Cloud Search Service

API Reference

Issue 01

Date 2025-09-10

HUAWEI CLOUD COMPUTING TECHNOLOGIES CO., LTD.

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1 Before You Start

Overview

Welcome to *Cloud Search Service (CSS) API Reference*. CSS is a fully managed, distributed search service that enables you to perform quick, real-time search on both structured and unstructured data. It is fully compatible with open-source Elasticsearch and provides you search, statistical analysis, and reporting capabilities.

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

If you plan to access CSS through an API, ensure that you are familiar with CSS concepts. For details, see **What Is Cloud Search Service**.

Supported versions

CSS supports Elasticsearch 7.6.2 and 7.10.2; OpenSearch 1.3.6, 2.17.1, and 2.19.0; and Logstash 7.10.0.

Restrictions and Limitations

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

Regions and 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**.

Concepts

- Account

  An account is created upon successful registration with the cloud system. The account has full access permissions for all of its cloud services and resources.

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It can be used to reset user passwords and grant user permissions. The account is a payment entity, which should not be used directly to perform routine management. For security purposes, create Identity and Access Management (IAM) users and grant them permissions for routine management.

- User

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

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

- Region

  A region is a geographic area in which cloud resources are deployed. Availability zones (AZs) in the same region can communicate with each other over an intranet, while AZs in different regions are isolated from each other. By creating cloud resources in different regions, you can design applications to better meet customer requirements and comply with local laws and regulations.

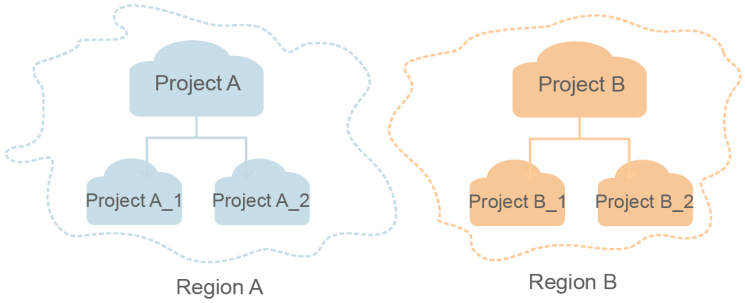
- AZ

  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

  A project corresponds to a region. Default projects are defined to group and physically isolate resources (including compute, storage, and network resources) between different regions. Users can be granted permissions in a default project to access all resources under their accounts in the region associated with the project. If you need more refined access control, create 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 Isolation by project



- 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.

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- 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.
- Enterprise Project

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

  For details about how to obtain enterprise project IDs and features, see **Enterprise Management Service User Guide**.

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2 API Overview

CSS APIs comply with RESTful API design specifications. You can use the functions described in **Table 2-2** by calling the corresponding APIs.

> **CAUTION**
>
> Some APIs of V2 have been released. You are advised to use APIs of V2 preferentially.

APIs of V2

Table 2-1 Description of APIs of version V2

API	Description
Creating a Cluster (V2)	This API is used to create a cluster with multiple node types (for example, **ess**, **ess-cold**, **ess-client**, and **ess-master**).
Restarting a Cluster (V2)	This API is used to restart nodes of all node types or the combination of some node types in the current cluster.
Rolling Start	This API is used to restart nodes one by one, which requires a long time if the nodes have a large number of indexes.
Enabling Automatic Snapshot Creation	This API is used to enable automatic snapshot creation.
Disabling Automatic Snapshot Creation	This API is used to disable automatic snapshot creation.
Deleting a Configuration File (V2)	This API is used to delete configuration files.

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API	Description
Deleting a Custom Template (V2)	This API is used to delete custom templates.

APIs of V1

Table 2-2 Description of APIs of version V1

API	Description
Cluster Management APIs	Create clusters, scale out clusters, view cluster details, and obtain instance specifications.
Kibana Public Network Access APIs	Enable, disable, and modify Kibana public network access for a security-mode cluster.
Logstash APIs	Create configuration files for Logstash clusters and start pipelines to migrate data.
Log Management APIs	Enable, disable, modify, and query logs.
Public Network Access APIs	Enable, disable, and modify public network access for 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 snapshots.
VPC Endpoint APIs	Enable, disable, obtain, and update VPC endpoint connections.
Parameter Configuration APIs	Modify the parameter settings of a cluster.
Load Balancer APIs	Enable or disable load balancers, or obtain load balancer information.
Intelligent O&M APIs	Create, delete, and obtain intelligent O&M and detection tasks.

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Table 2-3 Cluster management APIs

API	Description
Creating a Cluster	This API is used to create a cluster.
Querying the List of Clusters	This API is used to query and display the cluster list and cluster status.
Querying Cluster Details	This API is used to query and display the details of a cluster.
Deleting a Cluster	This API is used to delete a cluster.
Changing the Cluster Billing Mode	This API is used to change the cluster billing mode from pay-per-use to yearly/monthly.
Changing the Cluster Name	This API is used to change the name of a cluster.
Changing the Cluster Password	This API is used to change the password of a cluster.
Restarting a Cluster	This API is used to restart a cluster. Services will be interrupted during the restart.
Scaling Out a Cluster	This API is used to add instances (Elasticsearch instances only) to a cluster.
Adding Instances and Expanding Instance Storage Capacity	This API is used to add instances of different types and expand instance storage capacity in a cluster.
Changing Specifications	This API is used to modify the specifications of a cluster.
Obtaining the Instance Specifications List	This API is used to query and display the IDs of supported instance specifications.
Querying All Tags	This API is used to query all tags in a specified region.
Querying Tags of a Specified Cluster	This API is used to query the tag information about a specified cluster.
Adding Tags to a Cluster	This API is used to add tags to a cluster.
Deleting the Tags of a Cluster	This API is used to delete the tags of a cluster.
Updating Cluster Routes	This API is used to update cluster routes.
Adding or Deleting Cluster Tags in Batches	This API is used to add tags to or delete tags from a cluster in batches.

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API	Description
Obtaining a Cluster Route	This API is used to obtain a cluster route.
Removing Specified Nodes	This API is used to scale in a cluster by removing specified nodes.
Changing the Specifications of a Specified Node Type	This API is used to modify cluster specifications. Nodes of the **ess**, **ess-cold**, **ess-client**, and **ess-master** types can be modified.
Scaling In Nodes of a Specific Type	This API is used to remove instances of different types and reduce instance storage capacity in a cluster.
Downloading a Security Certificate	This API is used to download a security certificate.
Replacing a Node	This API is used to replace a failed node.
Modifying the Security Mode	This API is used to switch the security mode of a cluster.
Adding Master and Client Nodes	This API is used to add a master or client node.
Upgrading a Cluster Kernel	This API is used to upgrade Elasticsearch from an earlier version to a later version or the same version.
Obtaining the ID of the Target Image to Upgrade To	This API is used to obtain the ID of an image that the current cluster can be upgraded to.
Obtaining Details About a Cluster Upgrade or AZ Switchover	An upgrade may take a long time. This API can be used to check phase-by-phase information during a cluster upgrade or AZ switchover.
Retrying a Failed Upgrade Task	If an upgrade takes too long, there is a chance that it has already failed due to connectivity issues. You can call this API to retry the upgrade or terminate its impact.
Changing the Security Group	This API is used to change the security group after a cluster is created.
Changing the Subnet of a Cluster	This API is used to bind a new subnet to newly added nodes after cluster creation, or in the case of a cluster subnet change.
Changing the AZ of a Cluster Instance	This API is used to change AZs by specifying node types.

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Table 2-4 Kibana public network access APIs

API	Description
Enabling Kibana Public Access	This API is used to enable public network access to Kibana.
Disabling Kibana Public Access	This API is used to disable public network access to Kibana.
Modifying the Kibana Public Network Bandwidth	This API is used to modify the public network bandwidth of Kibana.
Modifying Kibana Public Network Access Control	This API is used to modify the Kibana public network access whitelist.
Disabling Kibana Public Network Access Control	This API is used to disable the Kibana public network access whitelist.

Table 2-5 Logstash APIs

API	Description
Creating a Configuration File	This API is used to create the configuration file for a Logstash cluster.
Updating a Configuration File	This API is used to update the configuration file for a Logstash cluster.
Starting a Data Migration Pipeline	This API is used to start a data migration pipeline.
Stopping a Data Migration Pipeline	This API is used to stop a data migration pipeline.
Adding a Custom Template	This API is used to add a custom template.
Querying the Pipeline List	This API is used to query the pipeline list.
Querying the Configuration File List	This API is used to query the configuration file list.
Testing Connectivity	This API is used to test connectivity.
Querying the Template List	This API is used to query the template list.
Querying Operation Records	This API is used to query operation records.

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API	Description
Querying the Configuration File Content	This API is used to query the configuration file content.
Deleting a Configuration File	This API is used to delete a configuration file.
Deleting a Custom Template	This API is used to delete custom templates.
Hot-starting a Data Migration Pipeline	This API is used to hot-start a data migration pipeline.
Hot-stopping a Data Migration Pipeline	This API is used to hot-stop a data migration pipeline.
Uploading a Certificate	This API is used to upload a certificate.
Querying the Certificate List	This API is used to query the certificate list.
Querying Certificate Information	This API is used to query certificate information.
Deleting a Certificate	This API is used to delete a certificate.
Forcibly Restarting VMs in a Cluster	A cluster becomes unavailable during restart. Exercise caution. During the restart of a running cluster, the Logstash process is automatically stopped. If Keepalive is disabled for pipelines, restarting the cluster will stop all running pipelines.

Table 2-6 Log management APIs

API	Description
Enabling the Log Function	This API is used to enable the log management function.
Disabling Logging	This API is used to disable the log management function.
Querying the Job List	This API is used to query the job list in the logs of a cluster.
Querying Basic Log Configurations	This API is used to query basic log configurations.
Modifying Basic Log Configurations	This API is used to modify basic log configurations.

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API	Description
Enabling an Automatic Log Backup Policy	This API is used to enable an automatic log backup policy.
Disabling an Automatic Log Backup Policy	This API is used to disable an automatic log backup policy.
Backing Up Logs	This API is used to back up logs.
Querying Logs	This API is used to query log information.
Testing Connectivity	This API is used to test the connectivity between two clusters.

Table 2-7 Public network access APIs

API	Description
Enabling Public Network Access	This API is used to enable public network access.
Disabling Public Network Access	This API is used to disable public network access.
Modifying Public Network Access Bandwidth	This API is used to modify the public network access bandwidth.
Enabling the Public Network Access Control Whitelist	This API is used to enable the public network access control whitelist.
Disabling the Public Network Access Control Whitelist	This API is used to disable the public network access control whitelist.

Table 2-8 Snapshot management APIs

API	Description
(Not Recommended) Automatically Configuring Basic Settings of a Cluster Snapshot	This API is used to automatically configure basic settings of a cluster snapshot, including configuring OBS buckets and IAM agency.
Modifying Basic Configurations of a Cluster Snapshot	This API is used to modify the basic configurations of a cluster snapshot, including OBS buckets and IAM agency.

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API	Description
Manually Creating a Snapshot	This API is used to manually create a snapshot.
Restoring a Snapshot	This API is used to manually restore a snapshot.
Deleting a Snapshot	This API is used to delete a snapshot.
Setting the Automatic Snapshot Creation Policy	This API is used to configure automatic snapshot creation. By default, a snapshot is created every day.
Querying the Automatic Snapshot Creation Policy	This API is used to query the automatic snapshot creation policy of a cluster.
Querying the Snapshot List	This API is used to query the snapshot list of a specified cluster.
Disabling the Snapshot Function	This API is used to disable the snapshot function.

Table 2-9 VPC endpoint APIs

API	Description
Enabling the VPC Endpoint Service	This API is used to enable the VPC endpoint service.
Disabling the VPC Endpoint Service	This API is used to disable the VPC endpoint service.
Obtaining a VPC Endpoint Connection	This API is used to obtain a VPC endpoint connection.
Updating a VPC Endpoint Connection	This API is used to update a VPC endpoint connection.
Modifying the Endpoint Service Whitelist	This API is used to modify the endpoint service whitelist.

Table 2-10 Parameter configuration APIs

API	Description
Modifying Parameter Settings	This API is used to modify parameters.
Obtaining the Task List of Parameter Configurations	This API is used to obtain the task list of parameter configurations.

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API	Description
Obtaining the Parameter Configuration List	This API is used to obtain the parameter configuration list of the current cluster.

Table 2-11 Load balancer APIs

API	Description
Querying ELB V3 Load Balancers Supported by a Cluster	This API is used to query the ELB V3 load balancers supported by a cluster.
Enabling or Disabling the Elasticsearch Load Balancer	This API is used to enable or disable an Elasticsearch load balancer.
Configuring an Elasticsearch Listener	This API is used to configure an Elasticsearch listener.
Obtaining Elasticsearch ELB Information and Health Check Status	This API is used to obtain the ELB information and health check status of an Elasticsearch cluster.
Updating an Elasticsearch Listener	This API is used to update an Elasticsearch listener.
Querying the Certificate List	This API is used to query the certificate list.

Table 2-12 Intelligent O&M APIs

API	Description
Obtaining the Intelligent O&M Task List and Details	This API is used to obtain the intelligent O&M task list and details.
Creating a Cluster Detection Task	This API is used to create a cluster detection task.
Deleting a Detection Task Record	This API is used to delete a detection task record.
Obtaining SMN Topics Available for Intelligent O&M Alarms	This API is used to obtain SMN topics available for intelligent O&M alarms.

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3 Calling APIs

3.1 Making an API Request

This section describes the structure of a RESTful API request, and uses the IAM API for **creating an IAM user** as an example to describe how to call an API.

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 **Regions and Endpoints**.
resource-path	API access path for performing a specified operation. Obtain the value from the URI of an API. For example, the resource-path of the API for creating an IAM user (by an administrator account) is **/v3.0/OS-USER/users**.
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, if you want to create an IAM user, use the IAM endpoint of any region (for example, for CN-Hong Kong, the IAM endpoint is **iam.ap-southeast-1.myhuaweicloud.com**) and combine it with the **resource-path** (/v3.0/OS-USER/users) in the URI of the API for **creating an IAM user (by an administrator account)**. See as follows:

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```
https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
```

Figure 3-1 Example URL

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.

For example, in the URI of the API for **creating an IAM user as an administrator**, the request method is **POST**. The request is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users (Outside China)
```

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**.

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Parameter	Mandatory	Description
X-Auth-Token	Mandatory for token authentication	User token. It 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.
X-Project-Id	No	Subproject ID, which is used in multi-project scenarios. The **X-Project-ID** field is mandatory in the request header for accessing resources in a subproject through AK/SK-based authentication.
X-Sdk-Date	Mandatory for AK/SK authentication	Request sending time. When AK/SK authentication is enabled, this field is automatically specified when SDK is used to sign the request. For details, see **Authentication**. The format is YYYYMMDD'T'HHMMSS'Z'. The value is the current GMT time of the system.
Authorization	Mandatory for AK/SK authentication	Signature authentication information, When AK/SK authentication is enabled, this field is automatically specified when SDK is used to sign the request. For details, see **Authentication**.
X-Language	No	Request language

For the API for **creating an IAM user as an administrator**, if AK/SK-based authentication is enabled, the request with the header is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Sdk-Date: 20240416T095341Z
Authorization: SDK-HMAC-SHA256 Access=**********, SignedHeaders=content-type;host;x-sdk-date,
Signature=**********
```

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 transfers content other than the request header. If the

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request body contains Chinese characters, set Content-type to utf-8, for example, **Content-Type: application/json; charset=utf-8**.

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

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

- **accountid** indicates the ID of the account to which the IAM user belongs.
- **username** indicates the IAM username to be created.
- ********** indicates the login password of the IAM user.

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Sdk-Date: 20240416T095341Z
Authorization: SDK-HMAC-SHA256 Access=**********, SignedHeaders=content-type;host;x-sdk-date,
Signature=**********

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

By now, all data required for an API request is available. You can send the request to call the API through curl, Postman, or coding.

3.2 Authentication

You can use either of the following authentication methods when calling APIs:

- AK/SK-based authentication: Requests are encrypted using AK/SK pairs.
- Token authentication: Requests are authenticated using a token.

AK/SK-based Authentication

NOTE

- AK/SK-based authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, use token-based authentication.
- You can use the AK/SK in a permanent or temporary access key. The **X-Security-Token** field must be configured if the AK/SK in a temporary access key is used, and the field value is **security_token** of the temporary access key.

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

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

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In AK/SK-based authentication, you can use the AK/SK to sign requests based on the signature algorithm or use a dedicated signing SDK to sign requests. For details about how to sign requests and use the signing SDK, see **AK/SK Signing and Authentication Guide**.

NOTICE

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

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.
- Ensure that the token is valid while you use it. Using a token that will soon expire may cause API calling failures.

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.

When calling the API to **obtain a user token**, you must set **auth.scope** in the request body to **project**.

```
{
    "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": {
                "name": "xxxxxxxx"    //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://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

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3.3 Returned Values

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

Status Code

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

If status code 201 is returned for the API for **creating an IAM user as an administrator**, the request is successful.

Response Header

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

For the API for **creating an IAM user as an administrator**, the message header shown in **Figure 3-2** is returned.

Figure 3-2 Response header fields for the API used to create an IAM user

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

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.

For the API for **creating an IAM user as an administrator**, the following message body is returned. Only part of the response is shown here.

```
{
    "user": {
        "id": "c131886aec...",
        "name": "IAMUser",
        "description": "IAM User Description",
        "areacode": "",
        "phone": "",
        "email": "***@***.com",
        "status": null,
        "enabled": true,
        "pwd_status": false,
        "access_mode": "default",
```

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```
        "is_domain_owner": false,
        "xuser_id": "",
        "xuser_type": "",
        "password_expires_at": null,
        "create_time": "2024-05-21T09:03:41.000000",
        "domain_id": "d78cbac1.........",
        "xdomain_id": "30086000.......",
        "xdomain_type": "",
        "default_project_id": null
    }
}
```

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

