBandWidth

Parameter	Mandatory	Type	Description
size	Yes	Integer	Bandwidth range. Unit: Mbit/s

Response Parameters

Status code: 200

Table 7-5 Response body parameters

Parameter	Type	Description
action	String	Operations. The fixed value is bindZone , indicating that the binding is successful.

Example Requests

```
{
  "eip" : {
    "bandWidth" : {
      "size" : 5
    }
  }
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "action" : "bindZone"
}
```

Status Codes

Status Code	Description
200	Request succeeded.

Status Code	Description
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

7.2 Disabling Public Network Access

Function

This API is used to disable public network access to Kibana.

URI

PUT /v1.0/{project_id}/clusters/{cluster_id}/public/close

Table 7-6 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose public network access you want to disable.

Request Parameters

Table 7-7 Request body parameters

Parameter	Mandatory	Type	Description
eip	No	UnBindPublicReqEipReq object	EIP information.

Table 7-8 UnBindPublicReqEipReq

Parameter	Mandatory	Type	Description
bandWidth	No	BindPublicReqEipBandWidth object	Public network bandwidth.

Table 7-9 BindPublicReqEipBandWidth

Parameter	Mandatory	Type	Description
size	Yes	Integer	Bandwidth range. Unit: Mbit/s

Response Parameters

Status code: 200

Table 7-10 Response body parameters

Parameter	Type	Description
action	String	Operations. The fixed value is unbindZone , indicating that the unbinding is successful.

Example Requests

```
{
  "eip" : {
    "bandWidth" : {
      "size" : 5
    }
  }
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "action" : "unbindZone"
}
```

Status Codes

Status Code	Description
200	Request succeeded.

Status Code	Description
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

7.3 Modifying Public Network Access Bandwidth

Function

This API is used to modify the public network access bandwidth.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/public/bandwidth

Table 7-11 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose public network access bandwidth you want to modify.

Request Parameters

Table 7-12 Request body parameters

Parameter	Mandatory	Type	Description
bandWidth	Yes	BindPublicReqEipBandWidth object	Public network bandwidth.

Table 7-13 BindPublicReqEipBandWidth

Parameter	Mandatory	Type	Description
size	Yes	Integer	Bandwidth range. Unit: Mbit/s

Response Parameters

None

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

7.4 Enabling the Public Network Access Control Whitelist

Function

This API is used to enable the public network access control whitelist.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/public/whitelist/update

Table 7-14 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose public network access control whitelist you want to enable.

Request Parameters

Table 7-15 Request body parameters

Parameter	Mandatory	Type	Description
whiteList	Yes	String	IP address of the user for whom the whitelist is enabled.

Response Parameters

None

Example Requests

```
{
  "whiteList" : "192.168.0.xx"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.

Status Code	Description
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

7.5 Disabling the Public Network Access Control Whitelist

Function

This API is used to disable the public network access control whitelist.

URI

PUT /v1.0/{project_id}/clusters/{cluster_id}/public/whitelist/close

Table 7-16 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose public network access control whitelist you want to disable.

Request Parameters

None

Response Parameters

None

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

8 Snapshot Management

8.1 (Not Recommended) Automatically Setting Basic Configurations of a Cluster Snapshot

Function

This API is used to automatically set basic configurations for a cluster snapshot, including configuring OBS buckets and IAM agency.

- **OBS Bucket:** Enter the location of the OBS bucket used for storing snapshots.
- **Backup Path:** Enter the storage path of the snapshot in the OBS bucket.
- **IAM Agency:** Authorize you to use OBS in IAM so that snapshots must be stored in OBS.

This API automatically creates an OBS bucket and an agency for the snapshot. If there are multiple clusters, an OBS bucket will be created for each cluster via this API. As a result, the OBS quota may be insufficient, and many OBS buckets are difficult to maintain. You are advised to perform the operations in [Modifying Basic Configurations of a Cluster Snapshot](#).

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/auto_setting

Table 8-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster where snapshots you want to back up.

Request Parameters

None

Response Parameters

None

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
406	The server could not fulfill the request according to the content characteristics of the request.

Error Codes

See [Error Codes](#).

8.2 Modifying Basic Configurations of a Cluster Snapshot

Function

This API is used to modify the basic configurations for a cluster snapshot, including OBS buckets and IAM agency.

You can also use this API to enable the snapshot function.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/setting

Table 8-2 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Parameter	Mandatory	Type	Description
cluster_id	Yes	String	ID of the cluster whose snapshot basic configuration you want to modify.

Request Parameters

Table 8-3 Request body parameters

Parameter	Mandatory	Type	Description
bucket	Yes	String	Name of the OBS bucket used for backup.
agency	Yes	String	IAM agency used to access OBS.
basePath	Yes	String	Storage path of the snapshot in the OBS bucket.

Response Parameters

None

Example Requests

```
{
  "bucket": "test-bucket",
  "agency": "usearch",
  "basePath": "css_repository/Es-name"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
406	The server could not fulfill the request according to the content characteristics of the request.
412	The server did not meet one of the preconditions contained in the request.
504	A gateway timeout error occurred.

Error Codes

See [Error Codes](#).

8.3 Manually Creating a Snapshot

Function

This API is used to manually create a snapshot.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot

Table 8-4 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster for which you want to create a snapshot.

Request Parameters

Table 8-5 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Snapshot name. Enter 4 to 64 characters. Lowercase letters, digits, hyphens (-), and underscores (_) are allowed. The value must start with a letter.
description	No	String	Snapshot description. The value can contain up to 256 characters and cannot contain the following characters: ! <>=&'"

Parameter	Mandatory	Type	Description
indices	No	String	Name of an index to be backed up. Multiple indexes are separated by commas (,). By default, all indexes are backed up. You can use \ * to match multiple indexes. For example, if you specify 2018-06*, then the data of the indexes with the prefix 2018-06 will be backed up. The value can contain 0 to 1,024 characters. Uppercase letters, spaces, and the following special characters are not allowed: "< >/?"

Response Parameters

Status code: 201

Table 8-6 Response body parameters

Parameter	Type	Description
backup	backupRsp object	Snapshot information.

Table 8-7 backupRsp

Parameter	Type	Description
id	String	Snapshot ID
name	String	Snapshot name

Example Requests

```
{
  "name" : "snapshot_001",
  "indices" : "myindex1myindex2"
}
```

Example Responses

Status code: 201

Resource created.

```
{
  "backup" : {
    "id" : "9dc4f5c9-33c0-45c7-9378-ae35ae350682",
    "name" : "snapshot_101"
  }
}
```

Status Codes

Status Code	Description
201	Resource created.
400	Invalid request. Modify the request before retry.
403	Request rejected.The server has received and understood the request, but refused to respond to it. The client should modify the request before retry.
406	The server could not fulfill the request according to the content characteristics of the request.
500	The server has received the request but could not understand it.
501	The server does not support the function required to fulfill the request.

Error Codes

See [Error Codes](#).

8.4 Restoring a Snapshot

Function

This API is used to manually restore a snapshot.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/{snapshot_id}/restore

Table 8-8 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose snapshot you want to restore.
snapshot_id	Yes	String	Snapshot ID.

Request Parameters

Table 8-9 Request body parameters

Parameter	Mandatory	Type	Description
targetCluster	Yes	String	ID of the cluster that a snapshot is to be restored to.
indices	No	String	Name of an index to be restored. Multiple indexes are separated by commas (,). By default, all indexes are restored. You can use \ * to match multiple indexes. For example, if you specify 2018-06*, then the data of the indexes with the prefix 2018-06 will be restored. The value can contain 0 to 1,024 characters. Uppercase letters, spaces, and the following special characters are not allowed: "\< >/?
renamePattern	No	String	Rule for defining the indexes to be restored. The value contains a maximum of 1,024 characters. Indexes that match this rule will be restored. The filtering condition must be a regular expression. The value can contain 0 to 1,024 characters. Uppercase letters, spaces, and the following special characters are not allowed: "\< >/?

Parameter	Mandatory	Type	Description
renameReplacement	No	String	Rule for renaming an index. The value can contain 0 to 1,024 characters. Uppercase letters, spaces, and the following special characters are not allowed: "\< >/?". For example, restored_index_\$1 indicates adding the restored_ prefix to the names of all the restored indexes. The renameReplacement parameter takes effect only if renamePattern has been enabled.

Response Parameters

None

Example Requests

```
{
  "targetCluster" : "ea244205-d641-45d9-9dcb-ab2236bcd07e",
  "indices" : "myindex1,myindex2",
  "renamePattern" : "index",
  "renameReplacement" : "restored_index_$1"
}
```

Example Responses

None

Status Codes

Status Code	Description
201	Resource created.
400	Invalid request. Modify the request before retry.
403	Request rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

8.5 Deleting a Snapshot

Function

This API is used to delete a snapshot.

URI

DELETE /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/{snapshot_id}

Table 8-10 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose snapshot you want to delete.
snapshot_id	Yes	String	ID of the snapshot you want to delete.

Request Parameters

None

Response Parameters

None

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.

Status Code	Description
403	Request rejected.The server has received and understood the request, but refused to respond to it. The client should modify the request before retry.

Error Codes

See [Error Codes](#).