```
{
    "error_msg": "Request body is invalid.",
    "error_code": "IAM.0011"
}
```

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

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4 API V2

4.1 Cluster Management

4.1.1 Creating a Cluster (V2)

Function

This API is used to create a cluster that uses multiple different types of nodes. The cluster engine type can be Elasticsearch, OpenSearch, or Logstash.

- An Elasticsearch cluster supports the following nodes:
- Data node (ess): mandatory. Data nodes store the data of a cluster. If there are no client nodes in the cluster, data nodes will need to additionally handle cluster access and data analytics requests; if there are no master nodes, data nodes will need to provide cluster management.
- Master nodes (ess-master): optional. Master nodes manage cluster-wide operations, including metadata, indexes, and shard allocation. For large-scale deployments, using dedicated master nodes enhances cluster stability, service availability, and centralized control.
- Client nodes (ess-client): Client nodes route and coordinate search and index requests, offloading processing from data nodes for enhanced query performance and cluster scalability when there are heavy loads.
- Cold data nodes (ess-cold): Cold data nodes are used to store and query large quantities of latency-insensitive data. They offer an effective way to manage large datasets while cutting storage costs.
- OpenSearch clusters support the same nodes as Elasticsearch clusters.
- Logstash clusters support the creation of Logstash nodes (lgs). Logstash nodes ingest, parse, process, and transmit data.

Constraints

- Before creating a cluster, make sure you have planned its configuration, including the cluster size, node specifications, and storage capacity requirements.

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- You have created a VPC, subnet, and security group beforehand, or you can create them when creating the cluster.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2.0/{project_id}/clusters

Table 4-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

Request Parameters

Table 4-2 Request body parameters

Parameter	Mandatory	Type	Description
cluster	Yes	**CreateClusterBody** object	**Definition**: Cluster object. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Table 4-3 CreateClusterBody

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition**: Cluster name. **Constraints**: N/A **Value range**: The value must consist of 4 to 32 characters, and must start with a letter. It can only contain digits, letters, periods (.), hyphens (-), and underscores (_). **Default value**: N/A
desc	No	String	**Definition**: Cluster description. **Constraints**: Enter a maximum of 128 characters. **Value range**: Digits, letters, periods (.), hyphens (-), underscores (_), and other special characters are allowed. **Default value**: N/A
backupStrategy	No	**CreateClusterBackupStrategyBody** object	**Definition**: Automatic snapshot creation. **Constraints**: The automatic snapshot creation policy is enabled only when **backupStrategy** is not left blank. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
roles	Yes	Array of **CreateClusterRolesBody** objects	**Definition**: Cluster node information. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
nics	Yes	**CreateClusterInstanceNicsBody** object	**Definition**: Network configuration information. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
enterprise_project_id	No	String	**Definition**: Enterprise project ID. When you create a cluster, associate the enterprise project ID with the cluster. **Constraints**: N/A **Value range**: The value can contain a maximum of 36 characters. It is string **0** or in UUID format with hyphens (-). **Default value**: **0** indicates an enterprise project.

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Parameter	Mandatory	Type	Description
tags	No	Array of **CreateClusterTagsBody** objects	**Definition**: Cluster tags. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
availability_zone	Yes	String	**Definition**: AZ of the node. The AZ name needs to be specified. **Constraints**: If multiple AZs are selected, the name of each AZ must be unique, and the number of nodes must be greater than or equal to the number of AZs. If the number of nodes is evenly divisible by the number of AZs, the nodes will be evenly distributed among all AZs. If the number of nodes is not evenly divisible by the number of AZs, the absolute difference between node quantity in any two AZs is 1 at most. To learn more about AZs, see Basic Concepts in CSS **Before You Start**. **Value range**: When specifying the AZs of nodes, use commas (,) to separate different AZ names. For example, if multiple AZs are selected for general AZs, the value of availability_zone is region-1a,region-1b,region-1c. **Default value**: N/A

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Parameter	Mandatory	Type	Description
datastore	Yes	**CreateClusterDatastoreBody** object	**Definition**: Engine type of the cluster to be created. **Constraints**: N/A **Value range**: The value can be elasticsearch, opensearch, or logstash. **Default value**: N/A
authorityEnable	No	Boolean	**Definition**: Whether to enable security authentication for a cluster. **Constraints**: This parameter is available only for Elasticsearch and OpenSearch clusters. • Elasticsearch: Only Elasticsearch 6.5.4 and later versions support security-mode clusters. • OpenSearch: No constraints. • **true**: Authentication is enabled for the cluster. • **false**: Authentication is disabled for the cluster. **Value range**: **Default value**: false

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Parameter	Mandatory	Type	Description
httpsEnable	No	Boolean	**Definition**: Whether communication is encrypted on the cluster. **Constraints**: When **httpsEnable** is set to **true**, **authorityEnable** must be set to **true**. Only Elasticsearch 6.5.4 security-mode clusters and later support this parameter. HTTPS access can be disabled only for OpenSearch 1.3.6 and 2.19.0 security-mode clusters. For other versions, HTTPS access is forcibly enabled and cannot be disabled. **Value range**: • **true**: Communication is encrypted on the cluster. • **false**: Communication is not encrypted for the cluster. **Default value**: false
adminPwd	No	String	**Definition**: Password of the administrator admin for a security-mode cluster. **Constraints**: This parameter is mandatory only when authorityEnable is set to true during cluster creation. **Value range**: A string of 8 to 32 characters. Must contain at least three of the following character types: uppercase letters, lowercase letters, digits, and special characters ~!@#$%&*()-_=|[{}];:,<.>/? **Default value**: N/A

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Parameter	Mandatory	Type	Description
publicIPReq	No	CreateClusterPublicIpReq object	**Definition**: Public network access information. **Constraints**: This parameter is valid only when **httpsEnable** is set to **true**. **Value range**: N/A **Default value**: N/A
loadBalance	No	CreateClusterLoadBalance object	**Definition**: VPC endpoint service information. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
publicKibanaReq	No	CreateClusterPublicKibanaReq object	**Definition**: Kibana public network access information. **Constraints**: This parameter is valid only when **authorityEnable** is set to **true**. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
payInfo	No	**PayInfoBody** object	**Definition**: Parameters used for purchasing a yearly/monthly cluster. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
ipv6_enable	No	Boolean	**Definition**: Whether to enable automatic IPv6 address assignment for the cluster. **Constraints**: N/A **Value range**: • true: Automatic IPv6 address assignment is enabled for the cluster. • false: Automatic IPv6 address assignment is disabled for the cluster. **Default value**: false
diskEncryption	No	**diskEncryptionInfo** object	**Definition**: Disk encryption information. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Table 4-4 CreateClusterBackupStrategyBody

Parameter	Mandatory	Type	Description
period	Yes	String	**Definition**: Time when a snapshot is created every day. **Constraints**: 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. **Value range**: N/A **Default value**: 00:00 GMT+08:00. **NOTE** When frequency is set to HOUR, you do not need to specify period. By default, snapshot creation starts from the next hour after the settings are successful.

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Parameter	Mandatory	Type	Description
frequency	No	String	**Definition**: Frequency of automatically creating snapshots. **Constraints**: The number of retained snapshots depends on the execution frequency and indexes set in the automatic snapshot creation policy. If the execution interval is short or the index data volume is large, the number of retained automatic snapshots may not reach the preset value. Set this value based on actual conditions. **Value range**: ● HOUR: Execute once every hour on the hour. ● DAY: Execute once every day. ● SUN, MON, TUE, WED, THU, FRI, and SAT: Execute once on the specified day of a week. For example, SUN indicates that the task is executed once every Sunday. **Default value**: DAY
prefix	Yes	String	**Definition**: Prefix of a snapshot that is automatically created, which is manually entered. **Constraints**: Enter up to 32 characters and start with a lowercase letter. Lowercase letters, digits, hyphens (-), and underscores (_) are allowed. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
keepday	Yes	Integer	**Definition**: Customize the number of snapshots to be retained. **Constraints**: Expired snapshots will be automatically deleted on the half hour. The deletion policy applies only to automated snapshots that are executed at the same frequency as the current automatic snapshot creation policy. **Value range**: 1–90 **Default value**: N/A
bucket	No	String	**Definition**: Name of the OBS bucket used for backup. **Constraints**: Select an OBS bucket that meets the following requirements: • Storage class: Standard. • Region: the same as that of the cluster. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
basePath	No	String	**Definition**: Storage path of the snapshot in the OBS bucket. **Constraints**: The backup path cannot: • Contain the following characters: :*?"<>|'{} • Start with a slash (/). • Start or end with a period (.). • Contain more than two consecutive slashes (/) or periods (.). • Exceed 512 characters. **Value range**: N/A **Default value**: N/A
agency	No	String	**Definition**: Select an IAM agency to grant the current account the permission to access and use OBS. **Constraints**: N/A **Value range**: The agency name can contain only letters (case-sensitive), digits, underscores (_), and hyphens (-). **Default value**: N/A **NOTE** If none of the bucket, basePath, and agency parameters are specified, the system will automatically create an OBS bucket and an IAM agency. If the creation fails, you need to manually configure correct parameters.

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Parameter	Mandatory	Type	Description
maxSnapshotBytesPerSeconds	No	String	**Parameter description**: This parameter sets the maximum backup speed per node (bytes per second). When it is exceeded, flow control is triggered to prevent excessive resource usage and ensure system stability. The actual backup speed may not reach the configured value, as it depends on many factors, such as OBS performance and disk I/O. **Constraints** N/A **Value range**: The following values and formats are allowed: ● Number + Unit The number ranges from 0 to 9999. The unit can be k, kb, m, mb, g, gb, t, tb, p, pb, or b (case-insensitive). **0mb** means there is no speed limit. An overly high backup speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. ● 0 There is no speed limit. An overly high backup speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. ● -1 There is no speed limit. An overly high backup speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. **Default value**:

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Parameter	Mandatory	Type	Description
			40mb

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Parameter	Mandatory	Type	Description
maxRestoreBytesPerSeconds	No	String	**Parameter description**: This parameter sets the maximum recovery speed per node (bytes per second). When it is exceeded, flow control is triggered to prevent excessive resource usage and ensure system stability. The actual recovery speed may not reach the configured value, as it depends on many factors, such as OBS performance and disk I/O. **Constraints** For OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter. If Maximum recovery speed (per second) is lower than indices.recovery.max_bytes_per_sec, flow control is triggered when the former is reached. If Maximum recovery speed (per second) is higher than indices.recovery.max_bytes_per_sec, flow control is triggered when the latter is reached. **Value range**: The following values and formats are allowed: ● Number + Unit The number ranges from 0 to 9999. The unit can be k, kb, m, mb, g, gb, t, tb, p, pb, or b (case-insensitive). **0mb** means there is no speed limit. (However, for OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter.) An overly high recovery speed may lead

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Parameter	Mandatory	Type	Description
			to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. • 0 There is no speed limit. (However, for OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter.) An overly high recovery speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. • -1 There is no speed limit. (However, for OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter.) An overly high recovery speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. **Default value**: For Elasticsearch clusters of 7.6.2 or earlier, the default setting is **40mb**. For OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the default setting is no limit, but the recovery speed is still limited by the indices.recovery.max_bytes_per_sec parameter.

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Table 4-5 CreateClusterRolesBody

Parameter	Mandatory	Type	Description
flavorRef	Yes	String	**Definition**: Name flavor name. For details about the current instance flavor, see the **name** attribute in **Obtaining the Instance Specifications List**. **Constraints**: For details about the current instance flavor, see the **name** attribute in **Obtaining the Instance Specifications List**. **Value range**: N/A **Default value**: N/A
volume	Yes	**CreateClusterInstanceVolumeBody** object	**Definition**: Volume information. **Constraints**: If **flavorRef** is set to a local disk flavor, leave this parameter blank. Obtain the local disk flavor by referring to the **diskrange** attribute in **Obtaining the Instance Specifications List**. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
type	Yes	String	**Definition**: Node type. **Constraints**: N/A **Value range**: • **ess-master** indicates a master node. • **ess-client** indicates a client node. • **ess-cold** indicates a cold data node. • **ess** indicates a data node. • **lgs** indicates a Logstash node. • **english** indicates an English language model. • **arabic** indicates an Arabic model. • **thai** indicates a Thai model. • **turkish** indicates a Turkish language model. • **tools** indicates a tools model. • **portuguese** indicates a Portuguese model. • **spanish** indicates a Spanish model. • chinese-english: general model for Chinese and English. • spanish-portuguese: general model for Spanish and Portuguese.] (tag:white) [- **chinese** indicates a Chinese language model. **Default value**: N/A

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Parameter	Mandatory	Type	Description
instanceNum	Yes	Integer	**Definition**: Number of instances. **Constraints**: See the value range. **Value range**: • If **ess** is selected, you can set the value to 1 to 32. – If both **ess** and **ess-master** are selected, you can set the value to 1 to 200. – If both **ess** and **ess-client** are selected, you can set the value to 1 to 32. – If both **ess** and **ess-cold** are selected, you can set the value to 32. • If **ess-master** is selected, you can set the value to 3 to 10. • If **ess-client** is selected, you can set the value to 1 to 32. • If **ess-cold** is selected, you can set the value to 1 to 32. • For Logstash nodes, the value ranges from 1 to 100. **Default value**: N/A

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Table 4-6 CreateClusterInstanceVolumeBody

Parameter	Mandatory	Type	Description
volume_type	Yes	String	**Definition**: Disk type. **Constraints**: N/A **Value range**: • **COMMON**: common I/O • **HIGH**: high I/O • **ULTRAHIGH**: ultra-high I/O • **ESSD**: ultra-fast SSD **Default value**: N/A
size	Yes	Integer	**Definition**: Disk size. **Constraints**: The value must be greater than 0 and a common multiple of 4 and 10, in GB. **Value range**: You can obtain the disk size from the **diskrange** attribute in **Obtaining the Instance Specifications List**. **Default value**: • ess and ess-cold nodes: 100 GB or the minimum disk capacity supported by the selected node flavor, whichever is larger. • ess-master and ess-client nodes: The default volume size is 40 GB and cannot be changed. **NOTE** For ess and ess-cold nodes, 100 GB or a larger value is recommended.

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Table 4-7 CreateClusterInstanceNicsBody

Parameter	Mandatory	Type	Description
vpcId	Yes	String	**Definition**: VPC ID, which is used for configuring cluster network. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
netId	Yes	String	**Definition**: Subnet ID (network ID). **Constraints**: N/A **Value range**: N/A **Default value**: N/A
securityGroupId	Yes	String	**Definition**: Security group ID. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
ips	No	Array of strings	**Definition**: Node IP address, which is configured when a cluster is created. **Constraints**: N/A **Value range**: Only Elasticsearch and OpenSearch support this parameter. Assign automatically: Private IPv4 addresses will be automatically assigned to cluster nodes. Assign manually: Manually assign private IPv4 addresses to cluster nodes. Before assigning an IP address, click View In-Use IP Address to check IP addresses that are already in use. **Default value**: N/A

Table 4-8 CreateClusterTagsBody

Parameter	Mandatory	Type	Description
key	Yes	String	**Definition**: Tag key. **Constraints**: N/A **Value range**: The value can contain 1 to 36 characters. Only digits, letters, hyphens (-), and underscores (_) are allowed. **Default value**: N/A

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Parameter	Mandatory	Type	Description
value	Yes	String	**Definition**: Tag value. **Constraints**: N/A **Value range**: The value can contain 0 to 43 characters. It can only contain digits, letters, hyphens (-), and underscores (_). **Default value**: N/A

Table 4-9 CreateClusterDatastoreBody

Parameter	Mandatory	Type	Description
version	Yes	String	**Definition**: Version of the CSS cluster engine. For details, see the supported versions in **Before You Start**. **Constraints**: N/A **Value range**: N/A[For a serverless cluster, logs, search, and vector are supported.] (tag:white) **Default value**: N/A

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Parameter	Mandatory	Type	Description
type	Yes	String	**Definition**: Engine type of the cluster to be created. **Constraints**: N/A **Value range**: • elasticsearch: Elasticsearch cluster. • opensearch: OpenSearch cluster. • logstash: Logstash cluster. **Default value**: N/A

Table 4-10 CreateClusterPublicIpReq

Parameter	Mandatory	Type	Description
eip	Yes	**CreateClusterPublicEip** object	**Definition**: Public network bandwidth. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
elbWhiteListReq	Yes	**CreateClusterElbWhiteList** object	**Definition**: EIP whitelist. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
publicBindType	Yes	String	**Definition**: Whether to automatically bind an EIP. **Constraints**: N/A **Value range**: Currently, only auto_assign is supported. **Default value**: N/A
eipId	No	String	**Definition**: EIP ID. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Table 4-11 CreateClusterPublicEip

Parameter	Mandatory	Type	Description
bandWidth	Yes	**CreateClusterPublicEipSize** object	**Definition**: Set the public network bandwidth. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Table 4-12 CreateClusterPublicEipSize

Parameter	Mandatory	Type	Description
size	Yes	Integer	**Definition**: Bandwidth size, in Mbit/s. **Constraints**: N/A **Value range**: 1-200 **Default value**: 1

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Table 4-13 CreateClusterElbWhiteList

Parameter	Mandatory	Type	Description
enableWhiteList	Yes	Boolean	**Definition**: Whether to enable public network access control. **Constraints**: N/A **Value range**: • true: A whitelist is set. Only IP addresses or CIDR blocks on this whitelist can access the cluster from the public network. • false: No whitelist is set. All public IP addresses can access the cluster. Click +Add. In the displayed text box, enter IP addresses or CIDR blocks that are allowed to access the cluster from the public network. Separate them using commas (,). Each value must be unique. An example of valid values: 192.168.1.1,10.0.0.0/24. Examples of invalid values: 0.0.0.0, x.x.x.x0, 172.16.0.0-172.16.255.255, non-standard formats (e.g., 192.168.1), and duplicate values. **Default value**: false
whiteList	No	String	**Definition**: Public network access control whitelist. **Constraints**: Separate the whitelisted CIDR blocks or IP addresses with commas (,), and make sure each of them is unique. **Value range**: N/A **Default value**: N/A

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Table 4-14 CreateClusterLoadBalance

Parameter	Mandatory	Type	Description
endpointWithDnsName	Yes	Boolean	**Definition**: Specifies the private domain name for accessing the VPC endpoint. **Constraints**: N/A **Value range**: • true: Internal domain names are supported. The system automatically assigns a private domain name to the VPC endpoint. After cluster creation, you can check this private domain name on the VPC Endpoint tab of the cluster details page. • false: Internal domain names are not supported. No private domain name is assigned for the VPC endpoint. The cluster can only be accessed through an IP address assigned to the VPC endpoint. **Default value**: false
vpcPermissions	No	Array of strings	**Definition**: Access control. **Constraints**: N/A **Value range**: N/A. **Default value**: N/A

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Parameter	Mandatory	Type	Description
professionVpcep	No	Boolean	**Definition**: Create a professional VPC endpoint. **Constraints**: N/A **Value range**: • **true**: Yes. Create professional VPC endpoints that support the IPv4/IPv6 dual-stack network. • **false**: No. Create basic VPC endpoints that support IPv4 only. **Default value**: fasle
dualstackEnable	No	Boolean	**Definition**: Whether to enable IPv4/IPv6 dual-stack networking. **Constraints**: The IPv4/IPv6 dual-stack network can be enabled only when a professional VPC endpoint is created and the VPC of the cluster supports IPv6. **Value range**: • **true**: Yes The system automatically assigns an IPv6 address to the VPC endpoint. • **false**: No The VPC endpoint does not support IPv6 addresses. **Default value**: fasle

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Table 4-15 CreateClusterPublicKibanaReq

Parameter	Mandatory	Type	Description
eipSize	Yes	Integer	**Definition**: Bandwidth size, in Mbit/s. **Constraints**: N/A **Value range**: 1-200 **Default value**: 1
elbWhiteList	Yes	**CreateClusterPublicKibanaElbWhiteList** object	**Definition**: Kibana whitelist information. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Table 4-16 CreateClusterPublicKibanaElbWhiteList

Parameter	Mandatory	Type	Description
whiteList	Yes	String	**Definition**: Whitelists **Constraints**: Separate the whitelisted CIDR blocks or IP addresses with commas (,), and make sure each of them is unique. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
enableWhiteList	Yes	Boolean	**Definition**: Whether to enable Kibana access control. **Constraints**: N/A **Value range**: • true: A whitelist is set. Only IP addresses or CIDR blocks on this whitelist can access the cluster's Kibana console from the public network. • false: No whitelist is set. All public IP addresses can access the cluster through Kibana. Click +Add. In the displayed text box, enter IP addresses or CIDR blocks that are allowed to access the cluster's Kibana console from the public network. Separate them using commas (,). Each value must be unique. An example of valid values: 192.168.1.1,10.0.0.0/24. Examples of invalid values: 0.0.0.0, x.x.x.x0, 172.16.0.0-172.16.255.255, non-standard formats (e.g., 192.168.1), and duplicate values. **Default value**: false

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Table 4-17 PayInfoBody

Parameter	Mandatory	Type	Description
payModel	Yes	Integer	**Definition**: Cluster subscription period type. **Constraints**: N/A **Value range**: • **2**: monthly. • **3**: yearly. **Default value**: N/A
period	Yes	Integer	**Definition**: Cluster subscription periods. **Constraints**: N/A **Value range**: • If **payModel** is **2**, the value range is 1 to 9. • If **payModel** is **3**, the value range is 1 to 3. **Default value**: N/A
isAutoRenew	No	Integer	**Definition**: Whether to automatically renew the subscription. If this parameter is not specified, the subscription is not automatically renewed. **Constraints**: N/A **Value range**: • 1: Auto renewal is enabled. • **0**: Auto renewal is disabled. **Default value**: 0

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Parameter	Mandatory	Type	Description
isAutoPay	No	Integer	**Definition**: Whether to enable automatic payment from your Huawei Cloud account. This parameter takes effect only for yearly/monthly clusters. **Constraints**: N/A **Value range**: ● 1: Discounts and coupons will be automatically selected. The fee will be deducted from your Huawei Cloud account. If the automatic payment fails, an order in Pending Payment state is generated waiting for manual payment. (During manual payment, the customer can still modify the discounts and coupons that were automatically selected.) ● 0: No. (The customer needs to manually pay for the bill. Discounts and coupons can be used.) **Default value**: 0

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Table 4-18 diskEncryptionInfo

Parameter	Mandatory	Type	Description
systemEncrypted	No	String	**Definition**: Whether disk encryption is enabled. KMS is used to encrypt the data disks of cluster nodes to ensure the security of stored data. **Constraints**: Disk encryption and decryption do not alter cluster management or O&M processes. However, they do increase the system's processing load, potentially affecting the system's operational performance. **Value range**: • 0: Disable disk encryption. • 1: Enable disk encryption. **Default value**: 0

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Parameter	Mandatory	Type	Description
systemCmkid	No	String	**Definition**: Disk key ID. **Constraints**: This parameter is valid only when systemEncrypted is set to 1. Select a KMS key from the drop-down list. KMS keys that are unavailable in this drop-down list are not supported by the cluster. Set a key that meets the following requirements: • Cryptographic algorithm: AES or SM4. • Key usage: ENCRYPT_DECRYPT. After cluster creation, the KMS key cannot be changed. If the KMS key used by the cluster is disabled, the cluster cannot be scaled or upgraded, its node specifications or AZs cannot be changed, and its nodes cannot be replaced (by specifying the nodes that need replacement). To solve this problem, you will have to create a new cluster and migrate your data to that new cluster. **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

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Table 4-19 Response body parameters

Parameter	Type	Description
cluster	CreateClusterResp object	**Definition**: Cluster object. For a pay-per-use cluster, only the **cluster** parameter is returned. **Value range**: N/A.
orderId	String	**Definition**: Order ID. This parameter is returned only when a yearly/monthly cluster is created. **Value range**: N/A.

Table 4-20 CreateClusterResp

Parameter	Type	Description
id	String	**Definition**: Cluster ID. **Value range**: N/A.
name	String	**Definition**: Cluster name. **Value range**: N/A.

Example Requests

- Example request for creating a yearly/monthly Elasticsearch cluster.

```
POST https://{Endpoint}/v2.0/{project_id}/clusters

{
  "cluster" : {
    "name" : "css-cluster",
    "desc" : "Cluster testing",
    "backupStrategy" : {
      "period" : "16:00 GMT+08:00",
      "prefix" : "snapshot",
      "keepday" : 7,
      "frequency" : "DAY",
      "bucket" : "OBS-obsName",
      "basePath" : "css_repository/obs-path",
      "agency" : "css_obs_agency",
      "maxSnapshotBytesPerSeconds" : 40,
      "maxRestoreBytesPerSeconds" : 40
```

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```
  },
  "roles" : [ {
    "flavorRef" : "ess.spec-4u8g",
    "volume" : {
      "volume_type" : "COMMON",
      "size" : 100
    },
    "type" : "ess",
    "instanceNum" : 1
  } ],
  "nics" : {
    "vpcId" : "{VPC ID}",
    "netId" : "{NET ID}",
    "securityGroupId" : "{Security group ID}"
  },
  "enterprise_project_id" : 0,
  "tags" : [ {
    "key" : "k1",
    "value" : "v1"
  }, {
    "key" : "k2",
    "value" : "v2"
  } ],
  "availability_zone" : "{Az code}",
  "datastore" : {
    "version" : "{cluster-version}",
    "type" : "elasticsearch"
  },
  "authorityEnable" : true,
  "httpsEnable" : true,
  "adminPwd" : "{password}",
  "publicIPReq" : {
    "eip" : {
      "bandWidth" : {
        "size" : 5
      }
    },
    "elbWhiteListReq" : {
      "enableWhiteList" : true,
      "whiteList" : "127.0.0.1"
    },
    "publicBindType" : "auto_assign",
    "eipId" : null
  },
  "loadBalance" : {
    "endpointWithDnsName" : false,
    "vpcPermissions" : [ "{Account ID}" ]
  },
  "publicKibanaReq" : {
    "eipSize" : 5,
    "elbWhiteList" : {
      "whiteList" : "127.0.0.1",
      "enableWhiteList" : true
    }
  },
  "payInfo" : {
    "payModel" : 2,
    "period" : 1,
    "isAutoRenew" : 1,
    "isAutoPay" : null
  }
 }
}
```

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

```
POST https://{Endpoint}/v2.0/{project_id}/clusters

{
 "cluster" : {
  "name" : "css-cluster",
```

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```
  "desc" : "Cluster testing",
  "backupStrategy" : {
    "period" : "16:00 GMT+08:00",
    "prefix" : "snapshot",
    "keepday" : 7,
    "frequency" : "DAY",
    "bucket" : "OBS-obsName",
    "basePath" : "css_repository/obs-path",
    "agency" : "css_obs_agency",
    "maxSnapshotBytesPerSeconds" : 40,
    "maxRestoreBytesPerSeconds" : 40
  },
  "roles" : [ {
    "flavorRef" : "ess.spec-4u8g",
    "volume" : {
      "volume_type" : "COMMON",
      "size" : 100
    },
    "type" : "ess",
    "instanceNum" : 1
  } ],
  "nics" : {
    "vpcId" : "{VPC ID}",
    "netId" : "{NET ID}",
    "securityGroupId" : "{Security group ID}"
  },
  "enterprise_project_id" : 0,
  "tags" : [ {
    "key" : "k1",
    "value" : "v1"
  }, {
    "key" : "k2",
    "value" : "v2"
  } ],
  "availability_zone" : "{Az code}",
  "datastore" : {
    "version" : "{cluster-version}",
    "type" : "elasticsearch"
  },
  "authorityEnable" : true,
  "httpsEnable" : true,
  "adminPwd" : "{password}",
  "publicIPReq" : {
    "eip" : {
      "bandWidth" : {
        "size" : 5
      }
    },
    "elbWhiteListReq" : {
      "enableWhiteList" : true,
      "whiteList" : "127.0.0.1"
    },
    "publicBindType" : "auto_assign",
    "eipId" : null
  },
  "loadBalance" : {
    "endpointWithDnsName" : false,
    "vpcPermissions" : [ "{Account ID}" ]
  },
  "publicKibanaReq" : {
    "eipSize" : 5,
    "elbWhiteList" : {
      "whiteList" : "127.0.0.1",
      "enableWhiteList" : true
    }
  }
 }
}
```

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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"
  }
}
```

- Example response for creating a yearly/monthly cluster.

```
{
  "orderId" : "CS2208241141LY94J",
  "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**.

4.1.2 Restarting a Cluster (V2)

Function

This API is used to restart nodes of all or some types in the current cluster.

NOTE

If a cluster is available, ensure that it has stopped handling service requests, such as importing and searching for data. Otherwise, the cluster restart may cause data loss.

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Calling Method

For details, see **Calling APIs**.

URI

POST /v2.0/{project_id}/clusters/{cluster_id}/restart

Table 4-21 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to restart. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 4-22 Request body parameters

Parameter	Mandatory	Type	Description
type	Yes	String	**Definition**: Restart mode. **Value range**: • node: restarts nodes. • role: restarts roles.
value	Yes	String	Operation parameters. Parameter description: • When the operation role is **node**, the value is the node ID. You can obtain the ID attribute in instances by referring to **Querying Cluster Details**. • When the operation role is **role**, the value is one or multiple node types (such as ess, ess-master, ess-client, and ess-cold).

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Restart nodes of all or some types in the current cluster.

```
POST https://{Endpoint}/v2.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/restart

{
  "type" : "role",
  "value" : "ess"
}
```

Example Responses

None

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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**.

4.1.3 Rolling Restart (Deprecated)

Function

This API is used to restart nodes one by one, which requires a long time when the nodes have a large number of indexes.

NOTE

Rolling restart is supported only when the cluster has more than three nodes (including master nodes, client nodes, and cold data nodes). When the cluster is available, ensure that the cluster has stopped handling service requests (such as importing data and searching for data). Otherwise, the cluster restart may cause data loss.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2.0/{project_id}/clusters/{cluster_id}/rolling_restart

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Table 4-23 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to restart. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 4-24 Request body parameters

Parameter	Mandatory	Type	Description
type	Yes	String	Operation role. Its type can only be **role**.

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Parameter	Mandatory	Type	Description
value	Yes	String	Instance type. (At least one data node is required when you configure instance types.) Use commas (,) to separate multiple types. For example: • **ess-master** indicates a master node. • **ess-client** indicates a client node. • **ess-cold** indicates a cold data node. • **ess** indicates a data node. • **all** indicates all nodes.

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Restart a node.

```
POST https://{Endpoint}/v2.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/rolling_restart

{
  "type" : "role",
  "value" : "ess"
}
```

Example Responses

None

Status Codes

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

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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**.

4.1.4 Rolling Restart

Function

This API is used to restart nodes one by one, which requires a long time when the nodes have a large number of indexes.

NOTE

Rolling restart is supported only when the cluster has more than three nodes (including master nodes, client nodes, and cold data nodes). When the cluster is available, ensure that the cluster has stopped handling service requests (such as importing data and searching for data). Otherwise, the cluster restart may cause data loss.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2.0/{project_id}/clusters/{cluster_id}/rolling-restart

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Table 4-25 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to restart. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 4-26 Request body parameters

Parameter	Mandatory	Type	Description
type	Yes	String	Operation role. Its type can only be **role**.

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Parameter	Mandatory	Type	Description
value	Yes	String	Instance type. (At least one data node is required when you configure instance types.) Use commas (,) to separate multiple types. For example: • **ess-master** indicates a master node. • **ess-client** indicates a client node. • **ess-cold** indicates a cold data node. • **ess** indicates a data node. • **all** indicates all nodes.

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Restart the node.

```
POST https://{Endpoint}/v2.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/rolling-restart

{
  "type" : "role",
  "value" : "ess"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	The request is invalid. Do not retry the request without modifying it.

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Status Code	Description
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exists, or the request failed 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**.

4.2 Snapshot Management

4.2.1 Enabling Automatic Snapshot Creation

Function

CSS allows you to use snapshots to back up and restore the data of an OpenSearch cluster. By storing a snapshot in an OBS bucket, you save a point-in-time copy of the cluster's data. By restoring this snapshot, you can restore the cluster to a previous state. There are two ways to create snapshots to back up a CSS cluster: automatic and manual.