8.6 Configuring the Automatic Snapshot Creation Policy

Function

This API is used to configure automatic snapshot creation. By default, a snapshot is created every day.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/policy

Table 8-11 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster for which you want to create snapshots automatically.

Request Parameters

Table 8-12 Request body parameters

Parameter	Mandatory	Type	Description
prefix	Yes	String	Prefix of a snapshot that is automatically created, which is manually entered. Enter up to 32 characters and start with a lowercase letter. Lowercase letters, digits, hyphens (-), and underscores (_) are allowed.

Parameter	Mandatory	Type	Description
period	Yes	String	Time when a snapshot is created every day. Snapshots can only be created on the hour. The time format is the time followed by the time zone, specifically, HH:mm z . In the format, HH:mm refers to the hour time and z refers to the time zone. For example, 00:00 GMT+08:00 and 01:00 GMT+08:00 .
keepday	Yes	Integer	Snapshot retention period. The value ranges from 1 to 90. Expired snapshots will be automatically deleted on the half hour.
enable	Yes	String	Whether to enable the automatic snapshot creation policy. • true: The automatic snapshot creation policy is enabled. • false: The automatic snapshot creation policy is disabled.
deleteAuto	No	String	Whether to clear all the automatically created snapshots when the automatic snapshot creation policy is disabled. The default value is false , indicating that automatically created snapshots will not be deleted. If this parameter is set to true , all created snapshots will be deleted when the automatic snapshot creation policy is disabled.

Response Parameters

None

Example Requests

```
{  
  "prefix" : "snapshot",  
  "period" : "16:00 GMT+08:00",  
}
```

```
"keepday" : 7,  
"enable" : "true",  
"deleteAuto" : "false"  
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
406	The server could not fulfill the request according to the content characteristics of the request.

Error Codes

See [Error Codes](#).

8.7 Querying the Automatic Snapshot Creation Policy

Function

This API is used to query the automatic snapshot creation policy.

URI

GET /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/policy

Table 8-13 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster where snapshots are to be automatically created.

Request Parameters

None

Response Parameters

Status code: 200

Table 8-14 Response body parameters

Parameter	Type	Description
keepday	Integer	Number of days for retaining a snapshot.
period	String	Time when a snapshot is created every day.
prefix	String	Snapshot name prefix, which needs to be manually entered.
bucket	String	Name of the OBS bucket where snapshots are stored.
basePath	String	Storage path of the snapshot in the OBS bucket.
agency	String	Agency used to access OBS buckets.
enable	String	Whether to enable the automatic snapshot creation policy. ● true: The automatic snapshot creation policy is enabled. ● false: The automatic snapshot creation policy is disabled.

Example Requests

None

Example Responses

Status code: 200

Request succeeded.

```
{
  "keepday": 2,
  "period": "16:00 GMT+08:00",
  "prefix": "snapshot",
  "bucket": "es-backup",
  "basePath": "css_repository/tests",
  "agency": "usearch",
  "enable": "true"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
406	The server could not fulfill the request according to the content characteristics of the request.

Error Codes

See [Error Codes](#).

8.8 Querying a Snapshot List

Function

This API is used to query all the snapshots of a cluster.

URI

GET /v1.0/{project_id}/clusters/{cluster_id}/index_snapshots

Table 8-15 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose snapshots you want to query.

Request Parameters

None

Response Parameters

Status code: 200

Table 8-16 Response body parameters

Parameter	Type	Description
backups	Array of ListSnapshotBackupsResp objects	Snapshot list

Table 8-17 ListSnapshotBackupsResp

Parameter	Type	Description
created	String	Snapshot creation time

Parameter	Type	Description
datastore	ListSnapshotBackupsDatastoreResp object	Search engine
description	String	Snapshot description
id	String	Snapshot ID
clusterId	String	Cluster ID
clusterName	String	Cluster name
name	String	Snapshot name
status	String	Snapshot status
updated	String	Time when the snapshot was updated. The format is ISO8601: CCYY-MM-DDThh:mm:ss .
backupType	String	Snapshot creation type. The options are as follows: ● 0: Automatic creation. ● 1: Manual creation.
backupMethod	String	Snapshot creation mode
backupExpectedStartTime	String	Snapshot start time
backupKeepDay	Integer	Snapshot retention period
backupPeriod	String	Time when a snapshot is created every day
indices	String	Index you want to back up
totalShards	Integer	Total number of shards of the index you want to back up
failedShards	Integer	Number of shards that fail to be backed up
version	String	Snapshot version
restoreStatus	String	Snapshot restoration status
startTime	Long	Snapshot start timestamp
endTime	Long	Snapshot end timestamp
bucketName	String	Name of the bucket that stores snapshot data

Table 8-18 ListSnapshotBackupsDatastoreResp

Parameter	Type	Description
type	String	Engine type. Currently, only Elasticsearch is supported.
version	String	Elasticsearch engine version. For details, see CSS Supported Cluster Versions .

Example Requests

None

Example Responses

Status code: 200

Request succeeded.

```
{
  "backups": [ {
    "created": "2018-03-07T07:34:47",
    "datastore": {
      "type": "elasticsearch",
      "version": "x.x.x"
    },
    "description": "",
    "id": "e29d99c1-3d19-4ea4-ae8d-f252df76cbe9",
    "clusterId": "37cb1075-c38e-4cd8-81df-442d52df3786",
    "clusterName": "Es-xfx",
    "name": "snapshot-002",
    "status": "COMPLETED",
    "updated": "2018-03-07T07:40:12",
    "backupType": "1",
    "backupMethod": "manual",
    "backupExpectedStartTime": null,
    "backupKeepDay": null,
    "backupPeriod": null,
    "indices": ".kibanaweb2",
    "totalShards": 6,
    "failedShards": 0,
    "version": "x.x.x",
    "restoreStatus": "success",
    "startTime": 1520408087099,
    "endTime": 1520408412219,
    "bucketName": "obs-b8ed"
  }, {
    "created": "2018-03-06T15:42:37",
    "datastore": {
      "type": "elasticsearch",
      "version": "x.x.x"
    },
    "description": "",
    "id": "29a2254e-947f-4463-b65a-5f0b17515fae",
    "clusterId": "37cb1075-c38e-4cd8-81df-442d52df3786",
    "clusterName": "Es-xfx",
    "name": "snapshot-001",
    "status": "COMPLETED",
    "updated": "2018-03-06T15:48:04",
    "backupType": "1",
    "backupMethod": "manual",
    "backupExpectedStartTime": null,
  }
]
```

```
"backupKeepDay" : null,
"backupPeriod" : null,
"indices" : ".kibana",
"totalShards" : 1,
"failedShards" : 0,
"version" : "x.x.x",
"restoreStatus" : "none",
"startTime" : 1520350957275,
"endTime" : 1520351284357,
"bucketName" : "obs-b8ed"
} ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
406	The server could not fulfill the request according to the content characteristics of the request.

Error Codes

See [Error Codes](#).

8.9 Disabling the Snapshot Function

Function

This API is used to disable the snapshot function.

URI

DELETE /v1.0/{project_id}/clusters/{cluster_id}/index_snapshots

Table 8-19 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose snapshot function you want to disable.

Request Parameters

None

Response Parameters

None

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
406	The server could not fulfill the request according to the content characteristics of the request.

Error Codes

See [Error Codes](#).

9 Parameter Configuration

9.1 Modifying Cluster Parameters

Function

This API is used to modify the parameter settings of a cluster.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/ymls/update

Table 9-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster whose parameter settings you want to be modify.

Request Parameters

Table 9-2 Request body parameters

Parameter	Mandatory	Type	Description
edit	Yes	UpdateYmlsReqEdit object	Configuration file information.

Table 9-3 UpdateYmlsReqEdit

Parameter	Mandatory	Type	Description
modify	Yes	UpdateYmlsReqEditModify object	Operations on the configuration file. • modify: Modify parameter settings. • delete: Delete parameter settings. • reset: Reset parameter settings.

Table 9-4 UpdateYmlsReqEditModify

Parameter	Mandatory	Type	Description
elasticsearch.yml	Yes	Object	Parameter configuration list. The value is the JSON data you want to modify.

Response Parameters

Status code: 200

Table 9-5 Response body parameters

Parameter	Type	Description
acknowledged	Boolean	Whether the modification is successful. • true: The modification succeeded. • false: The modification failed.
errorMessage	String	Error message. If acknowledged was set to true , null is returned for this field.
httpErrorResponse	String	HTTP error information. The default value is null .

Example Requests

```
{
  "edit" : {
    "modify" : {
      "elasticsearch.yml" : {
        "thread_pool.force_merge.size" : 1
      }
    }
  }
}
```


Example Responses

Status code: 200

Request succeeded.

```
{
  "acknowledged" : true,
  "externalMessage" : null,
  "httpErrorResponse" : null
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

9.2 Obtaining the Task List of Parameter Configurations

Function

This API is used to obtain the parameter configuration task list of a cluster.

URI

GET /v1.0/{project_id}/clusters/{cluster_id}/ymls/joblists

Table 9-6 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Parameter	Mandatory	Type	Description
cluster_id	Yes	String	ID of the cluster you want to query.