- Automatic snapshot creation: Snapshots are created periodically based on a preset time policy, for example, daily or weekly, to ensure continuous data protection. This reduces manual effort and improves backup reliability and efficiency.
- Manual snapshot creation: You create snapshots manually for special occasions, for example, prior to a high-risk operation (such as a cluster upgrade). This ensures you can restore data using snapshots in case anything should go wrong. Manual snapshots provide additional flexibility.

This API is used to enable automatic snapshot creation.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2.0/{project_id}/clusters/{cluster_id}/snapshots/policy/open

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Table 4-27 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster that the snapshot belongs to. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 4-28 Request body parameters

Parameter	Mandatory	Type	Description
indices	No	String	**Definition**: Name of an index to be backed up. Multiple indexes are separated by commas (,). By default, all indexes are backed up. You can use the combination of a backslash and an asterisk (*) to back up data of certain indexes. For example, if you specify 2018-06*, then the data of the indexes with the prefix **2018-06** will be backed up. **Constraints**: N/A **Value range**: The value can contain 0 to 1,024 characters. Uppercase letters, spaces, and the following special characters are not allowed: "\<|>/? **Default value**: N/A
keepday	Yes	Integer	**Definition**: Set the number of snapshots to be retained. Expired snapshots will be automatically deleted on the half hour. The deletion policy applies only to auto snapshots that are executed at the same frequency as the current automatic snapshot creation policy. **Constraints**: N/A **Value range**: 1–90 **Default value**: N/A

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Parameter	Mandatory	Type	Description
frequency	No	String	**Definition**: Frequency of automatically creating snapshots. **Constraints**: N/A **Value range**: N/A **Default value**: DAY When the value is HOUR, the task is executed every hour. When the value is DAY, the scheduled task is executed every day. When the parameter is set to SUN, MON, TUE, WED, THU, FRI or SAT, the scheduled task is executed at the specified day of every week. The number of retained snapshots depends on the execution frequency and indexes set in the automatic snapshot creation policy. If the execution interval is short or the index data volume is large, the number of retained automatic snapshots may not reach the preset value. Set this value based on actual conditions.

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Parameter	Mandatory	Type	Description
period	Yes	String	**Definition**: Time when a snapshot is created every day. **Constraints**: N/A **Value range**: 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. **Default value**: 00:00 GMT+08:00 **NOTE** When frequency is set to HOUR, you do not need to specify period. By default, snapshot creation starts from the next hour after the settings are successful.
prefix	Yes	String	**Definition**: Prefix of a snapshot that is automatically created, which is manually entered. **Constraints**: N/A **Value range**: Enter up to 32 characters and start with a lowercase letter. Lowercase letters, digits, hyphens (-), and underscores (_) are allowed. **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

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Example Requests

Enable the automatic backup function.

```
POST https://{Endpoint}/v2.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/snapshots/policy/open

{
  "indices" : "*",
  "keepday" : 7,
  "frequency" : "DAY",
  "period" : "16:00 GMT+08:00",
  "prefix" : "snapshot"
}
```

Example Responses

None

Status Codes

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

Error Codes

See **Error Codes**.

4.2.2 Disabling Automatic Snapshot Creation

Function

CSS allows you to use snapshots to back up and restore the data of an OpenSearch cluster. By storing a snapshot in an OBS bucket, you save a point-in-time copy of the cluster's data. By restoring this snapshot, you can restore the cluster to a previous state. There are two ways to create snapshots to back up a CSS cluster: automatic and manual.

- Automatic snapshot creation: Snapshots are created periodically based on a preset time policy, for example, daily or weekly, to ensure continuous data protection. This reduces manual effort and improves backup reliability and efficiency.
- Manual snapshot creation: You create snapshots manually for special occasions, for example, prior to a high-risk operation (such as a cluster upgrade). This ensures you can restore data using snapshots in case anything should go wrong. Manual snapshots provide additional flexibility.

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This API is used to disable automatic snapshot creation.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v2.0/{project_id}/clusters/{cluster_id}/snapshots/policy/close

Table 4-29 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster that the snapshot belongs to. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

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None

Example Requests

Disable the automatic backup function.

```
PUT https://{Endpoint}/v2.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/snapshots/policy/close
```

Example Responses

None

Status Codes

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

Error Codes

See **Error Codes**.

4.3 Logstash

4.3.1 Delete a Configuration File (V2)

Function

Delete a configuration file.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2.0/{project_id}/clusters/{cluster_id}/lgsconf/delete

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Table 4-30 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose configuration file is to be deleted. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 4-31 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Configuration file name.

Response Parameters

Status code: 200

Request succeeded.

None

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Example Requests

Deleting a Configuration File

```
POST https://{Endpoint}/v2.0/{project_id}/clusters/5c2bab0d-ec5f-491f-9418-b8da38a26760/lgsconf/delete

{
  "name" : "confName"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	The request is invalid. Do not retry the request without modifying it.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exists, or the request failed 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**.

4.3.2 Delete a Custom Template V2

Function

This API is used to delete a custom template.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2.0/{project_id}/lgsconf/deletetemplate

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Table 4-32 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

Request Parameters

Table 4-33 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Template name.

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Delete a custom template.

```
POST https://{Endpoint}/v2.0/{project_id}/lgsconf/deletetemplate

{
  "name" : "template1"
}
```

Example Responses

None

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Status Codes

Status Code	Description
200	Request succeeded.
400	The request is invalid. Do not retry the request without modifying it.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exists, or the request failed 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**.

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5 API V1

5.1 Cluster Management

5.1.1 Creating a Cluster (Discarded)

Function

This API can only be used to create clusters that contain a single type of nodes. To create clusters that contain multiple types of nodes (ess, ess-cold, ess-client, and ess-master), use the API for **Creating a Cluster v2**.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters

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Table 5-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

Request Parameters

Table 5-2 Request body parameters

Parameter	Mandatory	Type	Description
cluster	Yes	**CreateClusterBody** object	**Parameter description**: Cluster object. **Constraints**: N/A **Options**: N/A **Default value**: N/A

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Table 5-3 CreateClusterBody

Parameter	Mandatory	Type	Description
instance	Yes	**CreateClusterInstanceBody** object	**Parameter description**: Array of Buffer instances, whose memory is to be shared. **Constraints**: N/A **Options**: N/A **Default value**: N/A
datastore	Yes	**CreateClusterDatastoreBody** object	**Definition**: Search engine. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
name	Yes	String	**Definition**: Cluster name. **Constraints**: N/A **Value range**: It can contain 4 to 32 characters. Only digits, letters, hyphens (-), and underscores (_) are allowed. The value must start with a letter. **Default value**: N/A

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Parameter	Mandatory	Type	Description
desc	No	String	**Definition**: Cluster description. **Constraints**: Enter a maximum of 128 characters. **Value range**: The value can contain digits, letters, periods (.), hyphens (-), underscores (_), and other special characters. **Default value**: N/A
instanceNum	Yes	Integer	**Definition**: Number of cluster instances. **Constraints**: N/A **Value range**: 1–32. **Default value**: N/A
backupStrategy	No	CreateClusterBackupStrategyBody object	**Parameter description**: Automatic snapshot creation policy, which is disabled by default. The automatic snapshot creation policy is enabled only when **backupStrategy** is not left blank. **Constraints**: N/A **Options**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
httpsEnable	No	Boolean	**Definition**: Whether communication is encrypted on the cluster. The value can be **true** or **false**. By default, communication encryption is disabled. When **httpsEnable** is set to **true**, **authorityEnable** must be set to **true**. **Constraints**: Only Elasticsearch 6.5.4 security-mode clusters and later support this parameter. HTTPS access can be disabled only for OpenSearch 1.3.6 and 2.19.0 security-mode clusters. For other versions, HTTPS access is forcibly enabled and cannot be disabled. **Value range**: • **true**: Communication is encrypted on the cluster. • **false**: Communication is not encrypted for the cluster. **Default value**: false
authorityEnable	No	Boolean	**Definition**: Whether to enable authentication. Available values include **true** and **false**. Authentication is disabled by default. **Constraints**: Only Elasticsearch 6.5.4 security-mode clusters and later support this parameter. **Value range**: • **true**: Authentication is enabled for the cluster. • **false**: Authentication is disabled for the cluster. **Default value**: false

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Parameter	Mandatory	Type	Description
adminPwd	No	String	**Parameter description**: Password of the cluster user **admin** in security mode. This parameter is mandatory only when **authorityEnable** is set to **true**. Weak password verification is required for a security cluster. You are advised to set a strong password. **Constraints**: 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 ~!@#$%^&*()-_=+|[{}];:,<.>/? **Options**: See Constraints. **Default value**: N/A
enterprise_project_id	No	String	**Parameter description**: 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. **Constraints**: N/A **Options**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
tags	No	Array of **CreateClusterTagsBody** objects	**Parameter description**: Cluster tags. **Constraints**: N/A **Options**: N/A **Default value**: N/A
payInfo	No	**payInfoBody** object	**Parameter description**: Parameters used for purchasing a yearly/monthly cluster. **Constraints**: N/A **Options**: N/A **Default value**: N/A
ipv6_enable	No	Boolean	**Definition**: Whether to enable automatic IPv6 address assignment for the cluster. The default value is false. **Constraints**: N/A **Value range**: N/A **Default value**: false
diskEncryption	No	**diskEncryptionInfo** object	**Parameter description**: Disk encryption information. **Constraints**: N/A **Options**: N/A **Default value**: N/A

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Table 5-4 CreateClusterInstanceBody

Parameter	Mandatory	Type	Description
flavorRef	Yes	String	**Parameter description**: Instance flavor name. For details about the current instance flavor, see the **name** attribute in **Obtaining the Instance Specifications List**. **Constraints**: N/A **Options**: N/A **Default value**: N/A
volume	Yes	**CreateClusterInstanceVolumeBody** object	**Parameter description**: Volume information. You do not need to set this parameter when flavorRef is set to a local disk flavor. 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 **Constraints**: N/A **Options**: N/A **Default value**: N/A
nics	Yes	**CreateClusterInstanceNicsBody** object	**Parameter description**: Subnet information. **Constraints**: N/A **Options**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
availability_zone	Yes	String	**Definition**: AZ of the node. The AZ name needs to be specified. **Constraints**: When specifying the AZs of nodes, use commas (,) to separate different AZ names. For example, if multiple AZs are selected for general AZs, the value of availability_zone is region-1a,region-1b,region-1c. **Value range**: N/A **Default value**: availability_zone is empty by default, indicating that a single AZ is used. **NOTE** If multiple AZs are selected, the name of each AZ must be unique, and the number of nodes must be greater than or equal to the number of AZs. If the number of nodes is evenly divisible by the number of AZs, the nodes will be evenly distributed among all AZs. If the number of nodes is not evenly divisible by the number of AZs, the absolute difference between node quantity in any two AZs is 1 at most. AZ name. Obtain it from **Regions and Endpoints** in section "Before You Start".

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Table 5-5 CreateClusterInstanceVolumeBody

Parameter	Mandatory	Type	Description
volume_type	Yes	String	**Parameter description**: Volume type. **Constraints**: N/A **Options**: • **COMMON**: common I/O • **HIGH**: high I/O • **ULTRAHIGH**: ultra-high I/O • **ESSD**: ultra-fast SSD **Default value**: N/A
size	Yes	Integer	**Definition**: Disk size. **Constraints**: The value must be greater than 0 and a common multiple of 4 and 10, in GB. **Value range**: You can obtain the disk size from the **diskrange** attribute in **Obtaining the Instance Specifications List**. **Default value**: • ess and ess-cold nodes: 100 GB or the minimum disk capacity supported by the selected node flavor, whichever is larger. • ess-master and ess-client nodes: The default volume size is 40 GB and cannot be changed. **NOTE** For ess and ess-cold nodes, 100 GB or a larger value is recommended.

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Table 5-6 CreateClusterInstanceNicsBody

Parameter	Mandatory	Type	Description
vpcId	Yes	String	**Parameter description**: VPC ID, which is used for configuring cluster network. **Constraints**: N/A **Options**: N/A **Default value**: N/A
netId	Yes	String	**Parameter description**: Subnet ID (network ID). **Constraints**: N/A **Options**: N/A **Default value**: N/A
securityGroupId	Yes	String	**Parameter description**: Security group ID **Constraints**: N/A **Options**: N/A **Default value**: N/A

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Table 5-7 CreateClusterDatastoreBody

Parameter	Mandatory	Type	Description
version	Yes	String	**Parameter description**: Elasticsearch/Logstash engine version. For details, see the supported versions in **Before You Start**. **Constraints**: N/A **Options**: N/A **Default value**: N/A
type	Yes	String	**Definition**: Engine type of the cluster to be created. **Constraints**: N/A **Value range**: • elasticsearch: Elasticsearch cluster. • opensearch: OpenSearch cluster. • logstash: Logstash cluster. **Default value**: N/A

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Table 5-8 CreateClusterBackupStrategyBody

Parameter	Mandatory	Type	Description
period	Yes	String	**Definition**: Time when a snapshot is generated every day. **Constraints**: N/A **Value range**: 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. **Default value**: 00:00 GMT+08:00 **NOTE** When frequency is set to HOUR, you do not need to specify period. By default, snapshot creation starts from the next hour after the settings are successful.
prefix	Yes	String	**Definition**: Prefix of a snapshot that is automatically created, which is manually entered. **Constraints**: N/A **Value range**: Enter up to 32 characters and start with a lowercase letter. Lowercase letters, digits, hyphens (-), and underscores (_) are allowed. **Default value**: N/A

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Parameter	Mandatory	Type	Description
keepday	Yes	Integer	**Definition**: Set the number of snapshots to be retained. Expired snapshots will be automatically deleted on the half hour. The deletion policy applies only to automated snapshots that are executed at the same frequency as the current automatic snapshot creation policy. **Constraints**: N/A **Value range**: 1–90 **Default value**: N/A
bucket	No	String	**Parameter description**: Name of the OBS bucket used for backup. **Constraints**: N/A **Options**: N/A **Default value**: N/A
basePath	No	String	**Parameter description**: Storage path of the snapshot in the OBS bucket. **Constraints**: N/A **Options**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
agency	No	String	**Definition**: Agency name. You can create an agency to allow CSS to call other cloud services. An agency name cannot contain special characters or Chinese characters. **Constraints**: N/A **Value range**: Only a-z, A-Z, 0-9, hyphens (-) and underscores (_) are allowed. **Default value**: N/A **NOTE** If none of the bucket, basePath, and agency parameters are specified, the system will automatically create an OBS bucket and an IAM agency. If the creation fails, you need to manually configure correct parameters.

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Parameter	Mandatory	Type	Description
frequency	No	String	**Definition**: Frequency of automatically creating snapshots. **Constraints**: N/A **Value range**: • HOUR: Execute once every hour on the hour. • DAY: Execute once every day. • SUN, MON, TUE, WED, THU, FRI, and SAT: Execute the task at the specified day of every week. For example, SUN indicates that the task is executed once every Sunday. • The number of retained snapshots depends on the execution frequency and indexes set in the automatic snapshot creation policy. If the execution interval is short or the index data volume is large, the number of retained automatic snapshots may not reach the preset value. Set this value based on actual conditions. **Default value**: DAY

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Parameter	Mandatory	Type	Description
maxSnapshotBytesPerSeconds	No	String	**Definition**: This parameter sets the maximum backup speed per node (bytes per second). When it is exceeded, flow control is triggered to prevent excessive resource usage and ensure system stability. The actual backup speed may not reach the configured value, as it depends on many factors, such as OBS performance and disk I/O. **Constraints**: N/A **Value range**: The following values and formats are allowed: ● Number + Unit The number ranges from 0 to 9999. The unit can be k, kb, m, mb, g, gb, t, tb, p, pb, or b (case-insensitive). **0mb** means there is no speed limit. An overly high backup speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. ● 0 There is no speed limit. An overly high backup speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. ● -1 There is no speed limit. An overly high backup speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. **Default value**:

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Parameter	Mandatory	Type	Description
			The default value is 40 MB. If this parameter is left blank, the default value is used.

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Parameter	Mandatory	Type	Description
maxRestoreBytesPerSeconds	No	String	**Definition**: This parameter sets the maximum recovery speed per node (bytes per second). When it is exceeded, flow control is triggered to prevent excessive resource usage and ensure system stability. The actual recovery speed may not reach the configured value, as it depends on many factors, such as OBS performance and disk I/O. **Constraints**: For OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter. If Maximum recovery speed (per second) is lower than indices.recovery.max_bytes_per_sec, flow control is triggered when the former is reached. If Maximum recovery speed (per second) is higher than indices.recovery.max_bytes_per_sec, flow control is triggered when the latter is reached. **Value range**: The following values and formats are allowed: • Number + Unit The number ranges from 0 to 9999. The unit can be k, kb, m, mb, g, gb, t, tb, p, pb, or b (case-insensitive). **0mb** means there is no speed limit. (However, for OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter.) An overly high recovery speed may lead

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Parameter	Mandatory	Type	Description
			to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. • 0 There is no speed limit. (However, for OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter.) An overly high recovery speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. • -1 There is no speed limit. (However, for OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter.) An overly high recovery speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. **Default value**: For Elasticsearch clusters of 7.6.2 or earlier, the default setting is **40mb**. For OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the default setting is no limit, but the recovery speed is still limited by the indices.recovery.max_bytes_per_sec parameter. If this parameter is left blank, the default setting is used.

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Table 5-9 CreateClusterTagsBody

Parameter	Mandatory	Type	Description
key	Yes	String	**Definition**: Tag key. **Constraints**: N/A **Value range**: The value can contain 1 to 36 characters. Only digits, letters, hyphens (-), and underscores (_) are allowed. **Default value**: N/A
value	Yes	String	**Definition**: Tag value. **Constraints**: N/A **Value range**: • Length: 0 to 255 characters. • The value can contain UTF-8 letters, digits, spaces, and special characters _.://=+-@ **Default value**: N/A

Table 5-10 payInfoBody

Parameter	Mandatory	Type	Description
payModel	Yes	Integer	**Definition**: Subscription period type. **Constraints**: N/A **Value range**: • **2**: Monthly • **3**: Yearly **Default value**: N/A

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Parameter	Mandatory	Type	Description
period	Yes	Integer	**Definition**: Number of subscription periods. **Constraints**: N/A **Value range**: • If **payModel** is **2**, the value range is 1 to 9. • If **payModel** is **3**, the value range is 1 to 3. **Default value**: N/A
isAutoRenew	No	Integer	**Definition**: Whether to automatically renew the subscription. If this parameter is not specified, the subscription is not automatically renewed. **Constraints**: N/A **Value range**: • **1**: Auto renewal is enabled. • **0**: Auto renewal is disabled. **Default value**: 0

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Parameter	Mandatory	Type	Description
isAutoPay	No	Integer	**Definition**: Whether to enable automatic payment from your Huawei Cloud account. This parameter takes effect only for yearly/monthly clusters. **Constraints**: N/A **Value range**: • 1: Yes. (Discounts and coupons are automatically selected. The fee will be automatically deducted from your Huawei Cloud account.) If the automatic payment fails, an unpaid order will be generated, and you need to manually complete the payment. (During manual payment, you can still modify the discounts and coupons that were automatically selected.) • **0**: No. (The customer needs to manually pay for the bill. Discounts and coupons can be used.) The default value is 0. **Default value**: 0

Table 5-11 diskEncryptionInfo

Parameter	Mandatory	Type	Description
systemEncrypted	No	String	Whether to enable disk encryption. The value can be 0 or 1. The default value is 0. 0: Disable disk encryption. 1: Enable disk encryption.
systemCmkid	No	String	KMS key ID. This parameter is valid only when **systemEncrypted** is set to 1.

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Response Parameters

Status code: 200

Table 5-12 Response body parameters

Parameter	Type	Description
cluster	CreateClusterClusterResponse object	**Parameter description**: Cluster object. For a pay-per-use cluster, only the **cluster** parameter is returned. **Options**: N/A
orderId	String	**Parameter description**: Order ID. This parameter is returned only when a yearly/monthly cluster is created. **Options**: N/A

Table 5-13 CreateClusterClusterResponse

Parameter	Type	Description
id	String	**Parameter description**: Cluster ID. **Options**: N/A
name	String	**Parameter description**: Cluster name. **Options**: N/A

Example Requests

- Example request for creating a yearly/monthly cluster.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters

{
  "cluster" : {
    "instance" : {
      "flavorRef" : "ess.spec-4u16g",
      "volume" : {
        "volume_type" : "COMMON",
        "size" : 120
      },
      "nics" : {
```

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```
      "vpcId" : "{VPC ID}",
      "netId" : "{NET ID}",
      "securityGroupId" : "{Security group ID}"
    },
    "availability_zone" : "{AZ CODE}"
  },
  "datastore" : {
    "version" : "{cluster-version}",
    "type" : "elasticsearch"
  },
  "name" : "cluster-name",
  "desc" : "Cluster testing",
  "instanceNum" : 3,
  "backupStrategy" : {
    "period" : "16:00 GMT+08:00",
    "prefix" : "snapshot",
    "keepday" : 7,
    "frequency" : "DAY",
    "bucket" : "css-obs-backup",
    "basePath" : "css_repository/obs-path",
    "agency" : "css_obs_agency",
    "maxSnapshotBytesPerSeconds" : 40,
    "maxRestoreBytesPerSeconds" : 40
  },
  "httpsEnable" : true,
  "authorityEnable" : true,
  "adminPwd" : "{password}",
  "enterprise_project_id" : "0",
  "tags" : [ {
    "key" : "k1",
    "value" : "v1"
  }, {
    "key" : "k2",
    "value" : "v2"
  } ],
  "payInfo" : {
    "payModel" : 2,
    "period" : 1,
    "isAutoRenew" : 1,
    "isAutoPay" : 1
  }
 }
}
```

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

```
POST https://{Endpoint}/v1.0/{project_id}/clusters

{
 "cluster" : {
  "instance" : {
    "flavorRef" : "ess.spec-4u16g",
    "volume" : {
      "volume_type" : "COMMON",
      "size" : 120
    },
    "nics" : {
      "vpcId" : "{VPC ID}",
      "netId" : "{NET ID}",
      "securityGroupId" : "{Security group ID}"
    },
    "availability_zone" : "{AZ CODE}"
  },
  "datastore" : {
    "version" : "{cluster-version}",
    "type" : "elasticsearch"
  },
  "name" : "cluster-name",
  "desc" : "Cluster testing",
  "instanceNum" : 3,
  "backupStrategy" : {
```

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```
    "period" : "16:00 GMT+08:00",
    "prefix" : "snapshot",
    "keepday" : 7,
    "frequency" : "DAY",
    "bucket" : "css-obs-backup",
    "basePath" : "css_repository/obs-path",
    "agency" : "css_obs_agency",
    "maxSnapshotBytesPerSeconds" : 40,
    "maxRestoreBytesPerSeconds" : 40
  },
  "httpsEnable" : true,
  "authorityEnable" : true,
  "adminPwd" : "{password}",
  "enterprise_project_id" : "0",
  "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"
 }
}
```

- Example response for creating a yearly/monthly cluster.

```
{
 "cluster" : {
  "id" : "ef683016-871e-48bc-bf93-74a29d60d214",
  "name" : "ES-Test"
 },
 "orderId" : "CS2208241141LY94J"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

- Example request for creating a yearly/monthly cluster.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;
```

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

public class CreateClusterSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateClusterRequest request = new CreateClusterRequest();
        CreateClusterReq body = new CreateClusterReq();
        PayInfoBody payInfoCluster = new PayInfoBody();
        payInfoCluster.withPayModel(2)
            .withPeriod(1)
            .withIsAutoRenew(1)
            .withIsAutoPay(1);
        List<CreateClusterTagsBody> listClusterTags = new ArrayList<>();
        listClusterTags.add(
            new CreateClusterTagsBody()
                .withKey("k1")
                .withValue("v1")
        );
        listClusterTags.add(
            new CreateClusterTagsBody()
                .withKey("k2")
                .withValue("v2")
        );
        CreateClusterBackupStrategyBody backupStrategyCluster = new CreateClusterBackupStrategyBody();
        backupStrategyCluster.withPeriod("16:00 GMT+08:00")
            .withPrefix("snapshot")
            .withKeepday(7)
            .withFrequency("DAY")
            .withBucket("css-obs-backup")
            .withBasePath("css_repository/obs-path")
            .withAgency("css_obs_agency")
            .withMaxSnapshotBytesPerSeconds("40")
            .withMaxRestoreBytesPerSeconds("40");
        CreateClusterDatastoreBody datastoreCluster = new CreateClusterDatastoreBody();
        datastoreCluster.withVersion("{cluster-version}")
            .withType("elasticsearch");
        CreateClusterInstanceNicsBody nicsInstance = new CreateClusterInstanceNicsBody();
        nicsInstance.withVpcId("{VPC ID}")
            .withNetId("{NET ID}")
            .withSecurityGroupId("{Security group ID}");
        CreateClusterInstanceVolumeBody volumeInstance = new CreateClusterInstanceVolumeBody();
        volumeInstance.withVolumeType("COMMON")
            .withSize(120);
        CreateClusterInstanceBody instanceCluster = new CreateClusterInstanceBody();
        instanceCluster.withFlavorRef("ess.spec-4u16g")
            .withVolume(volumeInstance)
            .withNics(nicsInstance)
            .withAvailabilityZone("{AZ CODE}");
```

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```
        CreateClusterBody clusterbody = new CreateClusterBody();
        clusterbody.withInstance(instanceCluster)
            .withDatastore(datastoreCluster)
            .withName("cluster-name")
            .withInstanceNum(3)
            .withBackupStrategy(backupStrategyCluster)
            .withHttpsEnable(true)
            .withAuthorityEnable(true)
            .withAdminPwd("{password}")
            .withEnterpriseProjectId("0")
            .withTags(listClusterTags)
            .withPayInfo(payInfoCluster);
        body.withCluster(clusterbody);
        request.withBody(body);
        try {
            CreateClusterResponse response = client.createCluster(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;

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

public class CreateClusterSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateClusterRequest request = new CreateClusterRequest();
        CreateClusterReq body = new CreateClusterReq();
```