Request Parameters

None

Response Parameters

Status code: 200

Table 9-7 Response body parameters

Parameter	Type	Description
configList	Array of configListRsp objects	List of historical configuration changes

Table 9-8 configListRsp

Parameter	Type	Description
id	String	Operation ID.
clusterId	String	Cluster ID.
createAt	String	Creation time. Format: Unix timestamp.
status	String	Task execution status. • true: The operation is successful. • false: The execution failed.
finishedAt	String	End time. If the creation has not been completed, the end time is null . Format: Unix timestamp.
modifyDeleteReset	String	History of parameter setting modifications.
failedMsg	String	Returned error message. If the status is success , the value of this parameter is null .

Example Requests

None

Example Responses

Status code: 200

Request succeeded.

```
{
  "configList" : [ {
    "id" : "7ed7258a-60a8-46fe-8814-52819d491b80",
    "clusterId" : "4213d908-f5dc-4633-8401-cfd7175fca0c",
    "createAt" : 1633658735000,
    "status" : "success",
    "finishedAt" : null,
    "modifyDeleteReset" : "{\\"modify\\":{\\"elasticsearch.yml\\":{\\"thread_pool.force_merge.size\\":\\"1\\"}}}",
    "failedMsg" : ""
  } ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

9.3 Obtaining the Parameter Configuration List

Function

This API is used to obtain the parameter configuration list of the current cluster.

URI

GET /v1.0/{project_id}/clusters/{cluster_id}/ymls/template

Table 9-9 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
cluster_id	Yes	String	ID of the cluster you want to query.

Request Parameters

None

Response Parameters

Status code: 200

Table 9-10 Response body parameters

Parameter	Type	Description
configurations	Object	Cluster parameter configuration list. The key value in the object is subject to the actual situation. The value has the following attributes: • id: parameter ID. • key: parameter name. • value: parameter value. • defaultValue: parameter default value. • regex: parameter constraint. • desc: parameter description. • type: parameter type description. • moduleDesc: parameter function description. • modifyEnable: whether a parameter can be modified. true: The value can be changed. false: The value cannot be changed. • enableValue: parameter value that can be changed. • fileName: name of the file where parameters exist. The default value is elasticsearch.yml. • version: version information. • descENG: parameter description. • moduleDescENG: parameter function description.

Example Requests

None

Example Responses

Status code: 200

Request succeeded.

```
{
  "configurations" : {
    "http.cors.allow-credentials" : {
      "id" : "b462d13c-294b-4e0f-91d3-58be2ad02b99",
      "key" : "http.cors.allow-credentials",
      "value" : "false",
      "defaultValue" : "false",
      "regex" : "^(true|false)$",
      "desc" : "Indicates whether to return Access-Control-Allow-Credentials in the header during cross-domain access. The value is of the Boolean type and can be true or false.",
      "type" : "Boolean",
      "moduleDesc" : "Cross-domain access",
      "modifyEnable" : "true",
      "enableValue" : "true,false",
      "fileName" : "elasticsearch.yml",
      "version" : null,
      "descENG" : "Whether to return the Access-Control-Allow-Credentials of the header during cross-domain access. The value is a Boolean value and the options are true and false.",
      "moduleDescENG" : "Cross-domain Access"
    }
  }
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
409	The request could not be completed due to a conflict with the current state of the resource. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See [Error Codes](#).

10 Permissions Policies and Supported Actions

This section describes fine-grained permissions management for your CSS. If your account does not need individual IAM users, then you may skip over this chapter.

By default, new IAM users do not have any permissions assigned. You need to add a user to one or more groups, and assign permissions policies 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.

You can grant users permissions by using roles and policies. Roles are a type of coarse-grained authorization mechanism that defines permissions related to user responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

NOTE

Policy-based authorization is useful if you want to allow or deny the access to an API.

An account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API successfully.

Supported Actions

CSS provides system-defined policies that can be directly used in IAM. CSS administrators can create custom policies and use them to supplement system-defined policies, implementing more refined access control. Actions supported by policies are specific to APIs. The following are common concepts related to policies:

- **Permissions:** Allow or deny operations on specified resources under specific conditions.
- **APIs:** REST APIs that can be called by a custom policy.
- **Actions:** added to a custom policy to control permissions for specific operations.

- Related actions: actions on which a specific action depends to take effect. When assigning permissions for the action to a user, you also need to assign permissions for the dependent actions.
- IAM or enterprise projects: type of projects for which an action will take effect. Policies that contain actions supporting both IAM and enterprise projects can be assigned to user groups and take effect in both IAM and Enterprise Management. Policies that only contain actions supporting IAM projects can be assigned to user groups and only take effect for IAM.

 NOTE

The check mark (√) indicates that an action takes effect. The cross mark (x) indicates that an action does not take effect.