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```
        List<CreateClusterTagsBody> listClusterTags = new ArrayList<>();
        listClusterTags.add(
            new CreateClusterTagsBody()
                .withKey("k1")
                .withValue("v1")
        );
        listClusterTags.add(
            new CreateClusterTagsBody()
                .withKey("k2")
                .withValue("v2")
        );
        CreateClusterBackupStrategyBody backupStrategyCluster = new
CreateClusterBackupStrategyBody();
        backupStrategyCluster.withPeriod("16:00 GMT+08:00")
            .withPrefix("snapshot")
            .withKeepday(7)
            .withFrequency("DAY")
            .withBucket("css-obs-backup")
            .withBasePath("css_repository/obs-path")
            .withAgency("css_obs_agency")
            .withMaxSnapshotBytesPerSeconds("40")
            .withMaxRestoreBytesPerSeconds("40");
        CreateClusterDatastoreBody datastoreCluster = new CreateClusterDatastoreBody();
        datastoreCluster.withVersion("{cluster-version}")
            .withType("elasticsearch");
        CreateClusterInstanceNicsBody nicsInstance = new CreateClusterInstanceNicsBody();
        nicsInstance.withVpcId("{VPC ID}")
            .withNetId("{NET ID}")
            .withSecurityGroupId("{Security group ID}");
        CreateClusterInstanceVolumeBody volumeInstance = new CreateClusterInstanceVolumeBody();
        volumeInstance.withVolumeType("COMMON")
            .withSize(120);
        CreateClusterInstanceBody instanceCluster = new CreateClusterInstanceBody();
        instanceCluster.withFlavorRef("ess.spec-4u16g")
            .withVolume(volumeInstance)
            .withNics(nicsInstance)
            .withAvailabilityZone("{AZ CODE}");
        CreateClusterBody clusterbody = new CreateClusterBody();
        clusterbody.withInstance(instanceCluster)
            .withDatastore(datastoreCluster)
            .withName("cluster-name")
            .withInstanceNum(3)
            .withBackupStrategy(backupStrategyCluster)
            .withHttpsEnable(true)
            .withAuthorityEnable(true)
            .withAdminPwd("{password}")
            .withEnterpriseProjectId("0")
            .withTags(listClusterTags);
        body.withCluster(clusterbody);
        request.withBody(body);
        try {
            CreateClusterResponse response = client.createCluster(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

- Example request for creating a yearly/monthly cluster.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateClusterRequest()
        payInfoCluster = PayInfoBody(
            pay_model=2,
            period=1,
            is_auto_renew=1,
            is_auto_pay=1
        )
        listTagsCluster = [
            CreateClusterTagsBody(
                key="k1",
                value="v1"
            ),
            CreateClusterTagsBody(
                key="k2",
                value="v2"
            )
        ]
        backupStrategyCluster = CreateClusterBackupStrategyBody(
            period="16:00 GMT+08:00",
            prefix="snapshot",
            keepday=7,
            frequency="DAY",
            bucket="css-obs-backup",
            base_path="css_repository/obs-path",
            agency="css_obs_agency",
            max_snapshot_bytes_per_seconds="40",
            max_restore_bytes_per_seconds="40"
        )
        datastoreCluster = CreateClusterDatastoreBody(
            version="{cluster-version}",
            type="elasticsearch"
        )
        nicsInstance = CreateClusterInstanceNicsBody(
            vpc_id="{VPC ID}",
            net_id="{NET ID}",
            security_group_id="{Security group ID}"
        )
        volumeInstance = CreateClusterInstanceVolumeBody(
            volume_type="COMMON",
```

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```
            size=120
        )
        instanceCluster = CreateClusterInstanceBody(
            flavor_ref="ess.spec-4u16g",
            volume=volumeInstance,
            nics=nicsInstance,
            availability_zone="{AZ CODE}"
        )
        clusterbody = CreateClusterBody(
            instance=instanceCluster,
            datastore=datastoreCluster,
            name="cluster-name",
            instance_num=3,
            backup_strategy=backupStrategyCluster,
            https_enable=True,
            authority_enable=True,
            admin_pwd="{password}",
            enterprise_project_id="0",
            tags=listTagsCluster,
            pay_info=payInfoCluster
        )
        request.body = CreateClusterReq(
            cluster=clusterbody
        )
        response = client.create_cluster(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateClusterRequest()
        listTagsCluster = [
            CreateClusterTagsBody(
                key="k1",
                value="v1"
            ),
            CreateClusterTagsBody(
                key="k2",
                value="v2"
            )
```

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```
        ]
        backupStrategyCluster = CreateClusterBackupStrategyBody(
            period="16:00 GMT+08:00",
            prefix="snapshot",
            keepday=7,
            frequency="DAY",
            bucket="css-obs-backup",
            base_path="css_repository/obs-path",
            agency="css_obs_agency",
            max_snapshot_bytes_per_seconds="40",
            max_restore_bytes_per_seconds="40"
        )
        datastoreCluster = CreateClusterDatastoreBody(
            version="{cluster-version}",
            type="elasticsearch"
        )
        nicsInstance = CreateClusterInstanceNicsBody(
            vpc_id="{VPC ID}",
            net_id="{NET ID}",
            security_group_id="{Security group ID}"
        )
        volumeInstance = CreateClusterInstanceVolumeBody(
            volume_type="COMMON",
            size=120
        )
        instanceCluster = CreateClusterInstanceBody(
            flavor_ref="ess.spec-4u16g",
            volume=volumeInstance,
            nics=nicsInstance,
            availability_zone="{AZ CODE}"
        )
        clusterbody = CreateClusterBody(
            instance=instanceCluster,
            datastore=datastoreCluster,
            name="cluster-name",
            instance_num=3,
            backup_strategy=backupStrategyCluster,
            https_enable=True,
            authority_enable=True,
            admin_pwd="{password}",
            enterprise_project_id="0",
            tags=listTagsCluster
        )
        request.body = CreateClusterReq(
            cluster=clusterbody
        )
        response = client.create_cluster(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- Example request for creating a yearly/monthly cluster.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
```

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```
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateClusterRequest{}
    isAutoRenewPayInfo:= int32(1)
    isAutoPayPayInfo:= int32(1)
    payInfoCluster := &model.PayInfoBody{
        PayModel: int32(2),
        Period: int32(1),
        IsAutoRenew: &isAutoRenewPayInfo,
        IsAutoPay: &isAutoPayPayInfo,
    }
    var listTagsCluster = []model.CreateClusterTagsBody{
        {
            Key: "k1",
            Value: "v1",
        },
        {
            Key: "k2",
            Value: "v2",
        },
    }
    frequencyBackupStrategy:= "DAY"
    bucketBackupStrategy:= "css-obs-backup"
    basePathBackupStrategy:= "css_repository/obs-path"
    agencyBackupStrategy:= "css_obs_agency"
    maxSnapshotBytesPerSecondsBackupStrategy:= "40"
    maxRestoreBytesPerSecondsBackupStrategy:= "40"
    backupStrategyCluster := &model.CreateClusterBackupStrategyBody{
        Period: "16:00 GMT+08:00",
        Prefix: "snapshot",
        Keepday: int32(7),
        Frequency: &frequencyBackupStrategy,
        Bucket: &bucketBackupStrategy,
        BasePath: &basePathBackupStrategy,
        Agency: &agencyBackupStrategy,
        MaxSnapshotBytesPerSeconds: &maxSnapshotBytesPerSecondsBackupStrategy,
        MaxRestoreBytesPerSeconds: &maxRestoreBytesPerSecondsBackupStrategy,
    }
    datastoreCluster := &model.CreateClusterDatastoreBody{
        Version: "{cluster-version}",
        Type: "elasticsearch",
    }
    nicsInstance := &model.CreateClusterInstanceNicsBody{
        VpcId: "{VPC ID}",
        NetId: "{NET ID}",
        SecurityGroupId: "{Security group ID}",
    }
    volumeInstance := &model.CreateClusterInstanceVolumeBody{
        VolumeType: "COMMON",
        Size: int32(120),
```

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```
    }
    availabilityZoneInstance:= "{AZ CODE}"
    instanceCluster := &model.CreateClusterInstanceBody{
        FlavorRef: "ess.spec-4u16g",
        Volume: volumeInstance,
        Nics: nicsInstance,
        AvailabilityZone: &availabilityZoneInstance,
    }
    httpsEnableCluster:= true
    authorityEnableCluster:= true
    adminPwdCluster:= "{password}"
    enterpriseProjectIdCluster:= "0"
    clusterbody := &model.CreateClusterBody{
        Instance: instanceCluster,
        Datastore: datastoreCluster,
        Name: "cluster-name",
        InstanceNum: int32(3),
        BackupStrategy: backupStrategyCluster,
        HttpsEnable: &httpsEnableCluster,
        AuthorityEnable: &authorityEnableCluster,
        AdminPwd: &adminPwdCluster,
        EnterpriseProjectId: &enterpriseProjectIdCluster,
        Tags: &listTagsCluster,
        PayInfo: payInfoCluster,
    }
    request.Body = &model.CreateClusterReq{
        Cluster: clusterbody,
    }
    response, err := client.CreateCluster(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

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

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
request := &model.CreateClusterRequest{}
var listTagsCluster = []model.CreateClusterTagsBody{
    {
        Key: "k1",
        Value: "v1",
    },
    {
        Key: "k2",
        Value: "v2",
    },
}
frequencyBackupStrategy:= "DAY"
bucketBackupStrategy:= "css-obs-backup"
basePathBackupStrategy:= "css_repository/obs-path"
agencyBackupStrategy:= "css_obs_agency"
maxSnapshotBytesPerSecondsBackupStrategy:= "40"
maxRestoreBytesPerSecondsBackupStrategy:= "40"
backupStrategyCluster := &model.CreateClusterBackupStrategyBody{
    Period: "16:00 GMT+08:00",
    Prefix: "snapshot",
    Keepday: int32(7),
    Frequency: &frequencyBackupStrategy,
    Bucket: &bucketBackupStrategy,
    BasePath: &basePathBackupStrategy,
    Agency: &agencyBackupStrategy,
    MaxSnapshotBytesPerSeconds: &maxSnapshotBytesPerSecondsBackupStrategy,
    MaxRestoreBytesPerSeconds: &maxRestoreBytesPerSecondsBackupStrategy,
}
datastoreCluster := &model.CreateClusterDatastoreBody{
    Version: "{cluster-version}",
    Type: "elasticsearch",
}
nicsInstance := &model.CreateClusterInstanceNicsBody{
    VpcId: "{VPC ID}",
    NetId: "{NET ID}",
    SecurityGroupId: "{Security group ID}",
}
volumeInstance := &model.CreateClusterInstanceVolumeBody{
    VolumeType: "COMMON",
    Size: int32(120),
}
availabilityZoneInstance:= "{AZ CODE}"
instanceCluster := &model.CreateClusterInstanceBody{
    FlavorRef: "ess.spec-4u16g",
    Volume: volumeInstance,
    Nics: nicsInstance,
    AvailabilityZone: &availabilityZoneInstance,
}
httpsEnableCluster:= true
authorityEnableCluster:= true
adminPwdCluster:= "{password}"
enterpriseProjectIdCluster:= "0"
clusterbody := &model.CreateClusterBody{
    Instance: instanceCluster,
    Datastore: datastoreCluster,
    Name: "cluster-name",
    InstanceNum: int32(3),
    BackupStrategy: backupStrategyCluster,
    HttpsEnable: &httpsEnableCluster,
    AuthorityEnable: &authorityEnableCluster,
    AdminPwd: &adminPwdCluster,
    EnterpriseProjectId: &enterpriseProjectIdCluster,
    Tags: &listTagsCluster,
}
request.Body = &model.CreateClusterReq{
    Cluster: clusterbody,
}
response, err := client.CreateCluster(request)
if err == nil {
```

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.1.2 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.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-14 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to scale out. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-15 Request body parameters

Parameter	Mandatory	Type	Description
grow	Yes	Array of **RoleExtendGrowReq** objects	**Definition**: Detailed description about the cluster scale-out request. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
is_auto_pay	No	Integer	**Definition**: Whether to enable automatic payment from your Huawei Cloud account. **Constraints**: This parameter takes effect only for yearly/monthly clusters. **Value range**: ● 1: Yes. (Discounts and coupons are automatically selected. The fee will be automatically deducted from your Huawei Cloud account.) If the automatic payment fails, an unpaid order will be generated, and you need to manually complete the payment. (During manual payment, you can still modify the discounts and coupons that were automatically selected.) ● 0: No. (The customer needs to manually pay for the bill. Discounts and coupons can be used.) **Default value**: 0

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Table 5-16 RoleExtendGrowReq

Parameter	Mandatory	Type	Description
type	Yes	String	**Definition**: Type of the instance to be scaled out. **Constraints**: You can only add instances, rather than increase storage capacity, on nodes of the **ess-master** and **ess-client** types. **Value range**: • **ess**: data node • **ess-master**: master node • **ess-client**: client node • **ess-cold**: cold data node You can select multiple node types, but cannot select the same node for different roles. **Default value**: N/A
nodesize	Yes	Integer	**Definition**: Number of instances you want to add. **Constraints**: After scaling, the number of nodes of each type must meet the following requirements: • Data nodes: If the cluster does not have master nodes, the value ranges from 1 to 32. Otherwise, the value ranges from 1 to 200. • Master nodes: 3, 5, 7, or 9 (must be an odd number from 3 to 9) • Client nodes: 1 to 32. • Cold data nodes: 1 to 32. **Value range**: See Constraints. **Default value**: N/A

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Parameter	Mandatory	Type	Description
disksize	Yes	Integer	**Definition**: Storage capacity to be added, in GB **Constraints**: The sum of the original instance storage capacity plus the expanded instance storage capacity cannot exceed the default upper limit of storage capacity set during cluster creation. If there is no need to add more instances, set this parameter to 0. With a yearly/monthly cluster, you cannot change the number of nodes and disk capacity at the same time. **Value range**: • The scale-out step of ESS and ESS-cold nodes is 20. • Storage capacity of ess-master and ess-client nodes cannot be expanded. **Default value**: N/A

Response Parameters

Status code: 200

Table 5-17 Response body parameters

Parameter	Type	Description
id	String	**Definition**: Cluster ID. **Value range**: N/A

Example Requests

Change the number of instances and storage capacity of the current cluster.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/role_extend
```

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```
{
  "grow" : [ {
    "type" : "ess-master",
    "nodesize" : 2,
    "disksize" : 0
  }, {
    "type" : "ess",
    "nodesize" : 0,
    "disksize" : 40
  }, {
    "type" : "ess-client",
    "nodesize" : 1,
    "disksize" : 0
  }, {
    "type" : "ess-cold",
    "nodesize" : 1,
    "disksize" : 0
  } ],
  "is_auto_pay" : 1
}
```

Example Responses

Status code: 200

Request succeeded.

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

SDK Sample Code

The SDK sample code is as follows.

Java

Change the number of instances and storage capacity of the current cluster.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;

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

public class UpdateExtendInstanceStorageSolution {

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

        ICredential auth = new BasicCredentials()
```

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```
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

    CssClient client = CssClient.newBuilder()
            .withCredential(auth)
            .withRegion(CssRegion.valueOf("<YOUR REGION>"))
            .build();
    UpdateExtendInstanceStorageRequest request = new UpdateExtendInstanceStorageRequest();
    request.withClusterId("{cluster_id}");
    RoleExtendReq body = new RoleExtendReq();
    List<RoleExtendGrowReq> listbodyGrow = new ArrayList<>();
    listbodyGrow.add(
        new RoleExtendGrowReq()
            .withType("ess-master")
            .withNodesize(2)
            .withDisksize(0)
    );
    listbodyGrow.add(
        new RoleExtendGrowReq()
            .withType("ess")
            .withNodesize(0)
            .withDisksize(40)
    );
    listbodyGrow.add(
        new RoleExtendGrowReq()
            .withType("ess-client")
            .withNodesize(1)
            .withDisksize(0)
    );
    listbodyGrow.add(
        new RoleExtendGrowReq()
            .withType("ess-cold")
            .withNodesize(1)
            .withDisksize(0)
    );
    body.withIsAutoPay(1);
    body.withGrow(listbodyGrow);
    request.withBody(body);
    try {
        UpdateExtendInstanceStorageResponse response = client.updateExtendInstanceStorage(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
  }
}
```

Python

Change the number of instances and storage capacity of the current cluster.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

if __name__ == "__main__":
```

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```
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateExtendInstanceStorageRequest()
        request.cluster_id = "{cluster_id}"
        listGrowbody = [
            RoleExtendGrowReq(
                type="ess-master",
                nodesize=2,
                disksize=0
            ),
            RoleExtendGrowReq(
                type="ess",
                nodesize=0,
                disksize=40
            ),
            RoleExtendGrowReq(
                type="ess-client",
                nodesize=1,
                disksize=0
            ),
            RoleExtendGrowReq(
                type="ess-cold",
                nodesize=1,
                disksize=0
            )
        ]
        request.body = RoleExtendReq(
            is_auto_pay=1,
            grow=listGrowbody
        )
        response = client.update_extend_instance_storage(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Change the number of instances and storage capacity of the current cluster.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
```

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```
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateExtendInstanceStorageRequest{}
    request.ClusterId = "{cluster_id}"
    var listGrowbody = []model.RoleExtendGrowReq{
        {
            Type: "ess-master",
            Nodesize: int32(2),
            Disksize: int32(0),
        },
        {
            Type: "ess",
            Nodesize: int32(0),
            Disksize: int32(40),
        },
        {
            Type: "ess-client",
            Nodesize: int32(1),
            Disksize: int32(0),
        },
        {
            Type: "ess-cold",
            Nodesize: int32(1),
            Disksize: int32(0),
        },
    }
    isAutoPayRoleExtendReq:= int32(1)
    request.Body = &model.RoleExtendReq{
        IsAutoPay: &isAutoPayRoleExtendReq,
        Grow: listGrowbody,
    }
    response, err := client.UpdateExtendInstanceStorage(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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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**.

5.1.3 Querying the Cluster List

Function

This API is used to query the cluster list and cluster status, including cluster nodes, Kibana public network access information, public network IP address, and IPv4 address and port number for private network access. After a cluster is created, check the cluster information and update the cluster in a timely manner.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1.0/{project_id}/clusters

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Table 5-18 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

Table 5-19 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	**Definition**: The start value of the query. **Constraints**: N/A **Value range**: 1-1000 **Default value**: The default value is 1, indicating that the query starts from the first cluster.
limit	No	Integer	**Definition**: Number of clusters to be queried. **Constraints**: N/A **Value range**: 1-1000 **Default value**: The default value is 10, indicating that 10 clusters are queried at a time.

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Parameter	Mandatory	Type	Description
datastoreType	No	String	**Definition**: Cluster engine type. **Constraints**: N/A **Value range**: • elasticsearch: Provides distributed search capabilities, log analytics, reporting, and semantic search based on open-source Elasticsearch. • logstash: Provides functions such as data ingestion, transformation, cleaning, and parsing based on open-source Logstash. • opensearch: Provides distributed search, log analytics, reporting, and semantic search based on open-source OpenSearch. It is the future version of CSS's Elasticsearch clusters. • When this parameter is left blank, all types of clusters are queried. **Default value**: The default value is empty.

Request Parameters

None

Response Parameters

Status code: 200

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Table 5-20 Response body parameters

Parameter	Type	Description
totalSize	Integer	**Definition**: Number of clusters. If datastoreType is specified, the number of clusters of the specified type is displayed. Otherwise, the number of all clusters is displayed. **Value range**: N/A
clusters	Array of **ClusterList** objects	**Definition**: Cluster object list. **Value range**: N/A

Table 5-21 ClusterList

Parameter	Type	Description
datastore	**ClusterListDatastore** object	**Definition**: Cluster data search engine type. **Value range**: N/A
snapshotPolicy	**SnapshotPolicyResp** object	**Definition**: Information about an automatic snapshot creation policy. **Value range**: N/A
instances	Array of **ClusterListInstances** objects	**Definition**: Cluster node list. **Value range**: N/A
publicKibanaResp	**publicKibanaRespBody** object	**Definition**: Kibana public network access information. **Value range**: N/A

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Parameter	Type	Description
elbWhiteList	elbWhiteListResp object	**Definition**: Public network access control information. **Value range**: N/A
updated	String	**Definition**: Time when the cluster was last modified. **Value range**: The format is CCYY-MM-DDThh:mm:ss (ISO 8601).
name	String	**Definition**: Cluster name. **Value range**: N/A
publicIp	String	**Definition**: Public IP address information. **Value range**: N/A
created	String	**Definition**: Cluster creation time. The returned cluster list is sorted by creation time in descending order. The latest cluster is displayed at the top. **Value range**: The format is CCYY-MM-DDThh:mm:ss (ISO 8601).
id	String	**Definition**: Cluster ID. **Value range**: N/A
status	String	**Definition**: Cluster status. **Value range**: • **100**: creating • **200**: available • **300**: unavailable • **303**: creation failed

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Parameter	Type	Description
endpoint	String	**Definition**: IPv4 address and port number accessed from the cluster's private network. [If the cluster type is KooSearch, this field indicates the internal address and port number for accessing the knowledge management service.] (tag:white) **Value range**: N/A
vpcId	String	**Definition**: VPC ID. **Value range**: N/A
subnetId	String	**Definition**: Current subnet of a cluster. The subnet is used for adding nodes, including scaling, adding dedicated master/client nodes, and enabling VPC Endpoint. IP addresses will be allocated to newly added nodes from the new subnet. **Value range**: N/A
securityGroupId	String	**Definition**: Security group ID. **Value range**: N/A
bandwidthSize	Integer	**Definition**: Public network bandwidth. Unit (Mbit/s). **Value range**: N/A
httpsEnable	Boolean	**Definition**: Whether HTTPS access is enabled. **Value range**: • false: HTTPS access is disabled. • true: HTTPS access is enabled.

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Parameter	Type	Description
authorityEnable	Boolean	**Definition**: Whether to enable security mode-based authentication for the cluster. **Value range**: ● true: Enable security mode-based authentication. ● false: Disable security mode-based authentication.
diskEncrypted	Boolean	**Definition**: Whether disk encryption is enabled. To enable it, submit a service ticket. **Value range**: ● **true**: Disks are encrypted. ● **false**: Disk are not encrypted.
backupAvailable	Boolean	**Definition**: Whether to enable cluster snapshots. **Value range**: ● true: Cluster snapshots are enabled. ● false: Cluster snapshots are disabled.
actionProgress	Object	**Definition**: Cluster behavior progress, which shows the progress of cluster creation and scaling in percentage. **CREATING** indicates the progress of creation. **Value range**: N/A
actions	Array of strings	**Definition**: Current behavior of a cluster. **Value range**: ● REBOOTING ● GROWING ● RESTORING: The cluster is being restored. ● SNAPSHOTTING: A snapshot is being created.

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Parameter	Type	Description
enterpriseProjectId	String	**Definition**: ID of the enterprise project that a cluster belongs. If the user of the cluster has not enabled the enterprise project, the setting of this parameter is not returned. **Value range**: N/A
tags	Array of **ClusterListTags** objects	**Definition**: Cluster tags. **Value range**: N/A
failedReason	**ClusterListFailedReasons** object	**Definition**: Cluster failure cause. If the cluster status is available, this parameter is not returned. **Value range**: N/A
period	Boolean	**Definition**: Whether a cluster is billed on the yearly/monthly mode. **Value range**: • true: The cluster is billed on a yearly/monthly basis. • false: The cluster is billed pay-per-use.
bandwidthResourceId	String	**Definition**: ID of the Elasticsearch resource accessible from the public network. **Value range**: N/A
ipv6Endpoint	String	**Definition**: IPv6 address and port number accessed from the cluster's private network. **Value range**: N/A

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Parameter	Type	Description
cmkId	String	**Definition**: Encryption key ID used by the current cluster. **Value range**: N/A
currentSubnetIds	String	**Definition**: Subnets used by all nodes in the cluster. If there are multiple subnets (two at most), separate them with a comma (,). **Value range**: N/A
desc	String	

Table 5-22 ClusterListDatastore

Parameter	Type	Description
type	String	**Definition**: Cluster engine type. **Value range**: • elasticsearch: Elasticsearch cluster. • logstash: Logstash cluster. • opensearch: OpenSearch cluster.
version	String	**Definition**: Cluster engine version. **Value range**: For details, see the supported versions in **Before You Start**.
supportSecurity-mode	Boolean	**Definition**: Whether the cluster supports the security mode. **Value range**: • **true**: supported. • **false**: not supported.
subVersion	String	**Definition**: Cluster image version. **Value range**: N/A

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Parameter	Type	Description
isEosCluster	Boolean	**Definition**: Whether the cluster image version has reached EOS. **Value range**: • true: yes. • false: no.

Table 5-23 SnapshotPolicyResp

Parameter	Type	Description
backupEnable	Boolean	**Definition**: Whether to enable automatic snapshots for the cluster. **Value range**: • **true**: Yes • **false**: No
bakPeriod	String	**Definition**: Snapshot creation time. **Value range**: N/A
bakFrequency	String	**Definition**: Snapshot creation interval. **Value range**: • DAY: every day • MON: every Monday • TUR: every Tuesday • WED: every Wednesday • THU: every Thursday • FRI: every Friday • SAT: every Saturday • SUN: every Sunday • HOUR: every hour
bakKeepDay	Integer	**Definition**: Number of retained snapshots. **Value range**: N/A

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Table 5-24 ClusterListInstances

Parameter	Type	Description
status	String	**Definition**: Cluster node status. **Value range**: • **100**: creating • **200**: available • **303**: unavailable, for example, due to a creation failure.
type	String	**Definition**: Type of the current node. **Value range**: N/A
id	String	**Definition**: Instance ID. **Value range**: N/A
name	String	**Definition**: Instance name. **Value range**: N/A
specCode	String	**Definition**: Node flavor name. **Value range**: N/A
azCode	String	**Definition**: AZ of the node. **Value range**: N/A
ip	String	**Definition**: Instance IP address. **Value range**: N/A
volume	**ClusterVolumeRsp** object	**Definition**: Instance disk information. **Value range**: N/A

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Parameter	Type	Description
resourceId	String	**Definition**: Instance resource ID. **Value range**: N/A
subnetId	String	**Definition**: Subnet ID of the current node. **Value range**: N/A

Table 5-25 ClusterVolumeRsp

Parameter	Type	Description
type	String	**Definition**: Instance disk type. **Value range**: N/A
size	Integer	**Definition**: Instance disk size. **Value range**: N/A
resourceIds	Array of strings	**Definition**: Instance disk resource ID. **Value range**: N/A

Table 5-26 publicKibanaRespBody

Parameter	Type	Description
eipSize	Integer	**Definition**: The bandwidth size in Mbit/s. **Value range**: N/A

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Parameter	Type	Description
elbWhiteListResp	**kibanaElbWhiteListResp** object	**Definition**: Kibana public network access control information. **Value range**: N/A
publicKibanaIp	String	**Definition**: Specifies the IP address for accessing Kibana. **Value range**: N/A
bandwidthResourceId	String	**Definition**: Resource ID corresponding to the Kibana public network. **Value range**: N/A

Table 5-27 kibanaElbWhiteListResp

Parameter	Type	Description
enableWhiteList	Boolean	**Definition**: Whether to enable Kibana access control. **Value range**: • **true**: Access control is enabled. • **false**: Access control is disabled.
whiteList	String	**Definition**: Whitelist for Kibana public network access. **Value range**: N/A

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Table 5-28 elbWhiteListResp

Parameter	Type	Description
enableWhiteList	Boolean	**Definition**: Whether to enable public network access control via ELB. If a whitelist is set, only IP addresses on the whitelist can access the cluster. If no whitelist is set, all IP addresses can access the cluster. **Value range**: • **true**: Public network access control is enabled. • **false**: Public network access control is disabled.
whiteList	String	**Definition**: Whitelist for public network access. **Value range**: N/A

Table 5-29 ClusterListTags

Parameter	Type	Description
key	String	**Definition**: Tag key. **Value range**: N/A
value	String	**Definition**: Tag value. **Value range**: N/A

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Table 5-30 ClusterListFailedReasons

Parameter	Type	Description
errorCode	String	**Parameter description**: Error code. **Options**: • **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	**Definition**: Error details. **Value range**: N/A

Example Requests

- Querying the First Two Clusters

```
- Method 1: GET https://{Endpoint}/v1.0/{project_id}/clusters?start=1&limit=2
- Method 2: GET https://{Endpoint}/v1.0/{project_id}/clusters?limit=2
```

- Querying the First 10 Clusters

```
- Method 1: GET https://{Endpoint}/v1.0/{project_id}/clusters?start=1&limit=10
- Method 2: GET https://{Endpoint}/v1.0/{project_id}/clusters?limit=10
```

Example Responses

Status code: 200

Request succeeded. This is only an example. The responses to the four requests are similar. In the example, there is only one cluster list.

```
{
  "totalSize" : 1,
  "clusters" : [ {
    "datastore" : {
      "type" : "elasticsearch",
      "version" : "7.10.2",
      "subVersion" : "7.10.2_24.3.0_0827",
      "isEosCluster" : false,
      "supportSecuritymode" : false
    },
    "instances" : [ {
      "status" : "200",
      "type" : "ess",
      "id" : "{INSTANCE_ID}",
      "name" : "css-8bc5-ess-esn-1-1",
```

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```
      "specCode" : "ess.spec-4u8g",
      "azCode" : "{AZ_CODE}",
      "volume" : {
        "type" : "ULTRAHIGH",
        "size" : 40,
        "resourceIds" : [ "{RESOURCE_ID}" ]
      },
      "ip" : "192.168.0.122",
      "resourceId" : "{RESOURCE_ID}",
      "subnetId" : "{SUBNET_ID}"
    } ],
    "publicKibanaResp" : {
      "eipSize" : 10,
      "publicKibanaIp" : "100.95.152.28:9200",
      "bandwidthResourceId" : "18bec13f-5cc1-4631-867f-33505d15be12"
    },
    "elbWhiteList" : {
      "whiteList" : "",
      "enableWhiteList" : false
    },
    "updated" : "2023-10-09T02:07:13",
    "name" : "css-8bc5",
    "publicIp" : "100.85.222.202",
    "created" : "2023-10-09T02:07:13",
    "id" : "{CLUSTER_ID}",
    "status" : "200",
    "endpoint" : "192.168.0.122:9200",
    "vpcId" : "{VPC_ID}",
    "subnetId" : "{SUBNET_ID}",
    "currentSubnetIds" : "{SUBNET_ID}",
    "securityGroupId" : "{SECURITY_GROUP_ID}",
    "bandwidthResourceId" : "{BANDWIDTH_RESOURCE_ID}",
    "bandwidthSize" : 3,
    "httpsEnable" : true,
    "authorityEnable" : true,
    "diskEncrypted" : false,
    "backupAvailable" : false,
    "actionProgress" : { },
    "actions" : [ ],
    "enterpriseProjectId" : "0",
    "tags" : [ ],
    "period" : true
  } ]
}
```


SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListClustersDetailsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
```

```
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListClustersDetailsRequest request = new ListClustersDetailsRequest();
        try {
            ListClustersDetailsResponse response = client.listClustersDetails(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListClustersDetailsRequest()
        response = client.list_clusters_details(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

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

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded. This is only an example. The responses to the four requests are similar. In the example, there is only one cluster list.
400	Invalid request. Modify the request before retry.

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

Error Codes

See **Error Codes**.

5.1.4 Adding Independent Masters and Clients

Function

This API is used to add dedicated master and client nodes to an existing cluster that previously does not have such nodes.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/type/{type}/independent

Table 5-31 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster that needs an independent master or client. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
type	Yes	String	**Parameter description**: Types of dedicated nodes to add. **Constraints**: N/A **Options**: • **ess-master**: master node • **ess-client**: client node **Default value**: N/A

Request Parameters

Table 5-32 Request body parameters

Parameter	Mandatory	Type	Description
type	Yes	**IndependentTypeReq** object	**Definition**: Master/Client request body parameter. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
is_auto_pay	No	Integer	**Definition**: Whether to enable automatic payment from your Huawei Cloud account. **Constraints**: This parameter takes effect only for yearly/monthly clusters. **Value range**: ● 1: Yes. (Discounts and coupons are automatically selected. The fee will be automatically deducted from your Huawei Cloud account.) If the automatic payment fails, an unpaid order will be generated, and you need to manually complete the payment. (During manual payment, you can still modify the discounts and coupons that were automatically selected.) ● 0: No. (The customer needs to manually pay for the bill. Discounts and coupons can be used.) **Default value**: 0

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Table 5-33 IndependentTypeReq

Parameter	Mandatory	Type	Description
flavor_ref	Yes	String	**Definition**: Flavor ID. **Constraints**: N/A **Value range**: You can obtain the value of this parameter by calling the API for **Obtaining the Instance Specifications List**. Select the flavor ID suitable for your cluster version. **Default value**: N/A
node_size	Yes	Integer	**Definition**: Number of nodes. **Constraints**: N/A **Value range**: • If the node type is ess-master, the number of nodes must be an odd number in the range 3 to 10. • If the node type is ess-client, the number of nodes must be in the range 1 to 32. **Default value**: N/A
volume_type	Yes	String	**Parameter description**: Node storage type. **Constraints**: N/A **Options**: • **COMMON**: common I/O • **HIGH**: high I/O • **ULTRAHIGH**: ultra-high I/O • **ESSD**: ultra-fast SSD **Default value**: N/A

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Response Parameters

Status code: 200

Table 5-34 Response body parameters

Parameter	Type	Description
id	String	**Definition**: Cluster ID. **Value range**: N/A

Example Requests

Add independent master and client nodes.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/type/ess-client/independent

{
  "type" : {
    "flavor_ref" : "d9dc06ae-b9c4-4ef4-acd8-953ef4205e27",
    "node_size" : 3,
    "volume_type" : "COMMON"
  }
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "320afa24-ff2a-4f44-8460-6ba95e512ad4"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Add independent master and client nodes.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
```

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```
import com.huaweicloud.sdk.css.v1.model.*;


public class AddIndependentNodeSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        AddIndependentNodeRequest request = new AddIndependentNodeRequest();
        request.withClusterId("{cluster_id}");
        request.withType("{type}");
        IndependentReq body = new IndependentReq();
        IndependentBodyReq typebody = new IndependentBodyReq();
        typebody.withFlavorRef("d9dc06ae-b9c4-4ef4-acd8-953ef4205e27")
            .withNodeSize(3)
            .withVolumeType("COMMON");
        body.withType(typebody);
        request.withBody(body);
        try {
            AddIndependentNodeResponse response = client.addIndependentNode(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Add independent master and client nodes.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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```
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddIndependentNodeRequest()
        request.cluster_id = "{cluster_id}"
        request.type = "{type}"
        typebody = IndependentBodyReq(
            flavor_ref="d9dc06ae-b9c4-4ef4-acd8-953ef4205e27",
            node_size=3,
            volume_type="COMMON"
        )
        request.body = IndependentReq(
            type=typebody
        )
        response = client.add_independent_node(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Add independent master and client nodes.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.AddIndependentNodeRequest{}
    request.ClusterId = "{cluster_id}"
```

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```
    request.Type = "{type}"
    typebody := &model.IndependentBodyReq{
        FlavorRef: "d9dc06ae-b9c4-4ef4-acd8-953ef4205e27",
        NodeSize: int32(3),
        VolumeType: "COMMON",
    }
    request.Body = &model.IndependentReq{
        Type: typebody,
    }
    response, err := client.AddIndependentNode(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
403	Request rejected. The server has received the request and understood it, but refused to respond to it. The client should not repeat the request without modifications.
500	The server has received the request but could not understand it.

Error Codes

See **Error Codes**.

5.1.5 Querying Cluster Details

Function

This API is used to query and display details about a single cluster, including the cluster's search type, node list, network information, cluster name, cluster ID, and cluster status, so that you can check whether the created cluster meets your expectation. You can also log in to the Huawei Cloud official website, access the CSS console, and obtain the cluster's private IP address, public IP address, version, and node information on the cluster information page.

Calling Method

For details, see **Calling APIs**.

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URI

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

Table 5-35 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

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Table 5-36 Response body parameters

Parameter	Type	Description
datastore	**ClusterDetailDatastore** object	**Definition**: Cluster data search engine type. **Value range**: N/A
instances	Array of **ClusterDetailInstances** objects	**Definition**: List of node objects. **Value range**: N/A
publicKibanaResp	**publicKibanaRespBody** object	**Definition**: Kibana public network access information. **Value range**: N/A
elbWhiteList	**elbWhiteListResp** object	**Definition**: Kibana public network access control information. **Value range**: N/A
updated	String	**Definition**: Time when the cluster was last modified. **Value range**: The format is CCYY-MM-DDThh:mm:ss (ISO 8601).
name	String	**Definition**: Cluster name. **Value range**: N/A
publicIp	String	**Definition**: Public IP address and port number. **Value range**: N/A
created	String	**Definition**: Time when a cluster was created. **Value range**: The format is CCYY-MM-DDThh:mm:ss (ISO 8601).

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Parameter	Type	Description
id	String	**Definition**: Cluster ID. **Value range**: N/A
status	String	**Parameter description**: Cluster status. **Options**: **100**: An operation, such as creation, is in progress. • **200**: Available • **303**: unavailable, for example, due to a creation failure.
endpoint	String	**Definition**: IPv4 address and port number accessed from the cluster's private network. [If the cluster type is KooSearch, this field indicates the internal address and port number for accessing the knowledge management service.] (tag:white) **Value range**: N/A
vpcId	String	**Definition**: VPC ID. **Value range**: N/A
subnetId	String	**Definition**: Current subnet of a cluster. This subnet is used to add nodes, including scaling, adding dedicated master/client nodes, and enabling the VPC Endpoint service. IP addresses will be allocated to newly added nodes from the current subnet. **Value range**: N/A
securityGroupId	String	**Definition**: Security group ID. **Value range**: N/A

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Parameter	Type	Description
vpcepIp	String	**Definition**: VPC endpoint IP address. **Value range**: N/A
vpcepIpv6Address	String	**Definition**: IPv6 address of the VPC endpoint. **Value range**: N/A
bandwidthSize	Integer	**Definition**: Public network bandwidth, in Mbit/s. **Value range**: N/A
httpsEnable	Boolean	**Parameter description**: Communication encryption status. **Options**: • **false**: Communication encryption is not enabled. • **true**: Communication encryption is enabled.
diskEncrypted	Boolean	**Parameter description**: Whether disks are encrypted. **Options**: • **true**: Disks are encrypted. • **false**: Disk are not encrypted.
authorityEnable	Boolean	**Definition**: Whether to enable security mode-based authentication for the cluster. **Value range**: • true: Enable security mode-based authentication. • false: Disable security mode-based authentication.

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Parameter	Type	Description
backupAvailable	Boolean	**Definition**: Whether snapshot is enabled. **Value range**: • **true**: The snapshot function is enabled. • **false**: The snapshot function is disabled.
actionProgress	Object	**Definition**: Cluster behavior progress, which shows the progress of cluster creation and scaling in percentage. **Value range**: N/A
actions	Array of strings	**Definition**: List of ongoing tasks in the cluster. **Value range**: • **REBOOTING** • **GROWING** • RESTORING: The cluster is being restored. • SNAPSHOTTING: A snapshot is being created.
enterpriseProjectId	String	**Definition**: ID of the enterprise project that a cluster belongs. If the user of the cluster has not enabled the enterprise project, the setting of this parameter is not returned. **Value range**: N/A
tags	Array of **ClusterDetailTags** objects	**Definition**: Cluster tags. **Value range**: N/A
failedReason	**ClusterDetailFailedReasons** object	**Definition**: Failure cause of a cluster change task. If the cluster status is available, this parameter is not returned. **Value range**: N/A

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Parameter	Type	Description
period	Boolean	**Definition**: Whether a cluster is billed yearly/monthly. **Value range**: • true: The cluster is billed on a yearly/monthly basis. • false: The cluster is billed pay-per-use.
bandwidthResourceId	String	**Definition**: ID of the resource accessible from the public network. **Value range**: N/A
ipv6Endpoint	String	**Definition**: IPv6 address and port number accessed from the cluster's private network. **Value range**: N/A
supportVpcep	Boolean	**Definition**: Whether the VPCEP service can be enabled for the current cluster. **Value range**: • **true**: supported. • **false**: not supported.
cmkId	String	**Definition**: Encryption key ID used by the current cluster. **Value range**: N/A
orderId	String	**Definition**: Order ID of a yearly/monthly cluster. **Value range**: N/A

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Parameter	Type	Description
currentSubnetIds	String	**Definition**: Subnets used by all nodes in the cluster. If there are multiple subnets (two at most), separate them with a comma (,). **Value range**: N/A
desc	String	

Table 5-37 ClusterDetailDatastore

Parameter	Type	Description
type	String	**Definition**: Engine type. **Value range**: • elasticsearch: Provides distributed search capabilities, log analytics, reporting, and semantic search based on open-source Elasticsearch. • logstash: provides distributed search, log analytics, reporting, and semantic search based on open-source OpenSearch. • opensearch: Provides functions such as data ingestion, transformation, cleaning, and parsing based on open-source Logstash.
version	String	**Definition**: Version of the CSS cluster engine. For details, see the supported versions in **Before You Start**. **Value range**: N/A
subVersion	String	**Definition**: Cluster image version. **Value range**: N/A

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Parameter	Type	Description
isEosCluster	Boolean	**Definition**: Whether the cluster image version has reached EOS. **Value range**: • true: yes. • false: no.
supportSecurity-mode	Boolean	'**Definition**: Whether the cluster supports the security mode. **Value range**: • **true**: supported. • **false**: not supported.

Table 5-38 ClusterDetailInstances

Parameter	Type	Description
status	String	**Parameter description**: Node status. **Options**: • **100**: creating • **200**: Available • **303**: unavailable, for example, due to a creation failure.
resourceId	String	**Definition**: Instance resource ID. **Value range**: N/A
type	String	**Definition**: Node type. **Value range**: • **ess**: data node • **ess-cold**: cold data node • **ess-client**: client node • **ess-master**: master node • **lgs**: Logstash node

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Parameter	Type	Description
id	String	**Definition**: Instance ID. **Value range**: N/A
name	String	**Definition**: Instance name. **Value range**: N/A
specCode	String	**Definition**: Node flavor name. **Value range**: N/A
azCode	String	**Definition**: AZ of the node. **Value range**: N/A
ip	String	**Definition**: Instance IP address. **Value range**: N/A
volume	**ShowClusterVolumeRsp** object	**Definition**: Instance disk information. **Value range**: N/A
subnetId	String	**Definition**: Subnet ID of the current node. **Value range**: N/A

Table 5-39 ShowClusterVolumeRsp

Parameter	Type	Description
type	String	**Definition**: Instance disk type. **Value range**: N/A

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Parameter	Type	Description
size	Integer	**Definition**: Instance disk size. **Value range**: N/A
resourceIds	Array of strings	**Definition**: Instance disk resource ID. **Value range**: N/A

Table 5-40 publicKibanaRespBody

Parameter	Type	Description
eipSize	Integer	**Definition**: The bandwidth size in Mbit/s. **Value range**: N/A
elbWhiteListResp	**kibanaElbWhiteListResp** object	**Definition**: Kibana public network access control information. **Value range**: N/A
publicKibanaIp	String	**Definition**: Specifies the IP address for accessing Kibana. **Value range**: N/A
bandwidthResourceId	String	**Definition**: Resource ID corresponding to the Kibana public network. **Value range**: N/A

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Table 5-41 kibanaElbWhiteListResp

Parameter	Type	Description
enableWhiteList	Boolean	**Definition**: Whether to enable Kibana access control. **Value range**: • **true**: Access control is enabled. • **false**: Access control is disabled.
whiteList	String	**Definition**: Whitelist for Kibana public network access. **Value range**: N/A

Table 5-42 elbWhiteListResp

Parameter	Type	Description
enableWhiteList	Boolean	**Definition**: Whether to enable public network access control via ELB. If a whitelist is set, only IP addresses on the whitelist can access the cluster. If no whitelist is set, all IP addresses can access the cluster. **Value range**: • **true**: Public network access control is enabled. • **false**: Public network access control is disabled.
whiteList	String	**Definition**: Whitelist for public network access. **Value range**: N/A

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Table 5-43 ClusterDetailTags

Parameter	Type	Description
key	String	**Definition**: Tag key. **Value range**: N/A
value	String	**Definition**: Tag value. **Value range**: N/A

Table 5-44 ClusterDetailFailedReasons

Parameter	Type	Description
errorCode	String	**Parameter description**: Error code. **Options**: • **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	**Definition**: Error details. **Value range**: N/A

Example Requests

Whether the details of a cluster are obtained

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/5c2bab0d-ec5f-491f-9418-b8da38a26760
```

Example Responses

Status code: 200

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Request succeeded.


```
{
  "datastore": {
    "type": "elasticsearch",
    "version": "7.10.2",
    "subVersion": "7.10.2_24.3.0_0827",
    "isEosCluster": false,
    "supportSecuritymode": false
  },
  "instances": [
    {
      "status": "200",
      "type": "ess",
      "id": "{INSTANCE_ID}",
      "name": "css-8bc5-ess-esn-1-1",
      "specCode": "ess.spec-4u8g",
      "azCode": "{AZ_CODE}",
      "volume": {
        "type": "ULTRAHIGH",
        "size": 40,
        "resourceIds": [
          "{RESOURCE_ID}"
        ]
      },
      "ip": "192.168.0.122",
      "resourceId": "{RESOURCE_ID}",
     "subnetId": "{SUBNET_ID}" //Subnet ID used by the node
    }
  ],
  "publicKibanaResp": {
    "eipSize": 10,
    "publicKibanaIp": "100.95.152.28",
    "elbWhiteListResp": null,
    "bandwidthResourceId": "18bec13f-5cc1-4631-867f-33505d15be12"
  },
  "elbWhiteList": {
    "whiteList": "",
    "enableWhiteList": false
  },
  "updated": "2023-10-09T02:07:13",
  "name": "css-8bc5",
  "publicIp": "100.85.222.202",
  "created": "2023-10-09T02:07:13",
  "id": "{CLUSTER_ID}",
  "status": "200",
  "endpoint": "192.168.0.122:9200",
"vpcId": "{VPC_ID}", //VPC ID used by the cluster
"subnetId": "{SUBNET_ID}", //Subnet ID used by all nodes in the cluster. Typically, a cluster uses only one subnet.
  "securityGroupId": "{SECURITY_GROUP_ID}",
  "bandwidthResourceId": "{BANDWIDTH_RESOURCE_ID}",
  "bandwidthSize": 3,
  "httpsEnable": true,
  "authorityEnable": true,
  "diskEncrypted": false,
  "backupAvailable": false,
  "actionProgress": {},
  "actions": [],
  "enterpriseProjectId": "0",
  "tags": [],
  "period": true,
  "supportVpcep": true,
"currentSubnetIds":"{SUBNET_ID}" //Default subnet ID of the cluster, which is used to assign new IP addresses to newly added nodes during a cluster scale-out operation when a VPC endpoint is created.
}
```


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SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ShowClusterDetailSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowClusterDetailRequest request = new ShowClusterDetailRequest();
        request.withClusterId("{cluster_id}");
        try {
            ShowClusterDetailResponse response = client.showClusterDetail(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *
```

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowClusterDetailRequest()
        request.cluster_id = "{cluster_id}"
        response = client.show_cluster_detail(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

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```
  }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.1.6 Changing Node Specifications (Discarded)

Function

This API is used to modify the node specifications of a cluster. It can only change the specifications of ess nodes (data nodes). If you need to change other types of nodes as well, use the API for **Changing the Specifications of Specified Nodes**.