Table 10-1 API actions

Permission	API	Action	IAM Project (Project)	Enterprise Project (Enterprise Project)
Creating a cluster	POST /v1.0/{project_id}/clusters	css:cluster:create	√	√
Querying a cluster list	GET /v1.0/{project_id}/clusters	css:cluster:list	√	√
Querying cluster details	GET /v1.0/{project_id}/clusters/{cluster_id}	css:cluster:get	√	√
Deleting a cluster	DELETE /v1.0/{project_id}/clusters/{cluster_id}	css:cluster:delete	√	√
Restarting a cluster	POST /v1.0/{project_id}/clusters/{cluster_id}/restart	css:cluster:restart	√	√
Scaling out a cluster	POST /v1.0/{project_id}/clusters/{cluster_id}/extend	css:cluster:scaleOut	√	√
Adding instances and expanding instance storage capacity	POST /v1.0/{project_id}/clusters/{cluster_id}/role_extend	css:cluster:expand	√	√

Permission	API	Action	IAM Project (Project)	Enterprise Project (Enterprise Project)
Querying tags of a specified cluster	GET /v1.0/{project_id}/css-cluster/{cluster_id}/tags	css:tag:get	√	√
Loading a custom word dictionary	POST /v1.0/{project_id}/clusters/{cluster_id}/thesaurus	css:IKThesaurus:load	√	√
Querying the status of a custom word dictionary	GET /v1.0/{project_id}/clusters/{cluster_id}/thesaurus	css:IKThesaurus:get	√	√
Deleting a custom word dictionary	DELETE /v1.0/{project_id}/clusters/{cluster_id}/thesaurus	css:IKThesaurus:delete	√	√
Automatically setting basic configurations of a cluster snapshot	POST /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/auto_setting	css:snapshot:enableAutomaticSnapshot	√	√
Modifying basic configurations of a cluster snapshot	POST /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/setting	css:snapshot:setSnapshotConfiguration	√	√
Setting the automatic snapshot creation policy	POST /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/policy	css:snapshot:setSnapshotPolicy	√	√

Permission	API	Action	IAM Project (Project)	Enterprise Project (Enterprise Project)
Querying the automatic snapshot creation policy	GET /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/policy	css:snapshot:getSnapshotPolicy	√	√
Manually creating a snapshot	POST /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot	css:snapshot:create	√	√
Querying the snapshot list	GET /v1.0/{project_id}/clusters/{cluster_id}/index_snapshots	css:snapshot:list	√	√
Restoring a snapshot	POST /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/{snapshot_id}/restore	css:snapshot:restore	√	√
Deleting a snapshot	DELETE /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/{snapshot_id}	css:snapshot:delete	√	√
Disabling the snapshot function	DELETE /v1.0/{project_id}/clusters/{cluster_id}/index_snapshots	css:snapshot:disableSnapshotFunction	√	√

11 Common Parameters

11.1 Obtaining a Project ID and Name

A project ID or project name is required in some API requests. You need to obtain the project ID and name before calling an API.

Obtaining a Project ID and Name from the Console

1. Log in to the console.
2. In the upper right corner of the page, click the username and choose **My Credentials** from the drop-down list. The **API Credentials** page is displayed.
3. In the project list, view the **Project ID** and **Project Name**.

Obtaining a Project ID by Calling an API

The API for obtaining a project ID is **GET <https://{iam-endpoint}/v3/projects>**. *{iam-endpoint}* indicates the endpoint of IAM, which can be obtained from [Endpoints](#). For details about how to obtain the IAM endpoint, see [Authentication](#).

The following is an example response. For example, if CSS is deployed in region **xxx**, the value of **name** in the response body is **xxx**. The value of **id** in **projects** is the project ID.

```
{
  "projects": [
    {
      "domain_id": "65382450e8f64ac0870cd180d14exxxx",
      "is_domain": false,
      "parent_id": "65382450e8f64ac0870cd180d14exxxx",
      "name": "xxx",    //Project name, the name of the deployment zone.
      "description": "",
      "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22cd05f897dxxxx"
      },
      "id": "a4a5d4098fb4474fa22cd05f897dxxxx",    //Project ID
      "enabled": true
    }
  ],
  "links": {
    "next": null,
  }
}
```

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

11.2 Status Code

Table 11-1 describes the status code.