NOTE

All mission-critical data has been backed up before a disk change. This is to prevent data loss.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-45 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose specifications you want to change. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-46 Request body parameters

Parameter	Mandatory	Type	Description
newFlavorId	Yes	String	**Definition**: ID of the new node flavor or disk type. It is determined by **operationType**. **Constraints**: N/A **Value range**: • When **operationType** is set to vm, newFlavorId indicates the node flavor ID after the change. This parameter is obtained by calling the **Obtaining the Instance Specifications List** API. The API selects a flavor_id based on the values of the **name** attribute. • When **operationType** is set to volume, newFlavorId indicates the new disk type after the change. The following disk types are supported: The old and new node specifications must be under the same Elasticsearch engine version. **COMMON**: common I/O **HIGH**: high I/O **ULTRAHIGH**: ultra-high I/O **ESSD**: ultra-fast SSD **Default value**: N/A

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Parameter	Mandatory	Type	Description
operationType	No	String	**Definition**: Operation type for specifications change. **Constraints**: N/A **Value range**: • vm: Change the node flavor. • volume: Change the disk type. **Default value**: vm
needCheckReplica	No	Boolean	**Definition**: Whether to check replicas when changing cluster specifications. **Constraints**: N/A **Value range**: • **true*: Enable replica verification. • **false**: Disable replica verification. **Default value**: true

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Parameter	Mandatory	Type	Description
isAutoPay	No	Integer	**Definition**: Whether to enable automatic payment from your Huawei Cloud account. This parameter takes effect only for yearly/monthly clusters. **Constraints**: N/A **Value range**: ● 1: Yes. (Discounts and coupons are automatically selected. The fee will be automatically deducted from your Huawei Cloud account.) If the automatic payment fails, an unpaid order will be generated, and you need to manually complete the payment. (During manual payment, you can still modify the discounts and coupons that were automatically selected.) ● 0: No. (The customer needs to manually pay for the bill. Discounts and coupons can be used.) The default value is **0**. **Default value**: 0
needCheckClusterStatus	No	Boolean	**Definition**: Whether to check the cluster status when changing cluster specifications. **Constraints**: N/A **Value range**: ● **true**: Enable cluster load check. ● false: Cluster status verification is ignored. **Default value**: true

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Parameter	Mandatory	Type	Description
clusterLoadCheck	No	Boolean	**Definition**: Whether to check the cluster load when changing cluster specifications. **Constraints**: N/A **Value range**: • **true**: enable cluster load check. • false: Skip cluster load check. **Default value**: true

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

- ID of the new flavor.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/flavor

{
  "needCheckReplica" : false,
  "newFlavorId" : "35b060a4-f152-48ce-8773-36559ceb81f2",
  "isAutoPay" : 1,
  "needCheckClusterStatus" : true
}
```

- Disk type after the change.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/flavor

{
  "needCheckReplica" : false,
  "newFlavorId" : "ULTRAHIGH",
  "operationType" : "volume",
  "isAutoPay" : 1,
  "clusterLoadCheck" : true
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

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Java

- ID of the new flavor.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateFlavorSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateFlavorRequest request = new UpdateFlavorRequest();
        request.withClusterId("{cluster_id}");
        UpdateFlavorReq body = new UpdateFlavorReq();
        body.withNeedCheckClusterStatus(true);
        body.withIsAutoPay(1);
        body.withNeedCheckReplica(false);
        body.withNewFlavorId("35b060a4-f152-48ce-8773-36559ceb81f2");
        request.withBody(body);
        try {
            UpdateFlavorResponse response = client.updateFlavor(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Disk type after the change.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
```

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```
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateFlavorSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateFlavorRequest request = new UpdateFlavorRequest();
        request.withClusterId("{cluster_id}");
        UpdateFlavorReq body = new UpdateFlavorReq();
        body.withClusterLoadCheck(true);
        body.withIsAutoPay(1);
        body.withNeedCheckReplica(false);
        body.withOperationType("volume");
        body.withNewFlavorId("ULTRAHIGH");
        request.withBody(body);
        try {
            UpdateFlavorResponse response = client.updateFlavor(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

- ID of the new flavor.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

```
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateFlavorRequest()
        request.cluster_id = "{cluster_id}"
        request.body = UpdateFlavorReq(
            need_check_cluster_status=True,
            is_auto_pay=1,
            need_check_replica=False,
            new_flavor_id="35b060a4-f152-48ce-8773-36559ceb81f2"
        )
        response = client.update_flavor(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- Disk type after the change.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateFlavorRequest()
        request.cluster_id = "{cluster_id}"
        request.body = UpdateFlavorReq(
            cluster_load_check=True,
            is_auto_pay=1,
            need_check_replica=False,
            operation_type="volume",
            new_flavor_id="ULTRAHIGH"
        )
        response = client.update_flavor(request)
        print(response)
```

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```
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- ID of the new flavor.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateFlavorRequest{}
    request.ClusterId = "{cluster_id}"
    needCheckClusterStatusUpdateFlavorReq:= true
    isAutoPayUpdateFlavorReq:= int32(1)
    needCheckReplicaUpdateFlavorReq:= false
    request.Body = &model.UpdateFlavorReq{
        NeedCheckClusterStatus: &needCheckClusterStatusUpdateFlavorReq,
        IsAutoPay: &isAutoPayUpdateFlavorReq,
        NeedCheckReplica: &needCheckReplicaUpdateFlavorReq,
        NewFlavorId: "35b060a4-f152-48ce-8773-36559ceb81f2",
    }
    response, err := client.UpdateFlavor(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Disk type after the change.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
```

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```
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateFlavorRequest{}
    request.ClusterId = "{cluster_id}"
    clusterLoadCheckUpdateFlavorReq:= true
    isAutoPayUpdateFlavorReq:= int32(1)
    needCheckReplicaUpdateFlavorReq:= false
    operationTypeUpdateFlavorReq:= "volume"
    request.Body = &model.UpdateFlavorReq{
        ClusterLoadCheck: &clusterLoadCheckUpdateFlavorReq,
        IsAutoPay: &isAutoPayUpdateFlavorReq,
        NeedCheckReplica: &needCheckReplicaUpdateFlavorReq,
        OperationType: &operationTypeUpdateFlavorReq,
        NewFlavorId: "ULTRAHIGH",
    }
    response, err := client.UpdateFlavor(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

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

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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**.

5.1.7 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.

NOTE

This API can also be used to unsubscribe from yearly/monthly clusters. Clusters frozen for public security reasons cannot be deleted. Deleting a cluster will also clear its data. Exercise caution.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-47 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to delete. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Delete a cluster.

```
DELETE https://{Endpoint}/v1.0/{project_id}/clusters/2a197c4d-5467-4003-931d-83ec49939cf
```

Example Responses

None

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SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class DeleteClusterSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteClusterRequest request = new DeleteClusterRequest();
        request.withClusterId("{cluster_id}");
        try {
            DeleteClusterResponse response = client.deleteCluster(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *
```

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteClusterRequest()
        request.cluster_id = "{cluster_id}"
        response = client.delete_cluster(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

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```
  }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.1.8 Scaling In a Cluster by Removing a Specific Node

Function

During a scale-in, the data on the to-be-removed nodes needs to be migrated to the remaining nodes. The timeout for data migration per node is 48 hours. Scale-in will fail if this timeout expires. When the cluster has large quantities of data, you are advised to manually adjust the data migration rate and avoid performing the migration during peak hours.

This API is used to scale in a cluster by removing specified nodes. Yearly/Monthly clusters do not support the removal of specified nodes by calling this API.

NOTE

All mission-critical data has been backed up before a cluster scale-in. This is to prevent data loss.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-48 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to scale in. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-49 Request body parameters

Parameter	Mandatory	Type	Description
migrate_data	No	String	**Definition**: Whether to migrate data. **Value range**: • true: Migrate data. • false: Do not migrate data. **Default value**: true

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Parameter	Mandatory	Type	Description
shrink_nodes	Yes	Array of strings	**Definition**: ID of the node to be removed from the cluster. **Constraints**: N/A **Value range**: Obtain the **ID** attribute in instances by referring to **Querying Cluster Details**. **Default value**: N/A
agency_name	No	String	**Definition**: Agency name. You can create an agency to allow CSS to call other cloud services. **Constraints**: VPC permissions required by the agency: "vpc:subnets:get","vpc:ports:*". This parameter is mandatory when the new IAM plane is connected. This parameter is optional when the old IAM plane is connected. **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Scale in a cluster by scaling in specified nodes.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/node/offline

{
  "shrink_nodes" : [ "2077bdf3-b90d-412e-b460-635b9b159c11" ],
```

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```
  "migrate_data" : "true"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Scale in a cluster by scaling in specified nodes.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;

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

public class UpdateShrinkNodesSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateShrinkNodesRequest request = new UpdateShrinkNodesRequest();
        request.withClusterId("{cluster_id}");
        ShrinkNodesReq body = new ShrinkNodesReq();
        List<String> listbodyShrinkNodes = new ArrayList<>();
        listbodyShrinkNodes.add("2077bdf3-b90d-412e-b460-635b9b159c11");
        body.withShrinkNodes(listbodyShrinkNodes);
        body.withMigrateData("true");
        request.withBody(body);
        try {
            UpdateShrinkNodesResponse response = client.updateShrinkNodes(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
```

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

Python

Scale in a cluster by scaling in specified nodes.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateShrinkNodesRequest()
        request.cluster_id = "{cluster_id}"
        listShrinkNodesbody = [
            "2077bdf3-b90d-412e-b460-635b9b159c11"
        ]
        request.body = ShrinkNodesReq(
            shrink_nodes=listShrinkNodesbody,
            migrate_data="true"
        )
        response = client.update_shrink_nodes(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Scale in a cluster by scaling in specified nodes.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
```

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```
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateShrinkNodesRequest{}
    request.ClusterId = "{cluster_id}"
    var listShrinkNodesbody = []string{
        "2077bdf3-b90d-412e-b460-635b9b159c11",
    }
    migrateDataShrinkNodesReq:= "true"
    request.Body = &model.ShrinkNodesReq{
        ShrinkNodes: listShrinkNodesbody,
        MigrateData: &migrateDataShrinkNodesReq,
    }
    response, err := client.UpdateShrinkNodes(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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.

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Status Code	Description
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See **Error Codes**.

5.1.9 Changing the Cluster Billing Mode from Pay-per-use to Yearly/Monthly

Function

If you have a pay-per-use cluster that you expect to use for a long time, you can change it to yearly/monthly billing to cut costs. Doing so will create an order. After you pay for the order, yearly/monthly billing will be applied immediately.

Assume that you purchased a pay-per-use cluster at 15:29:16 on April 18, 2023 and changed the billing mode to yearly/monthly at 16:30:30 on April 18, 2023. The subscription period is one month and the order type is "changing from Pay-per-Use to Yearly/Monthly". After you pay for the order, the yearly/monthly cluster takes effect immediately. The following bill information is generated on the Billing Center > Bills page:

- Pay-per-use expenditures for 15:29:16 to 16:00:00 on April 18, 2023
- Pay-per-use expenditures for 16:00:00 to 16:30:30 April 18, 2023
- A single, yearly/monthly expenditure generated April 18, 2023, 16:30:30

This API is used to change the cluster billing mode from pay-per-use to yearly/monthly.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/cluster/{cluster_id}/period

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Table 5-50 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster that you want to change the billing mode to yearly/monthly. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-51 Request body parameters

Parameter	Mandatory	Type	Description
period_type	Yes	Integer	**Definition**: Subscription period type. **Constraints**: N/A **Value range**: • **2**: monthly. • **3**: yearly. **Default value**: N/A
period_num	Yes	Integer	**Definition**: Number of subscription periods. **Constraints**: N/A **Value range**: • If you selected **Monthly**, the value ranges from 1 to 9. • If you selected **Yearly**, the value ranges from 1 to 3. **Default value**: N/A
is_auto_renew	No	Integer	**Definition**: Whether to automatically renew the subscription. If this parameter is not specified, the subscription is not automatically renewed. **Constraints**: N/A **Value range**: • 1: Auto renewal is enabled. • **0**: Auto renewal is disabled. **Default value**: 0

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Parameter	Mandatory	Type	Description
is_auto_pay	No	Integer	**Definition**: Whether to enable automatic payment from your Huawei Cloud account. **Constraints**: This parameter takes effect only for yearly/monthly clusters. **Value range**: ● 1: Yes. (Discounts and coupons are automatically selected. The fee will be automatically deducted from your Huawei Cloud account.) If the automatic payment fails, an unpaid order will be generated, and you need to manually complete the payment. (During manual payment, you can still modify the discounts and coupons that were automatically selected.) ● 0: No. (The customer needs to manually pay for the bill. Discounts and coupons can be used.) **Default value**: 0
console_url	No	String	**Definition**: URL of the cloud service console. After the subscription is completed, this URL can be used to switch to the cloud service console page to view the information. (This parameter is used only for manual payment.) **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Response Parameters

Status code: 200

Table 5-52 Response body parameters

Parameter	Type	Description
orderId	String	**Definition**: Order ID. (The order is a new purchase.) **Value range**: N/A

Example Requests

Change the cluster billing mode from pay-per-use to yearly/monthly.

```
POST https://{Endpoint}/v1.0/{project_id}/cluster/4f3deec3-efa8-4598-bf91-560aad1377a3/period

{
  "period_type" : 2,
  "period_num" : 1,
  "is_auto_renew" : 1,
  "is_auto_pay" : 0,
  "console_url" : "https://console.xxx.huawei.com/elasticsearch-pre/?locale=zh-cn&region=xxx#/es/
management/elasticsearch"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "orderId" : "CS2112281600EBHKR"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Change the cluster billing mode from pay-per-use to yearly/monthly.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
```

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```
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateOndemandClusterToPeriodSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateOndemandClusterToPeriodRequest request = new UpdateOndemandClusterToPeriodRequest();
        request.withClusterId("{cluster_id}");
        PeriodReq body = new PeriodReq();
        body.withConsoleUrl("https://console.xxx.huawei.com/elasticsearch-pre/?locale=zh-cn&region=xxx#/es/
management/elasticsearch");
        body.withIsAutoPay(0);
        body.withIsAutoRenew(1);
        body.withPeriodNum(1);
        body.withPeriodType(2);
        request.withBody(body);
        try {
            UpdateOndemandClusterToPeriodResponse response =
client.updateOndemandClusterToPeriod(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Change the cluster billing mode from pay-per-use to yearly/monthly.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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```
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateOndemandClusterToPeriodRequest()
        request.cluster_id = "{cluster_id}"
        request.body = PeriodReq(
            console_url="https://console.xxx.huawei.com/elasticsearch-pre/?locale=zh-cn&region=xxx#/es/
management/elasticsearch",
            is_auto_pay=0,
            is_auto_renew=1,
            period_num=1,
            period_type=2
        )
        response = client.update_ondemand_cluster_to_period(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Change the cluster billing mode from pay-per-use to yearly/monthly.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
    request := &model.UpdateOndemandClusterToPeriodRequest{}
    request.ClusterId = "{cluster_id}"
    consoleUrlPeriodReq:= "https://console.xxx.huawei.com/elasticsearch-pre/?locale=zh-cn&region=xxx#/es/
management/elasticsearch"
    isAutoPayPeriodReq:= int32(0)
    isAutoRenewPeriodReq:= int32(1)
    request.Body = &model.PeriodReq{
        ConsoleUrl: &consoleUrlPeriodReq,
        IsAutoPay: &isAutoPayPeriodReq,
        IsAutoRenew: &isAutoRenewPeriodReq,
        PeriodNum: int32(1),
        PeriodType: int32(2),
    }
    response, err := client.UpdateOndemandClusterToPeriod(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request before retry.
403	Identity authentication failed. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.

Error Codes

See **Error Codes**.

5.1.10 Change the specifications of a specified node type.

Function

If the workloads on a cluster's data plane change, you can scale the cluster vertically by changing its node specifications or node storage type.

- Cluster types that support node specifications change: Elasticsearch, OpenSearch, and Logstash.
- Cluster types that support node storage type (disk type) change: Elasticsearch and OpenSearch. All mission-critical data must be backed up before a node storage type (disk type) change. This helps to prevent data loss.

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You can specify the following node types when calling this API:

- ess: data node (only for Elasticsearch and OpenSearch).
- ess-cold: cold data node (only for Elasticsearch and OpenSearch).
- ess-client: client node (only for Elasticsearch and OpenSearch).
- ess-master: master node (only for Elasticsearch and OpenSearch).
- lgs: Logstash node (only for Logstash).

Constraints

- Make sure the cluster status is Available and there are no ongoing tasks.
- The node specifications and storage type cannot be changed for nodes that use local disks.
- The node specifications and storage type cannot be changed at the same time.
- The node storage type can be changed only for data nodes and cold data nodes.
- When you change the node storage type, data needs to be migrated between different nodes. The timeout for data migration per node is 48 hours. Upgrade will fail if this timeout expires. When the cluster has large quantities of data, you are advised to manually adjust the data migration rate and avoid performing the migration during peak hours.
- For a cluster without master nodes, the node storage type can be changed only if the number of data nodes plus cold data nodes is at least three.
- For a cluster with master nodes, this operation is allowed only if the cluster has at least two data nodes.
- During a node storage type change, there is always one node that is unavailable. To ensure service continuity, there has to be at least two nodes of each type for the cluster in each of its AZs, and the total number of data nodes and cold data nodes is greater than the maximum number of index replicas plus 1.
- During a node specifications changes, nodes are brought offline in order to make the changes. To ensure service continuity, make sure all shards have replicas.
- Make sure the disk usage is always less than 80/ %during the change.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-53 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose specifications you want to change. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
types	Yes	String	**Definition**: Type of the cluster node you want to modify. **Constraints**: N/A **Value range**: • **ess**: data node • **ess-cold**: cold data node • **ess-client**: client node • **ess-master**: master node • lgs: Logstash node. **Default value**: N/A

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Request Parameters

Table 5-54 Request body parameters

Parameter	Mandatory	Type	Description
new_flavor_id	Yes	String	**Definition**: ID of the new node flavor or node storage type (disk type). It is determined by **operation_type**. **Constraints**: The value range depends on **operation_type**. **Value range**: 1. When **operation_type** is set to vm, newFlavorId indicates the node flavor ID after the change. This parameter is obtained by calling the **Obtaining the Instance Specifications List** API. The API selects a flavor_id based on the values of the **name** attribute. 2. When **operation_type** is set to volume, new_flavor_id indicates the node storage type (disk type). The options are as follows: • **COMMON**: common I/O • **HIGH**: high I/O • **ULTRAHIGH**: ultra-high I/O • **ESSD**: ultra-fast SSD **Default value**: N/A

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Parameter	Mandatory	Type	Description
operation_type	No	String	**Definition**: Operation type. **Constraints**: N/A **Value range**: • vm: Change the node flavor. • volume: Change the disk type. **Default value**: vm
need_check_replica	No	Boolean	**Definition**: Whether to verify replicas. **Constraints**: N/A **Value range**: • *true*: Enable replica verification. • **false**: Disable replica verification. **Default value**: true

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Parameter	Mandatory	Type	Description
is_auto_pay	No	Integer	**Definition**: Whether to enable automatic payment from your Huawei Cloud account. **Constraints**: This parameter takes effect only for yearly/monthly clusters. **Value range**: ● 1: Yes. (Discounts and coupons are automatically selected. The fee will be automatically deducted from your Huawei Cloud account.) If the automatic payment fails, an unpaid order will be generated, and you need to manually complete the payment. (During manual payment, you can still modify the discounts and coupons that were automatically selected.) ● 0: No. (The customer needs to manually pay for the bill. Discounts and coupons can be used.) **Default value**: 0
need_check_cluster_status	No	Boolean	**Definition**: Whether to check the cluster status. The value can be true or false. The default value is **true**. **Constraints**: N/A **Value range**: ● **true**: Enable cluster load check. ● false: Cluster status verification is ignored. **Default value**: true

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Parameter	Mandatory	Type	Description
cluster_load_check	No	Boolean	**Definition**: Whether to check the cluster load. The value can be **true** or **false**. The default value is **true**. **Constraints**: N/A **Value range**: • **true**: enable cluster load check. • false: Skip cluster load check. **Default value**: true

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Change the disk type of data nodes for a yearly/monthly Elasticsearch cluster. Before the change, disable index replica verification, and enable cluster status and cluster load check. The change in fees will apply automatically.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/ess/flavor

{
  "need_check_replica" : false,
  "new_flavor_id" : "HIGH",
  "is_auto_pay" : 1,
  "need_check_cluster_status" : true,
  "operation_type" : "volume",
  "cluster_load_check" : true
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

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Java

Change the disk type of data nodes for a yearly/monthly Elasticsearch cluster. Before the change, disable index replica verification, and enable cluster status and cluster load check. The change in fees will apply automatically.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateFlavorByTypeSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateFlavorByTypeRequest request = new UpdateFlavorByTypeRequest();
        request.withClusterId("{cluster_id}");
        request.withTypes("{types}");
        UpdateFlavorByTypeReq body = new UpdateFlavorByTypeReq();
        body.withClusterLoadCheck(true);
        body.withNeedCheckClusterStatus(true);
        body.withIsAutoPay(1);
        body.withNeedCheckReplica(false);
        body.withOperationType("volume");
        body.withNewFlavorId("HIGH");
        request.withBody(body);
        try {
            UpdateFlavorByTypeResponse response = client.updateFlavorByType(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

Change the disk type of data nodes for a yearly/monthly Elasticsearch cluster. Before the change, disable index replica verification, and enable cluster status and cluster load check. The change in fees will apply automatically.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateFlavorByTypeRequest()
        request.cluster_id = "{cluster_id}"
        request.types = "{types}"
        request.body = UpdateFlavorByTypeReq(
            cluster_load_check=True,
            need_check_cluster_status=True,
            is_auto_pay=1,
            need_check_replica=False,
            operation_type="volume",
            new_flavor_id="HIGH"
        )
        response = client.update_flavor_by_type(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Change the disk type of data nodes for a yearly/monthly Elasticsearch cluster. Before the change, disable index replica verification, and enable cluster status and cluster load check. The change in fees will apply automatically.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)
```

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateFlavorByTypeRequest{}
    request.ClusterId = "{cluster_id}"
    request.Types = "{types}"
    clusterLoadCheckUpdateFlavorByTypeReq:= true
    needCheckClusterStatusUpdateFlavorByTypeReq:= true
    isAutoPayUpdateFlavorByTypeReq:= int32(1)
    needCheckReplicaUpdateFlavorByTypeReq:= false
    operationTypeUpdateFlavorByTypeReq:= "volume"
    request.Body = &model.UpdateFlavorByTypeReq{
        ClusterLoadCheck: &clusterLoadCheckUpdateFlavorByTypeReq,
        NeedCheckClusterStatus: &needCheckClusterStatusUpdateFlavorByTypeReq,
        IsAutoPay: &isAutoPayUpdateFlavorByTypeReq,
        NeedCheckReplica: &needCheckReplicaUpdateFlavorByTypeReq,
        OperationType: &operationTypeUpdateFlavorByTypeReq,
        NewFlavorId: "HIGH",
    }
    response, err := client.UpdateFlavorByType(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

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

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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**.

5.1.11 Renaming a Cluster

Function

This API is used to change cluster names.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-55 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster that you want to rename For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-56 Request body parameters

Parameter	Mandatory	Type	Description
display_name	Yes	String	**Definition**: New name of a cluster **Constraints**: display_name and desc cannot be null at the same time. **Value range**: The cluster name must start with a letter and can contain 4 to 32 characters. Only letters, digits, periods (.), hyphens (-), and underscores (_) are allowed. **Default value**: N/A

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Parameter	Mandatory	Type	Description
desc	No	String	**Definition**: Cluster description. **Constraints**: The value can contain up to 128 characters. display_name and desc cannot be null at the same time. **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Change the display name of the current cluster.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/changename

{
  "display_name" : "ES-Test-new",
  "desc" : "test1"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Change the display name of the current cluster.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
```

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```
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateClusterNameSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateClusterNameRequest request = new UpdateClusterNameRequest();
        request.withClusterId("{cluster_id}");
        UpdateClusterNameReq body = new UpdateClusterNameReq();
        body.withDesc("test1");
        body.withDisplayName("ES-Test-new");
        request.withBody(body);
        try {
            UpdateClusterNameResponse response = client.updateClusterName(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Change the display name of the current cluster.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateClusterNameRequest()
        request.cluster_id = "{cluster_id}"
        request.body = UpdateClusterNameReq(
            desc="test1",
            display_name="ES-Test-new"
        )
        response = client.update_cluster_name(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Change the display name of the current cluster.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateClusterNameRequest{}
    request.ClusterId = "{cluster_id}"
    descUpdateClusterNameReq:= "test1"
    request.Body = &model.UpdateClusterNameReq{
        Desc: &descUpdateClusterNameReq,
        DisplayName: "ES-Test-new",
    }
    response, err := client.UpdateClusterName(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
```

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```
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.1.12 Scaling In Nodes of a Specific Type

Function

This API is used to remove instances of specific types and reduce instance storage capacity in a cluster. Yearly/Monthly clusters do not support the removal of specified node types by calling this API.

NOTE

All mission-critical data has been backed up before a cluster scale-in. This is to prevent data loss.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-57 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to scale in. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-58 Request body parameters

Parameter	Mandatory	Type	Description
shrink	Yes	Array of **ShrinkNodeReq** objects	**Parameter description**: Type and quantity of nodes you want to scale in.