Table 11-1 Status code description

Status Code	Code	Description
100	Continue	The client continues sending the request. This interim response is used to inform the client that the initial part of the request has been received and has not yet been rejected by the server.
101	Switching Protocols	Switching protocols. The target protocol must be later than the source protocol. For example, the current HTTPS protocol is switched to a later version.
200	OK	The request is processed successfully.
201	Created	The request for creating a resource has been fulfilled.
202	Accepted	The request has been accepted, but the processing has not been completed.
203	Non-Authoritative Information	The server successfully processed the request, but is returning information that may be from another source.
204	NoContent	The server has successfully processed the request, but has not returned any content. The status code is returned in response to an HTTPS OPTIONS request.
205	Reset Content	The server has fulfilled the request, but the requester is required to reset the content.
206	Partial Content	The server has processed certain GET requests.
300	Multiple Choices	There are multiple options for the location of the requested resource. The response contains a list of resource characteristics and addresses from which the user or user agent (such as a browser) can choose the most appropriate one.

Status Code	Code	Description
301	Moved Permanently	The requested resource has been assigned a new permanent URI, and the new URI is contained in the response.
302	Found	The requested resource resides temporarily under a different URI.
303	See Other	Retrieve a location. The response to the request can be found under a different URI and should be retrieved using a GET or POST method.
304	Not Modified	The requested resource has not been modified. When the server returns this status code, it does not return any resources.
305	Use Proxy	The requested resource must be accessed through a proxy.
306	Unused	The HTTPS status code is no longer used.
400	BadRequest	Invalid request. The client should not repeat the request without modifications.
401	Unauthorized	The status code is returned after the client provides the authentication information, indicating that the authentication information is incorrect or invalid.
402	Payment Required	This status code is reserved for future use.
403	Forbidden	The server understood the request, but is refusing to fulfill it. The client should not repeat the request without modifications.
404	NotFound	The requested resource cannot be found. The client should not repeat the request without modifications.
405	MethodNotAllowed	The method specified in the request is not supported for the requested resource. The client should not repeat the request without modifications.
406	Not Acceptable	The server cannot fulfill the request according to the content characteristics of the request.

Status Code	Code	Description
407	Proxy Authentication Required	This status code is similar to 401, but indicates that the client must first authenticate itself with the proxy.
408	Request Time-out	The request timed out. The client may repeat the request without modifications at any later time.
409	Conflict	The request could not be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exists, or the request fails to be processed because of the update of the conflict request.
410	Gone	The requested resource is no longer available. The status code indicates that the requested resource has been deleted.
411	Length Required	The server refuses to process the request without a defined Content-Length.
412	Precondition Failed	The server does not meet one of the preconditions that the requester puts on the request.
413	Request Entity Too Large	The request is larger than that a server is able to process. The server may close the connection to prevent the client from continuing the request. If the server cannot process the request temporarily, the response will contain a Retry-After header field.
414	Request-URI Too Large	The URI provided was too long for the server to process.
415	Unsupported Media Type	The server is unable to process the media format in the request.
416	Requested range not satisfiable	The requested range is invalid.
417	Expectation Failed	The server fails to meet the requirements of the Expect request-header field.
422	UnprocessableEntity	The request is well-formed but is unable to be processed due to semantic errors.

Status Code	Code	Description
429	TooManyRequests	The client has sent more requests than its rate limit is 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, it is advisable for the client to re-initiate requests after the time specified in the Retry-After header of the response expires.
500	InternalServerError	The server is able to receive the request but it could not understand the request.
501	Not Implemented	The server does not support the requested function.
502	Bad Gateway	The server is acting as a gateway or proxy and receives an invalid request from a remote server.
503	ServiceUnavailable	The requested service is invalid. The client should not repeat the request without modifications.
504	ServerTimeout	The request cannot be fulfilled within a given time. This status code is returned to the client only when the Timeout parameter is specified in the request.
505	HTTP Version not supported	The server does not support the HTTPS protocol version used in the request.

11.3 Error Code

No data is returned if an API fails to be invoked. You can locate the cause of an error according to the error code of each API. When the API calling fails, HTTPS status code 4xx or 5xx is returned. The returned message body contains the specific error code and error information. If you fail to locate the cause of the error, contact technical support and provide the error code for troubleshooting.

Status Code	Error Code	Error Message	Measure
400	CSS.0001	The parameter is incorrect.	Check the parameter settings according to the returned information.
500	CSS.0005	Server error.	Contact technical support.
400	CSS.0006	The request body is empty. Enter a request parameter.	Enter the request parameters.

Status Code	Error Code	Error Message	Measure
202	CSS.0011	This operation cannot be performed because another operation is being performed on the instance or the instance is faulty. Please try again later.	Try again later.
403	CSS.0015	Resource not found or permission denied.	Change the resource ID or check the access permission.
404	CSS.0022	The instance does not exist or has been deleted.	Change the instance ID.
403	CSS.0032	The current user has no operation permissions.	Check the permissions.
400	CSS.0045	The token is incorrect.	Obtain the token again.
400	CSS.1112	The number of instances has reached the quota.	Delete some clusters or increase the quota.
400	CSS.3011	Invalid retention duration of the backup.	Change the allowed retention duration.
404	CSS.3027	The cluster does not exist.	Check whether the cluster ID is correct.
400	CSS.5007	The selected flavor does not exist.	Check whether the specifications are correct.
400	CSS.5009	The hard disk size is beyond the valid range.	Change the disk size.
400	CSS.5014	Invalid VPC ID.	Check whether the VPC ID is correct.
400	CSS.5015	Invalid subnet ID.	Check whether the subnet ID is correct.
400	CSS.5021	The VPC does not exist or does not belong to the user.	Check whether the VPC is correct.
400	CSS.5023	The security group does not exist or does not belong to the VPC.	Check whether the security group is correct.
400	CSS.5157	The CIDR does not exist or is invalid.	Check whether there are subnets in the VPC.
400	CSS.5036	The engine does not exist.	Check whether the datastore parameter setting is correct.

Status Code	Error Code	Error Message	Measure
400	CSS.5047	The number of instances is beyond the valid range.	Check whether the number of instances is within the range.
409	CSS.5050	The cluster name already exists.	Change the cluster name.
400	CSS.5052	Invalid value of the AZ.	Change the AZ.
400	CSS.5055	Invalid flavor.	Modify the specifications.
400	CSS.5061	The hard disk type is invalid.	Change the hard disk type.
400	CSS.5071	The disk type does not match that in the XML configuration file.	Change the hard disk type.
400	CSS.5072	The security group ID is invalid.	Change the security group ID.
400	CSS.5074	The subnet does not belong to the VPC.	Change the subnet ID.
400	CSS.5077	Invalid cluster name.	Change the cluster name.
400	CSS.5078	The hard disk size is beyond the valid range.	Change the disk size.
400	CSS.5092	Invalid hard disk information.	Modify the hard disk information.
400	CSS.5093	Invalid specification information.	Modify the specification information.
412	CSS.5130	The agency name is invalid.	Change the agency name.
500	CSS.9999	Request processing failed.	Contact technical support.
NA	CSS.6000	Clusters fail to be created.	Try again later or contact technical support.
NA	CSS.6001	Cluster scale-out fails.	Try again later or contact technical support.
NA	CSS.6002	Failed to bind the elastic IP address to the cluster.	Try again later or contact technical support.
N/A	CSS.6003	Failed to restore the cluster.	Try again later or contact technical support.

Status Code	Error Code	Error Message	Measure
N/A	CSS. 6004	Failed to create a node.	Try again later or contact technical support.
N/A	CSS. 6005	The initialization fails.	Perform the initialization again or contact technical support.
NA	CSS. 6006	Failed to modify the specifications.	Perform the initialization again or contact technical support.
NA	CSS. 6007	Failed to reset the password.	Reset the password.
N/A	CSS. 6008	Failed to update the YML file.	Update the .yml file again or contact technical support.
N/A	CSS. 6009	Failed to create the snapshot.	Try again later or contact technical support.
N/A	CSS. 6010	Failed to restore the snapshot because the OBS object does not exist or has been deleted.	Check whether the configured OBS object exists.
N/A	CSS. 6011	Failed to create the snapshot because the OBS bucket you select does not exist or has been deleted.	Check whether the OBS bucket exists.
N/A	CSS. 6012	Failed to restore the snapshot because the OBS object does not exist or has been deleted.	Check whether the OBS bucket exists.
N/A	CSS. 6013	The parameters cannot be modified because other operations are being performed on the cluster.	Modify parameters when the cluster is available.
N/A	CSS. 6014	Some parameters cannot be modified.	Check whether the submitted parameter modification request contains a parameter value that cannot be modified. If yes, delete the parameter and try again.
N/A	CSS. 6015	The parameter value is not in YAML format.	Modify the parameter format and try again.

12 Change History

Released On	What's New
2023-06-20	Added: • Renaming a Cluster • Changing the Password of a Cluster • Scaling Out a Cluster • Scaling In Nodes of a Specific Type • Downloading a Security Certificate • Log Management • Public Network Access • Parameter Configuration
2022-11-15	Deleted the Word Dictionary Management APIs.
2022-06-30	• Added cluster version 7.9.3. • Brought the Poisson Analyzer offline. • Added: – Adding Tags to a Cluster – Deleting a Cluster Tag – Adding or Deleting Cluster Tags in Batches • Updated: – Calling APIs – Getting Started – Authentication – Obtaining a Project ID and Name • Modified: Scaling Out a Cluster
2020-11-07	This issue is the first official release.