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Parameter	Mandatory	Type	Description
agency_name	No	String	**Definition**: Agency name. You can create an agency to allow CSS to call other cloud services. **Constraints**: VPC permissions required by the agency: "vpc:subnets:get","vpc:ports:*". This parameter is mandatory when the new IAM plane is connected. This parameter is optional when the old IAM plane is connected. **Value range**: N/A **Default value**: N/A
operation_type	No	String	**Definition**: Operation type. **Constraints**: N/A **Value range**: • vm: Reduce nodes. [- volume: Reduce the disk size.] (tag:white) **Default value**: vm
cluster_load_check	No	Boolean	**Definition**: Whether to check the cluster load. **Constraints**: N/A **Value range**: • **true**: enable cluster load check. • **true**: skip cluster load check. **Default value**: true

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Table 5-59 ShrinkNodeReq

Parameter	Mandatory	Type	Description
reducedNodeNum	Yes	Integer	**Definition**: Number of nodes you want to reduce. **Constraints**: ● After the scale-in, there has to be at least one node of each type in each AZ. ● In a cross-AZ cluster, the difference between the numbers of same-type nodes in different AZs cannot exceed 1. ● For a cluster with no 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 number of the original data nodes, 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 number of the original master nodes. After scale-in, there has to be an odd number of master nodes, and there has to be at least three of them. **Value range**: See Constraints. **Default value**: N/A

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Parameter	Mandatory	Type	Description
type	Yes	String	**Definition**: Node type. **Constraints**: N/A [If operation_type is set to volume, this parameter cannot be set to ess-client or ess-master.] (tag:white) **Value range**: • **ess**: data node • **ess-cold**: cold data node • **ess-client**: client node • **ess-master**: master node **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Scale in a cluster by specifying the node type and the number of nodes to be removed.

```
POST https://{Endpoint}/v1.0/extend/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/role/shrink

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

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

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Java

Scale in a cluster by specifying the node type and the number of nodes to be removed.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;

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

public class UpdateShrinkClusterSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateShrinkClusterRequest request = new UpdateShrinkClusterRequest();
        request.withClusterId("{cluster_id}");
        ShrinkClusterReq body = new ShrinkClusterReq();
        List<ShrinkNodeReq> listbodyShrink = new ArrayList<>();
        listbodyShrink.add(
            new ShrinkNodeReq()
                .withReducedNodeNum(1)
                .withType("ess")
        );
        body.withShrink(listbodyShrink);
        request.withBody(body);
        try {
            UpdateShrinkClusterResponse response = client.updateShrinkCluster(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

Scale in a cluster by specifying the node type and the number of nodes to be removed.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateShrinkClusterRequest()
        request.cluster_id = "{cluster_id}"
        listShrinkbody = [
            ShrinkNodeReq(
                reduced_node_num=1,
                type="ess"
            )
        ]
        request.body = ShrinkClusterReq(
            shrink=listShrinkbody
        )
        response = client.update_shrink_cluster(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Scale in a cluster by specifying the node type and the number of nodes to be removed.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
```

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```
variables and decrypted during use to ensure security.
   // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
   ak := os.Getenv("CLOUD_SDK_AK")
   sk := os.Getenv("CLOUD_SDK_SK")
   projectId := "{project_id}"

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

   client := css.NewCssClient(
      css.CssClientBuilder().
         WithRegion(region.ValueOf("<YOUR REGION>")).
         WithCredential(auth).
         Build())

   request := &model.UpdateShrinkClusterRequest{}
   request.ClusterId = "{cluster_id}"
   var listShrinkbody = []model.ShrinkNodeReq{
      {
         ReducedNodeNum: int32(1),
         Type: "ess",
      },
   }
   request.Body = &model.ShrinkClusterReq{
      Shrink: listShrinkbody,
   }
   response, err := client.UpdateShrinkCluster(request)
   if err == nil {
      fmt.Printf("%+v\n", response)
   } else {
      fmt.Println(err)
   }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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.

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Error Codes

See **Error Codes**.

5.1.13 Changing the Password of a Cluster

Function

This API is used to change cluster passwords to enhance cluster security.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-60 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose password you want to change. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-61 Request body parameters

Parameter	Mandatory	Type	Description
newpassword	Yes	String	**Definition**: Password of the administrator admin for a security-mode cluster. **Constraints**: This API is available only when **authorityEnable** is set to **true** during cluster creation. **Value range**: • Must contain 8 to 32 characters. • Must contain at least three of the following character types: letters, digits, and special characters ~!@#$ %^&*()-_=+|[{}];:,<.>/? • Do not use the administrator name, or the administrator name spelled backwards, as the password. **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Change the administrator password of the current cluster.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/password/reset

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

Example Responses

None

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SDK Sample Code

The SDK sample code is as follows.

Java

Change the administrator password of the current cluster.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ResetPasswordSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ResetPasswordRequest request = new ResetPasswordRequest();
        request.withClusterId("{cluster_id}");
        ResetPasswordReq body = new ResetPasswordReq();
        body.withNewpassword("xxxxxx");
        request.withBody(body);
        try {
            ResetPasswordResponse response = client.resetPassword(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Change the administrator password of the current cluster.

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```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ResetPasswordRequest()
        request.cluster_id = "{cluster_id}"
        request.body = ResetPasswordReq(
            newpassword="xxxxxx"
        )
        response = client.reset_password(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Change the administrator password of the current cluster.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

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```
    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ResetPasswordRequest{}
    request.ClusterId = "{cluster_id}"
    request.Body = &model.ResetPasswordReq{
        Newpassword: "xxxxxx",
    }
    response, err := client.ResetPassword(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.1.14 Replacing a Node

Function

This API is used to replace a failed node.

If a node in an Elasticsearch cluster is faulty, you can replace it to restore services.

The node replacement process is as follows:

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1. Migrate data from the node that needs to be replaced to other available nodes.
2. Rebuild the node using the original ID, IP address, specifications, and AZ.
3. Add the new node into the cluster. The system automatically triggers a shard reallocation, migrating some of the shards

to the new node

This process does not interrupt services because data is migrated from the replaced node to other available nodes.

NOTE

All mission-critical data has been backed up before a node replacement. This is to prevent data loss.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1.0/{project_id}/clusters/{cluster_id}/instance/{instance_id}/replace

Table 5-62 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster where nodes are to be replaced. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
instance_id	Yes	String	**Definition**: ID of the node to be replaced. **Constraints**: N/A **Value range**: Node ID. Obtain the **ID** attribute in instances by referring to **Querying Cluster Details**. **Default value**: N/A

Table 5-63 Query Parameters

Parameter	Mandatory	Type	Description
migrateData	No	String	**Definition**: Whether to migrate data. **Constraints**: N/A **Value range**: • true: Migrate data. • false: Do not migrate data. **Default value**: true

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Parameter	Mandatory	Type	Description
agency	No	String	**Definition**: Agency name. You can create an agency to allow CSS to call other cloud services. **Constraints**: • VPC permissions required by the agency: "vpc:subnets:get","vpc:ports:*". • This parameter is mandatory when the new IAM plane is connected. This parameter is optional when the old IAM plane is connected. • The value can contain only letters (a-z and A-Z), digits (0-9), hyphens (-), and underscores (_). It cannot contain Chinese characters or other special characters. **Value range**: N/A **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Replace a node.

```
PUT https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/instance/43e63449-339c-4280-a6e9-da36b0685995/replace?migrateData=true
```

Example Responses

None

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SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateInstanceSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateInstanceRequest request = new UpdateInstanceRequest();
        request.withClusterId("{cluster_id}");
        request.withInstanceId("{instance_id}");
        try {
            UpdateInstanceResponse response = client.updateInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *
```

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateInstanceRequest()
        request.cluster_id = "{cluster_id}"
        request.instance_id = "{instance_id}"
        response = client.update_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateInstanceRequest{}
    request.ClusterId = "{cluster_id}"
    request.InstanceId = "{instance_id}"
    response, err := client.UpdateInstance(request)
    if err == nil {
```

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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 modify the request instead of re-initiating it.

Error Codes

See **Error Codes**.

5.1.15 Restarting a Cluster (Deprecated)

Function

This API is used to restart a data node in a cluster, which will interrupt services. To restart all nodes in a cluster, you are advised to use [Restart Cluster V2](RestartClusterMultiRole.xml).

NOTE

When the cluster is available, ensure that the cluster has stopped processing service data (such as importing data and searching for data). Otherwise, data may be lost when the cluster is restarted.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-64 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to restart. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/47e49a5e-8ced-4d0d-ae15-2af62ac468e3/restart
```

Example Responses

None

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SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class RestartClusterSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        RestartClusterRequest request = new RestartClusterRequest();
        request.withClusterId("{cluster_id}");
        try {
            RestartClusterResponse response = client.restartCluster(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *
```

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = RestartClusterRequest()
        request.cluster_id = "{cluster_id}"
        response = client.restart_cluster(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

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```
  }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.1.16 Configuring the Security Mode.

Function

This API is used to configure the security mode of a cluster. The security mode settings for clusters include:

- Security mode + HTTP: strikes a balance between performance and security. Make sure the cluster is deployed in a secure environment. Do not expose the cluster's network interface to the public network.
- Security mode + HTTPS: prioritizes security and in-transit data encryption, and allows public network access.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/mode/change

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Table 5-65 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the target cluster For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-66 Request body parameters

Parameter	Mandatory	Type	Description
authority_enable	Yes	Boolean	**Definition**: Whether to enable the security mode for the cluster. **Constraints**: Only Elasticsearch 6.5.4 security-mode clusters and later support this parameter. **Value range**: • true: enable. • false: disable. **Default value**: true
admin_pwd	No	String	**Definition**: Cluster password in security mode. **Constraints**: Only Elasticsearch 6.5.4 security-mode clusters and later support this parameter. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
https_enable	Yes	Boolean	**Definition**: Whether to enable HTTPS for the cluster. **Constraints**: • Elasticsearch: Only Elasticsearch 6.5.4 and later versions support security-mode clusters. • HTTPS access can be disabled only for OpenSearch 1.3.6 and 2.19.0 security-mode clusters. For other versions, HTTPS access is forcibly enabled and cannot be disabled. • true: Enable HTTPS. • false: Disable HTTPS. **Value range**: **Default value**: true

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Change the security mode of the current cluster.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/mode/change

{
  "authority_enable" : true,
  "admin_pwd" : "admin@1234",
  "https_enable" : true
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

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Java

Change the security mode of the current cluster.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ChangeModeSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ChangeModeRequest request = new ChangeModeRequest();
        request.withClusterId("{cluster_id}");
        ChangeModeReq body = new ChangeModeReq();
        body.withHttpsEnable(true);
        body.withAdminPwd("admin@1234");
        body.withAuthorityEnable(true);
        request.withBody(body);
        try {
            ChangeModeResponse response = client.changeMode(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Change the security mode of the current cluster.

```
# coding: utf-8

import os
```

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```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ChangeModeRequest()
        request.cluster_id = "{cluster_id}"
        request.body = ChangeModeReq(
            https_enable=True,
            admin_pwd="admin@1234",
            authority_enable=True
        )
        response = client.change_mode(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Change the security mode of the current cluster.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
```

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```
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ChangeModeRequest{}
    request.ClusterId = "{cluster_id}"
    adminPwdChangeModeReq:= "admin@1234"
    request.Body = &model.ChangeModeReq{
        HttpsEnable: true,
        AdminPwd: &adminPwdChangeModeReq,
        AuthorityEnable: true,
    }
    response, err := client.ChangeMode(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.1.17 Scaling Out a Cluster (Discarded)

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 the API for **Adding Instances and Expanding Instance Storage Capacity**.

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Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-67 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to scale out. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-68 Request body parameters

Parameter	Mandatory	Type	Description
grow	Yes	ExtendClusterGrowReq object	**Definition**: Detailed description about the cluster scale-out request. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
isAutoPay	No	Integer	**Definition**: Whether to enable automatic payment from your Huawei Cloud account. This parameter takes effect only for yearly/monthly clusters. **Constraints**: N/A **Value range**: • 1: Yes. (Discounts and coupons are automatically selected. The fee will be automatically deducted from your Huawei Cloud account.) If the automatic payment fails, an unpaid order will be generated, and you need to manually complete the payment. (During manual payment, you can still modify the discounts and coupons that were automatically selected.) • 0: No. (The customer needs to manually pay for the bill. Discounts and coupons can be used.) The default value is **0**. **Default value**: 0

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Table 5-69 ExtendClusterGrowReq

Parameter	Mandatory	Type	Description
modifySize	Yes	Integer	**Definition**: Number of instances to be scaled out. The total number of existing instances and newly added instances in a cluster cannot exceed 32. **Constraints**: N/A **Value range**: 1-32 **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Change the number of instances in the current cluster.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/extend

{
  "grow" : {
    "modifySize" : 4
  },
  "isAutoPay" : 1
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Change the number of instances in the current cluster.

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

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

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```
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateExtendClusterSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateExtendClusterRequest request = new UpdateExtendClusterRequest();
        request.withClusterId("{cluster_id}");
        ExtendClusterReq body = new ExtendClusterReq();
        ExtendClusterGrowReq growbody = new ExtendClusterGrowReq();
        growbody.withModifySize(4);
        body.withIsAutoPay(1);
        body.withGrow(growbody);
        request.withBody(body);
        try {
            UpdateExtendClusterResponse response = client.updateExtendCluster(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Change the number of instances in the current cluster.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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```
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateExtendClusterRequest()
        request.cluster_id = "{cluster_id}"
        growbody = ExtendClusterGrowReq(
            modify_size=4
        )
        request.body = ExtendClusterReq(
            is_auto_pay=1,
            grow=growbody
        )
        response = client.update_extend_cluster(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Change the number of instances in the current cluster.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

```
    request.ClusterId = "{cluster_id}"
    growbody := &model.ExtendClusterGrowReq{
        ModifySize: int32(4),
    }
    isAutoPayExtendClusterReq:= int32(1)
    request.Body = &model.ExtendClusterReq{
        IsAutoPay: &isAutoPayExtendClusterReq,
        Grow: growbody,
    }
    response, err := client.UpdateExtendCluster(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.1.18 Obtaining the Instance Specifications List

Function

This API is used to obtain the node specifications, including the node specifications version, cluster data search engine, number of vCPUs per node, and node memory size. You may use this API to check node specifications after a cluster is created.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-70 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 5-71 Response body parameters

Parameter	Type	Description
versions	Array of **EsflavorsVersionsResp** objects	**Definition**: Flavor version list. **Value range**: N/A

Table 5-72 EsflavorsVersionsResp

Parameter	Type	Description
version	String	**Definition**: Elasticsearch engine version. For details, see the supported versions in **Before You Start**. **Value range**: N/A

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Parameter	Type	Description
flavors	Array of **EsflavorsVersionsFlavorsResp** objects	**Definition**: Flavor list. **Value range**: N/A
type	String	**Parameter description**: Instance type. **Options**: • **ess**: data node • **ess-cold**: cold data node • **ess-master**: master node. – **ess-client**: client node

Table 5-73 EsflavorsVersionsFlavorsResp

Parameter	Type	Description
cpu	Integer	**Definition**: Number of CPU cores of an instance. **Value range**: N/A
ram	Integer	**Definition**: Memory size of an instance. Unit: GB. **Value range**: N/A
name	String	**Definition**: Flavor name. **Value range**: N/A
region	String	**Definition**: Available region. **Value range**: N/A
diskrange	String	**Definition**: Disk capacity range of an instance. **Value range**: N/A

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Parameter	Type	Description
availableAZ	String	**Definition**: AZ. **Value range**: N/A
flavor_id	String	**Definition**: Flavor ID. **Value range**: N/A

Example Requests

Obtain the specifications of all nodes in the project space.

```
GET https://{Endpoint}/v1.0/{project_id}/es-flavors
```

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"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

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Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListFlavorsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListFlavorsRequest request = new ListFlavorsRequest();
        try {
            ListFlavorsResponse response = client.listFlavors(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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```
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

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

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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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**.

5.1.19 Downloading a Security Certificate

Function

The certificate obtained through this API can be used for HTTPS-based secure cluster connections, where encryption and user authentication occur.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-74 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Request Parameters

None

Response Parameters

Status code: 200

Table 5-75 Response body parameters

Parameter	Type	Description
file	String	**Definition**: File stream **Default value**: N/A

Example Requests

Download the security certificate.

```
GET https://{Endpoint}/v1.0/{project_id}/cer/download
```

Example Responses

Status code: 200

Request succeeded.

```
"Certificate:xxxx"
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class DownloadCertSolution {

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

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```
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        DownloadCertRequest request = new DownloadCertRequest();
        try {
            DownloadCertResponse response = client.downloadCert(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

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

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Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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.

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Error Codes

See **Error Codes**.

5.1.20 Querying All Tags

Function

This API is used to query all tags of a user in the current project, including the keys and values. This facilitates tag management by group.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-76 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID. **Default value**: N/A
resource_type	Yes	String	**Definition**: Resource type. Currently, its value can only be **css-cluster**. **Constraints**: N/A **Value range**: css-cluster: Indicates the cluster type. **Default value**: N/A

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Request Parameters

None

Response Parameters

Status code: 200

Table 5-77 Response body parameters

Parameter	Type	Description
tags	Array of **ShowAllTagsTagsResp** objects	**Definition**: List of cluster tags. **Value range**: N/A

Table 5-78 ShowAllTagsTagsResp

Parameter	Type	Description
key	String	**Definition**: Tag key. **Value range**: N/A
values	Array of strings	**Definition**: Tag values. **Value range**: N/A

Example Requests

Query all cluster tags in a project.

```
GET https://{Endpoint}/v1.0/{project_id}/css-cluster/tags
```

Example Responses

Status code: 200

Request succeeded.

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

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```
 } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListClustersTagsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListClustersTagsRequest request = new ListClustersTagsRequest();
        request.withResourceType("{resource_type}");
        try {
            ListClustersTagsResponse response = client.listClustersTags(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
```

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```
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListClustersTagsRequest()
        request.resource_type = "{resource_type}"
        response = client.list_clusters_tags(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListClustersTagsRequest{}
    request.ResourceType = "{resource_type}"
    response, err := client.ListClustersTags(request)
```

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.1.21 Upgrading a Cluster Kernel

Function

This API is used to upgrade Elasticsearch from an earlier version to a later version or the same version.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/inst-type/{inst_type}/image/upgrade

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Table 5-79 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster to be upgraded. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
inst_type	Yes	String	**Definition**: Types of nodes to be upgraded. **Constraints**: N/A **Value range**: Currently, only **all** is supported, indicating all nodes. **Default value**: N/A

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Request Parameters

Table 5-80 Request body parameters

Parameter	Mandatory	Type	Description
target_image_id	Yes	String	**Definition**: ID of the target image version. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
upgrade_type	Yes	String	**Definition**: Upgrade type. **Constraints**: N/A **Value range**: • **same**: same-version upgrade. • **cross**: cross-version upgrade. • **cross-engine**: cross-engine upgrade. **Default value**: N/A
indices_backup_check	Yes	Boolean	**Definition**: Whether to perform backup verification. **Constraints**: N/A **Value range**: • true: Verify the load. • **false**: Do not verify the load. **Default value**: true

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Parameter	Mandatory	Type	Description
agency	Yes	String	**Definition**: Agency name. You can create an agency to allow CSS to call other cloud services. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
cluster_load_check	No	Boolean	**Definition**: Indicates whether to verify the load. **Constraints**: N/A **Value range**: • true: Verify the load. • **false**: Do not verify the load. **Default value**: true
batch_size	No	Integer	**Definition**: Data migration concurrency in terms of the number of data nodes. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

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Example Requests

Update a cluster version.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/inst-type/all/image/upgrade

{
  "target_image_id" : "{target_image_id}",
  "upgrade_type" : "same",
  "indices_backup_check" : true,
  "agency" : "css-test-agency",
  "cluster_load_check" : true
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Update a cluster version.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpgradeCoreSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpgradeCoreRequest request = new UpgradeCoreRequest();
        request.withClusterId("{cluster_id}");
        request.withInstType("{inst_type}");
        UpgradingTheKernelBody body = new UpgradingTheKernelBody();
        body.withClusterLoadCheck(true);
        body.withAgency("css-test-agency");
```

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```
        body.withIndicesBackupCheck(true);
        body.withUpgradeType(UpgradingTheKernelBody.UpgradeTypeEnum.fromValue("same"));
        body.withTargetImageId("{target_image_id}");
        request.withBody(body);
        try {
            UpgradeCoreResponse response = client.upgradeCore(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Update a cluster version.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpgradeCoreRequest()
        request.cluster_id = "{cluster_id}"
        request.inst_type = "{inst_type}"
        request.body = UpgradingTheKernelBody(
            cluster_load_check=True,
            agency="css-test-agency",
            indices_backup_check=True,
            upgrade_type="same",
            target_image_id="{target_image_id}"
        )
        response = client.upgrade_core(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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Go

Update a cluster version.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpgradeCoreRequest{}
    request.ClusterId = "{cluster_id}"
    request.InstType = "{inst_type}"
    clusterLoadCheckUpgradingTheKernelBody:= true
    request.Body = &model.UpgradingTheKernelBody{
        ClusterLoadCheck: &clusterLoadCheckUpgradingTheKernelBody,
        Agency: "css-test-agency",
        IndicesBackupCheck: true,
        UpgradeType: model.GetUpgradingTheKernelBodyUpgradeTypeEnum().SAME,
        TargetImageId: "{target_image_id}",
    }
    response, err := client.UpgradeCore(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should not repeat the request without modifications.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, 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**.

5.1.22 Obtaining the ID of the Target Image to Upgrade To

Function

This API is used to obtain the IDs of target images the current cluster can be upgraded to. The upgrade types are as follows:

- During a same-version upgrade, kernel patches are updated for a cluster. The cluster is upgraded to the latest image of the current version to fix known issues or optimize performance. For example, if the current cluster version is 7.10.2(7.10.2_24.3.3_0102), upon a same-version upgrade, the cluster will be upgraded to the latest image 7.10.2(7.10.2_24.3.4_0109) of version 7.10.2. (The version numbers used here are examples only.)
- Cross-version upgrade: Upgrade the cluster version. The cluster will be upgraded to the latest image of the target version to enhance functions or incorporate versions. For example, if the current cluster version is 7.6.2(7.6.2_24.3.3_1224), upon a cross-version upgrade, the cluster will be upgraded to the latest image 7.10.2(7.10.2_24.3.4_0109) of version 7.10.2. (The version numbers used here are examples only.)
- Cross-engine upgrade: Change an Elasticsearch cluster to an OpenSearch cluster. Cross-engine upgrade means to upgrade an Elasticsearch cluster to the latest image of the target OpenSearch version. For example, if the Elasticsearch cluster version is 7.10.2(7.10.2_24.3.3_0102), upon a cross-engine upgrade, the Elasticsearch cluster will be upgraded to the latest image 1.3.6(1.3.6_24.3.4_0109) of OpenSearch 1.3.6. (The version numbers used here are examples only.) This feature is not supported currently.

Calling Method

For details, see **Calling APIs**.

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URI

GET /v1.0/{project_id}/clusters/{cluster_id}/target/{upgrade_type}/images

Table 5-81 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster to be upgraded. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
upgrade_type	Yes	String	**Parameter description**: Upgrade type. **Constraints**: N/A **Options**: • **same**: same-version upgrade. • **cross**: cross-version upgrade. • **cross-engine**: cross-engine upgrade. **Default value**: N/A

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Table 5-82 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	**Definition**: Start value of the query. The default value is 0. **Constraints**: N/A **Value range**: 0-1000 **Default value**: 0
limit	No	Integer	**Definition**: Number of images to be queried. The default value is **10**, indicating that 10 images are queried at a time. **Constraints**: N/A **Value range**: 1-1000 **Default value**: 10

Request Parameters

None

Response Parameters

Status code: 200

Table 5-83 Response body parameters

Parameter	Type	Description
needUploadUpgradePlugin	Boolean	**Definition**: Whether to upload the plug-in of the target version. **Value range**: N/A

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Parameter	Type	Description
imageInfoList	Array of **GetTargetImageIdDetail** objects	**Definition**: Image details. **Value range**: N/A
totalSize	Integer	**Definition**: Number of target images. **Value range**: N/A

Table 5-84 GetTargetImageIdDetail

Parameter	Type	Description
id	String	**Definition**: ID of an image that can be upgraded. **Value range**: N/A
displayName	String	**Definition**: Name of an image that can be upgraded. **Value range**: N/A
imageDesc	String	**Definition**: Image description. **Value range**: N/A

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Parameter	Type	Description
datastoreType	String	**Definition**: Cluster engine type. **Value range**: • elasticsearch: Cloud Search Service (CSS) provides distributed search capabilities, log analytics, reporting, and semantic search based on open-source Elasticsearch. • logstash: Provides functions such as data ingestion, transformation, cleaning, and parsing based on open-source Logstash. • opensearch: Provides distributed search, log analytics, reporting, and semantic search based on open-source OpenSearch. It is the future version of CSS's Elasticsearch clusters.
datastoreVersion	String	**Definition**: Image engine version. **Value range**: N/A
priority	Integer	**Definition**: Priority of the target image. A larger value indicates a higher priority. **Value range**: N/A

Example Requests

Obtain the target image for a cross-version upgrade of the cluster.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/target/cross/images
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "needUploadUpgradePlugin" : false,
  "imageInfoList" : [ ],
  "totalSize" : 0
}
```

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SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListImagesSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListImagesRequest request = new ListImagesRequest();
        request.withClusterId("{cluster_id}");
        request.withUpgradeType("{upgrade_type}");
        try {
            ListImagesResponse response = client.listImages(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *
```

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListImagesRequest()
        request.cluster_id = "{cluster_id}"
        request.upgrade_type = "{upgrade_type}"
        response = client.list_images(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListImagesRequest{}
    request.ClusterId = "{cluster_id}"
    request.UpgradeType = "{upgrade_type}"
    response, err := client.ListImages(request)
    if err == nil {
```

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should not repeat the request without modifications.
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**.

5.1.23 Obtaining Details About a Cluster Upgrade or AZ Switchover

Function

By deploying a CSS cluster across multiple AZs, you can increase the cluster's availability, lower the likelihood of data loss, and minimize service downtime. You can deploy a cluster across two or three AZs within a region. The upgrade may take a long time. This API can be used to check phase-by-phase information during a cluster upgrade or AZ switchover.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-85 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster to be upgraded. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Table 5-86 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	**Definition**: The start value of the query. The default value is 1, indicating that the query starts from the first task. **Constraints**: N/A **Value range**: 1-1000 **Default value**: 1

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Parameter	Mandatory	Type	Description
limit	No	Integer	**Definition**: Number of AZs to be queried. The default value is **10**, indicating that 10 AZs are queried at a time. **Constraints**: N/A **Value range**: 1-1000 **Default value**: 10
action_mode	No	String	**Definition**: Query details about a cluster upgrade or AZ change operation. **Constraints**: N/A **Value range**: • **UPGRADING**: query cluster upgrade details. • **AZ_MIGRATION**: query AZ change details. **Default value**: UPGRADING

Request Parameters

None

Response Parameters

Status code: 200

Table 5-87 Response body parameters

Parameter	Type	Description
totalSize	Integer	**Definition**: Total number of cluster upgrade or AZ change tasks. **Value range**: N/A

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Parameter	Type	Description
detailList	Array of **GetUpgradeDetailInfo** objects	**Definition**: Details of cluster upgrade or AZ change tasks. **Value range**: N/A

Table 5-88 GetUpgradeDetailInfo

Parameter	Type	Description
id	String	**Definition**: ID of the upgrade or AZ change task. **Value range**: N/A
startTime	String	**Definition**: Start time of an upgrade or AZ change task. **Value range**: N/A
endTime	String	**Definition**: End time of an upgrade or AZ change task. **Value range**: N/A
status	String	**Definition**: Status of an upgrade or AZ change task. **Value range**: • **RUNNING**: The task is being executed. • **SUCCESS**: The task is successful. • FAILED: The job failed. • **PARTIAL_FAILED**: The task failed partially.

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Parameter	Type	Description
agencyName	String	**Definition**: Agency name. You can create an agency to allow CSS to call other cloud services. **Value range**: N/A
imageInfo	**GetTargetImageIdDetail** object	**Definition**: Image details. **Value range**: N/A
totalNodes	String	**Definition**: Names of all nodes that need to be upgraded or switched to another AZ. **Value range**: N/A
completedNodes	String	**Definition**: Nodes where upgrade or AZ change tasks have been completed. **Value range**: N/A
currentNodeName	String	**Definition**: Name of the node that is being upgraded or switched to another AZ. **Value range**: N/A
executeTimes	String	**Definition**: Number of times the upgrade or AZ change task was retried. **Value range**: N/A
migrateParam	String	**Definition**: This parameter is available only when **action_mode** is set to **AZ_MIGRATION**. It indicates the request parameter of the AZ change task. **Value range**: N/A

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Parameter	Type	Description
finalAzInfoMap	String	**Definition**: This parameter is available only when **action_mode** is set to **AZ_MIGRATION**. It indicates the AZ details of each node after AZ switchover. **Value range**: N/A
currentNodeDetail	Array of **CurrentNodeDetail** objects	**Definition**: Task details of the node that is being upgraded or switched to another AZ. **Value range**: N/A
batchSize	Integer	**Definition**: Number of nodes where data is being migrated concurrently. **Value range**: N/A
currentBatchNodes	String	**Definition**: Nodes where data is being migrated. **Value range**: N/A

Table 5-89 GetTargetImageIdDetail

Parameter	Type	Description
id	String	**Definition**: ID of an image that can be upgraded. **Value range**: N/A
displayName	String	**Definition**: Name of an image that can be upgraded. **Value range**: N/A

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Parameter	Type	Description
imageDesc	String	**Definition**: Image description. **Value range**: N/A
datastoreType	String	**Definition**: Cluster engine type. **Value range**: • elasticsearch: Cloud Search Service (CSS) provides distributed search capabilities, log analytics, reporting, and semantic search based on open-source Elasticsearch. • logstash: Provides functions such as data ingestion, transformation, cleaning, and parsing based on open-source Logstash. • opensearch: Provides distributed search, log analytics, reporting, and semantic search based on open-source OpenSearch. It is the future version of CSS's Elasticsearch clusters.
datastoreVersion	String	**Definition**: Image engine version. **Value range**: N/A
priority	Integer	**Definition**: Priority of the target image. A larger value indicates a higher priority. **Value range**: N/A

Table 5-90 CurrentNodeDetail

Parameter	Type	Description
order	Integer	**Definition**: SN of the upgrade or AZ switchover task. **Value range**: N/A

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Parameter	Type	Description
name	String	**Definition**: Name of the upgrade or AZ switchover task. **Value range**: N/A
status	String	**Definition**: Status of the upgrade or AZ change task of the current cluster. **Value range**: • **RUNNING**: running • **SUCCESS** • **FAILED** • **WAITING**
desc	String	**Definition**: Description of the upgrade or AZ change task of the current cluster. **Value range**: N/A
beginTime	String	**Definition**: Start time of the upgrade or AZ change task of the current cluster. **Value range**: N/A
endTime	String	**Definition**: End time of the upgrade or AZ change task of the current cluster. **Value range**: N/A

Example Requests

- Query cluster upgrade details.

  ```
  GET https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/upgrade/detail
  ```

- Query details about a cluster AZ change task.

  ```
  GET https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/upgrade/detail?action_mode=AZ_MIGRATION
  ```

Example Responses

Status code: 200

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Request succeeded.

- Example response for querying cluster upgrade details.


```
{
  "totalSize" : 1,
  "detailList" : [ {
    "id" : "b7ac4c5b-3bda-4feb-a303-eb80f4bce986",
    "startTime" : "2023-01-05T02:23:39",
    "endTime" : "",
    "status" : "RUNNING",
    "agencyName" : "css_test_agency",
    "imageInfo" : {
      "id" : "439b5d30-5968-45df-b088-d030a858522d",
      "displayName" : "7.10.2_22.5.1_1230",
      "imageDesc" : "The latest image of version 7.10.2 will be officially released on December 30, 2022. the stability of the cluster has been optimized. It is recommended that you upgrade to this version.",
      "datastoreType" : "elasticsearch",
      "datastoreVersion" : "7.10.2",
      "priority" : 16
    },
    "totalNodes" : "css-test-ess-esn-1-1,css-test-ess-esn-2-1,css-test-ess-esn-3-1",
    "completedNodes" : "",
    "currentNodeName" : "css-test-ess-esn-1-1",
    "executeTimes" : "1",
    "currentNodeDetail" : [ {
      "order" : 0,
      "name" : "Data migration",
      "status" : "SUCCESS",
      "desc" : "Data is migrated from a node to other nodes in the cluster by running the exclude command.",
      "beginTime" : "2023-01-05T02:23:42",
      "endTime" : "2023-01-05T02:29:51"
    }, {
      "order" : 12,
      "name" : "Task status update",
      "status" : "WAITING",
      "desc" : "The cluster task status is refreshed. If there are no nodes to be replaced, the task is marked as completed. Otherwise, another node starts to be replaced.",
      "beginTime" : "",
      "endTime" : ""
    } ]
  } ]
}
```


- Example response for querying cluster AZ change details.


```
{
  "totalSize" : 1,
  "detailList" : [ {
    "id" : "8ebe958b-b8c6-4939-b5a7-85aee9468888",
    "startTime" : "2022-12-29T08:32:29",
    "endTime" : "",
    "status" : "RUNNING",
    "agencyName" : "css_test_agency",
    "totalNodes" : "css-test-ess-esn-2-1,css-test-ess-esn-1-1,css-test-ess-esn-3-1",
    "completedNodes" : "css-test-ess-esn-2-1",
    "currentNodeName" : "css-test-ess-esn-1-1",
    "executeTimes" : "1",
    "migrateParam" : "{\"instType\":\"ess\",\"migrateType\":\"az_migrate\",\"sourceAz\":\"cn-north-4a\",\"targetAz\":\"cn-north-4c\"}",
    "finalAzInfoMap" : "{\"cn-north-4c\":\"css-test-ess-esn-2-1,css-test-ess-esn-1-1,css-test-ess-esn-3-1\"}",
    "currentNodeDetail" : [ {
      "order" : 0,
      "name" : "Data migration",
      "status" : "SUCCESS",
      "desc" : "Data is migrated from a node to other nodes in the cluster by running the exclude command.",
      "beginTime" : "2022-12-29T08:41:05",
```


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```
      "endTime" : "2022-12-29T08:41:23"
    }, {
      "order" : 12,
      "name" : "Task status update",
      "status" : "RUNNING",
      "desc" : "The cluster task status is refreshed. If there are no nodes to be replaced, the task is
marked as completed. Otherwise, another node starts to be replaced.",
      "beginTime" : "2023-01-04T06:53:42",
      "endTime" : ""
    } ]
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpgradeDetailSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpgradeDetailRequest request = new UpgradeDetailRequest();
        request.withClusterId("{cluster_id}");
        try {
            UpgradeDetailResponse response = client.upgradeDetail(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
```

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```
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpgradeDetailRequest()
        request.cluster_id = "{cluster_id}"
        response = client.upgrade_detail(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

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```
    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should not repeat the request without modifications.
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**.

5.1.24 Querying Tags of a Specified Cluster

Function

Tags are cluster identifiers. You can add tags to clusters to identify and manage cluster resources. You can add tags to a cluster when creating a cluster or add them on the details page of a created cluster. This API is used to query the tags of a specified cluster. It facilitates tag management.

Calling Method

For details, see **Calling APIs**.

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URI

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

Table 5-91 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
resource_type	Yes	String	**Definition**: Resource type. Currently, its value can only be **css-cluster**. **Constraints**: N/A **Value range**: css-cluster: Indicates the cluster type. **Default value**: N/A

Request Parameters

None

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Response Parameters

Status code: 200

Table 5-92 Response body parameters

Parameter	Type	Description
tags	Array of ShowTagsTagsResp objects	**Definition**: List of cluster tags. **Value range**: N/A

Table 5-93 ShowTagsTagsResp

Parameter	Type	Description
key	String	**Definition**: Tag key. **Value range**: N/A
value	String	**Definition**: Tag value. **Value range**: N/A

Example Requests

Query the tags of a cluster.

```
GET https://{Endpoint}/v1.0/{project_id}/css-cluster/4f3deec3-efa8-4598-bf91-560aad1377a3/tags
```

Example Responses

Status code: 200

Request succeeded.

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

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SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ShowClusterTagSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowClusterTagRequest request = new ShowClusterTagRequest();
        request.withClusterId("{cluster_id}");
        request.withResourceType("{resource_type}");
        try {
            ShowClusterTagResponse response = client.showClusterTag(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *
```

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowClusterTagRequest()
        request.cluster_id = "{cluster_id}"
        request.resource_type = "{resource_type}"
        response = client.show_cluster_tag(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowClusterTagRequest{}
    request.ClusterId = "{cluster_id}"
    request.ResourceType = "{resource_type}"
    response, err := client.ShowClusterTag(request)
    if err == nil {
```

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.1.25 Retrying a Failed Upgrade Task

Function

The upgrade may fail due to network problems. In this case, you can call this API to retry.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1.0/{project_id}/clusters/{cluster_id}/upgrade/{action_id}/retry

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Table 5-94 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster to retry upgrade. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
action_id	Yes	String	**Definition**: ID of the task to be retried. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Table 5-95 Query Parameters

Parameter	Mandatory	Type	Description
retry_mode	No	String	**Definition**: If this parameter is not left blank, the task will be terminated. **Constraints**: Currently, its value can only be **abort**. **Value range**: abort: Abort the task. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

- Example of an upgrade task retry request.

```
PUT https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/upgrade/bcdb711c-a7f0-4007-b8ee-9f13c05f8326/retry
```

- Example of an upgrade task termination request.

```
PUT https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/upgrade/bcdb711c-a7f0-4007-b8ee-9f13c05f8326/retry?retry_mode=abort
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
```

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```
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class RetryUpgradeTaskSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        RetryUpgradeTaskRequest request = new RetryUpgradeTaskRequest();
        request.withClusterId("{cluster_id}");
        request.withActionId("{action_id}");
        try {
            RetryUpgradeTaskResponse response = client.retryUpgradeTask(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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

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```
    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = RetryUpgradeTaskRequest()
        request.cluster_id = "{cluster_id}"
        request.action_id = "{action_id}"
        response = client.retry_upgrade_task(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.RetryUpgradeTaskRequest{}
    request.ClusterId = "{cluster_id}"
    request.ActionId = "{action_id}"
    response, err := client.RetryUpgradeTask(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should not repeat the request without modifications.
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**.

5.1.26 Adding Tags to a Cluster

Function

Tags are cluster identifiers. You can add tags to clusters to identify and manage cluster resources.

You can add tags to a cluster when creating a cluster or add them on the details page of a created cluster.

This API is used to add tags to a cluster.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-96 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster that you want to add tags to. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
resource_type	Yes	String	**Definition**: Resource type. Currently, its value can only be **css-cluster**. **Constraints**: N/A **Value range**: css-cluster: Indicates the cluster type. **Default value**: N/A

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Request Parameters

Table 5-97 Request body parameters

Parameter	Mandatory	Type	Description
tag	Yes	**Tag** object	**Definition**: Tag object you want to add. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Table 5-98 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	**Definition**: Tag key. **Constraints**: • The key cannot be empty. Its length is 1 to 128 characters. • The value can contain UTF-8 letters, digits, spaces, and special characters _ . : = + - @. • Tags starting with *sys* are system tags and cannot be used by tenants. • Do not use spaces to start or end the key. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
value	Yes	String	**Definition**: Tag value. **Constraints**: • The value contains 0 to 255 characters. • The value can contain UTF-8 letters, digits, spaces, and special characters _.://=+-@ **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 204

Request succeeded.

None

Example Requests

Add tags to a cluster.

```
POST https://{Endpoint}/v1.0/{project_id}/css-cluster/4f3deec3-efa8-4598-bf91-560aad1377a3/tags

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

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Add tags to a cluster.

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

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

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```
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class CreateClustersTagsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateClustersTagsRequest request = new CreateClustersTagsRequest();
        request.withClusterId("{cluster_id}");
        request.withResourceType("{resource_type}");
        TagReq body = new TagReq();
        Tag tagbody = new Tag();
        tagbody.withKey("K1")
            .withValue("V1");
        body.withTag(tagbody);
        request.withBody(body);
        try {
            CreateClustersTagsResponse response = client.createClustersTags(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Add tags to a cluster.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
```

```
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateClustersTagsRequest()
        request.cluster_id = "{cluster_id}"
        request.resource_type = "{resource_type}"
        tagbody = Tag(
            key="K1",
            value="V1"
        )
        request.body = TagReq(
            tag=tagbody
        )
        response = client.create_clusters_tags(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Add tags to a cluster.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
    request := &model.CreateClustersTagsRequest{}
    request.ClusterId = "{cluster_id}"
    request.ResourceType = "{resource_type}"
    tagbody := &model.Tag{
        Key: "K1",
        Value: "V1",
    }
    request.Body = &model.TagReq{
        Tag: tagbody,
    }
    response, err := client.CreateClustersTags(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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 exits, 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**.

5.1.27 Changing the Security Group

Function

This API is used to change the security group after a cluster is created.

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NOTE

Before changing the security group, ensure that port 9200 has been enabled. Incorrect security group configuration may cause service access failures. Exercise caution when performing this operation.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/sg/change

Table 5-99 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster that you want to change the security group. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-100 Request body parameters

Parameter	Mandatory	Type	Description
security_group_ids	Yes	String	**Definition**: Security group ID. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Change the security group that the current cluster belongs to.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/sg/change

{
  "security_group_ids" : "b1038649-1f77-4ae9-b64d-9af56e422652"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Change the security group that the current cluster belongs to.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
```

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```
import com.huaweicloud.sdk.css.v1.model.*;


public class ChangeSecurityGroupSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ChangeSecurityGroupRequest request = new ChangeSecurityGroupRequest();
        request.withClusterId("{cluster_id}");
        ChangeSecurityGroupReq body = new ChangeSecurityGroupReq();
        body.withSecurityGroupIds("b1038649-1f77-4ae9-b64d-9af56e422652");
        request.withBody(body);
        try {
            ChangeSecurityGroupResponse response = client.changeSecurityGroup(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Change the security group that the current cluster belongs to.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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

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```
client = CssClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(CssRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ChangeSecurityGroupRequest()
    request.cluster_id = "{cluster_id}"
    request.body = ChangeSecurityGroupReq(
        security_group_ids="b1038649-1f77-4ae9-b64d-9af56e422652"
    )
    response = client.change_security_group(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

Change the security group that the current cluster belongs to.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ChangeSecurityGroupRequest{}
    request.ClusterId = "{cluster_id}"
    request.Body = &model.ChangeSecurityGroupReq{
        SecurityGroupIds: "b1038649-1f77-4ae9-b64d-9af56e422652",
    }
    response, err := client.ChangeSecurityGroup(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

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More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should not repeat the request without modifications.
403	Request rejected. The server has received the request and understood it, but refused to respond to it. The client should not repeat the request without modifications.

Error Codes

See **Error Codes**.

5.1.28 Deleting a Cluster Tag

Function

Tags are cluster identifiers. You can add tags to clusters to identify and manage cluster resources.

You can add tags to a cluster when creating a cluster or add them on the details page of a created cluster.

This API is used to delete cluster tags. You can delete unnecessary cluster tags to facilitate cluster management.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-101 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster that you want to delete tags from. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
resource_type	Yes	String	**Definition**: Resource type. Currently, its value can only be **css-cluster**. **Constraints**: N/A **Value range**: css-cluster: Indicates the cluster type. **Default value**: N/A

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Parameter	Mandatory	Type	Description
key	Yes	String	**Definition**: Name of the tag you want to delete **Constraints**: If the tag name is in Chinese, encode the tag name using URL before calling the API. **Value range**: N/A **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 204

Request succeeded.

None

Example Requests

Delete the tags of a cluster.

```
DELETE https://{Endpoint}/v1.0/{project_id}/css-cluster/2a197c4d-5467-4003-931d-83ec49939cf/tags/K1
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;
```

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```
public class DeleteClustersTagsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteClustersTagsRequest request = new DeleteClustersTagsRequest();
        request.withClusterId("{cluster_id}");
        request.withResourceType("{resource_type}");
        request.withKey("{key}");
        try {
            DeleteClustersTagsResponse response = client.deleteClustersTags(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()
```

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```
    try:
        request = DeleteClustersTagsRequest()
        request.cluster_id = "{cluster_id}"
        request.resource_type = "{resource_type}"
        request.key = "{key}"
        response = client.delete_clusters_tags(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteClustersTagsRequest{}
    request.ClusterId = "{cluster_id}"
    request.ResourceType = "{resource_type}"
    request.Key = "{key}"
    response, err := client.DeleteClustersTags(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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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**.

5.1.29 Changing the Subnet of a Cluster

Function

This API is used to bind a new subnet to newly added nodes after cluster creation, or in the case of a cluster subnet change.

NOTE

By default, subnets with the same VPC are connected. Ensure that the new subnet can reach your service system. Note that a cluster with automatic IPv6 address creation enabled can only be switched to a new subnet that uses IPv6 addresses.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/subnet/change

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Table 5-102 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose subnet is to be changed. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-103 Request body parameters

Parameter	Mandatory	Type	Description
subnet_id	Yes	String	**Definition**: Subnet ID. **Constraints**: The value must be standard UUID format: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx. **Value range**: The value must be standard UUID format: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx. **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Modify the subnet of a cluster.

```
POST /v1.0/6204a5bd270343b5885144cf9c8c158d/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/subnet/change

{
  "subnet_id" : "b1234567-1f77-4ae9-b64d-9af56e123456"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Modify the subnet of a cluster.

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

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```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ChangeClusterSubnetSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ChangeClusterSubnetRequest request = new ChangeClusterSubnetRequest();
        request.withClusterId("{cluster_id}");
        ClusterChangeMainSubnet body = new ClusterChangeMainSubnet();
        body.withSubnetId("b1234567-1f77-4ae9-b64d-9af56e123456");
        request.withBody(body);
        try {
            ChangeClusterSubnetResponse response = client.changeClusterSubnet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Modify the subnet of a cluster.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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```
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ChangeClusterSubnetRequest()
        request.cluster_id = "{cluster_id}"
        request.body = ClusterChangeMainSubnet(
            subnet_id="b1234567-1f77-4ae9-b64d-9af56e123456"
        )
        response = client.change_cluster_subnet(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Modify the subnet of a cluster.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ChangeClusterSubnetRequest{}
    request.ClusterId = "{cluster_id}"
    request.Body = &model.ClusterChangeMainSubnet{
        SubnetId: "b1234567-1f77-4ae9-b64d-9af56e123456",
    }
    response, err := client.ChangeClusterSubnet(request)
```

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

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

Error Codes

See **Error Codes**.

5.1.30 Adding or Deleting Cluster Tags in Batches

Function

This API is used to add or delete tags in batches for Elasticsearch, Logstash, and OpenSearch clusters.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-104 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster for which you want to add or delete tags in batches. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
resource_type	Yes	String	**Definition**: Cluster resource type. Currently, its value can only be **css-cluster**. **Constraints**: N/A **Value range**: css-cluster: Indicates the cluster type. **Default value**: N/A

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Request Parameters

Table 5-105 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	**Definition**: Cluster tag operation type. This attribute is used to identify the required operation type. **Constraints**: N/A **Value range**: • **create**: Tags are added in batches. • **delete**: Tags are deleted in batches. **Default value**: N/A
tags	Yes	Array of **Tag** objects	**Definition**: List of cluster tags. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Table 5-106 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	**Definition**: Tag key. **Constraints**: • The key cannot be empty. Its length is 1 to 128 characters. • The value can contain UTF-8 letters, digits, spaces, and special characters _ . : = + - @. • Tags starting with *sys* are system tags and cannot be used by tenants. • Do not use spaces to start or end the key. **Value range**: N/A **Default value**: N/A
value	Yes	String	**Definition**: Tag value. **Constraints**: • The value contains 0 to 255 characters. • The value can contain UTF-8 letters, digits, spaces, and special characters _.://=+-@ **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 204

Request succeeded.

None

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Example Requests

Create cluster tags in batches.

```
POST https://{Endpoint}/v1.0/{project_id}/css-cluster/4f3deec3-efa8-4598-bf91-560aad1377a3/tags/action

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

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Create cluster tags in batches.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;

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

public class UpdateBatchClustersTagsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateBatchClustersTagsRequest request = new UpdateBatchClustersTagsRequest();
        request.withClusterId("{cluster_id}");
```

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```
        request.withResourceType("{resource_type}");
        BatchAddOrDeleteTagOnClusterReq body = new BatchAddOrDeleteTagOnClusterReq();
        List<Tag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new Tag()
                .withKey("K1")
                .withValue("V1")
        );
        listbodyTags.add(
            new Tag()
                .withKey("K2")
                .withValue("V2")
        );
        body.withTags(listbodyTags);
        body.withAction("create");
        request.withBody(body);
        try {
            UpdateBatchClustersTagsResponse response = client.updateBatchClustersTags(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Create cluster tags in batches.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateBatchClustersTagsRequest()
        request.cluster_id = "{cluster_id}"
        request.resource_type = "{resource_type}"
        listTagsbody = [
            Tag(
                key="K1",
```

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```
            value="V1"
        ),
        Tag(
            key="K2",
            value="V2"
        )
    ]
    request.body = BatchAddOrDeleteTagOnClusterReq(
        tags=listTagsbody,
        action="create"
    )
    response = client.update_batch_clusters_tags(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

Create cluster tags in batches.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateBatchClustersTagsRequest{}
    request.ClusterId = "{cluster_id}"
    request.ResourceType = "{resource_type}"
    var listTagsbody = []model.Tag{
        {
            Key: "K1",
            Value: "V1",
        },
        {
            Key: "K2",
            Value: "V2",
        },
    }
    request.Body = &model.BatchAddOrDeleteTagOnClusterReq{
```

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```
        Tags: listTagsbody,
        Action: "create",
    }
    response, err := client.UpdateBatchClustersTags(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.1.31 Changing AZs for a Cluster Instance

Function

An availability zone (AZ) is a physical region where resources use independent power supplies and networks. AZs in the same region can communicate with each other through internal networks but are physically isolated.

Multi-AZ deployment is a high-availability solution provided by CSS. You can deploy a cluster across two or three AZs in the same region. This helps prevent data loss and lower the risk of downtime.

This API is used to change AZs by specifying node types.

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Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/inst-type/{inst_type}/azmigrate

Table 5-107 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose AZs are to be changed. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Parameter	Mandatory	Type	Description
inst_type	Yes	String	**Definition**: Types of nodes whose AZ is to be changed. **Constraints**: N/A **Value range**: • **all**: all node types • **ess**: data node • **ess-cold**: cold data node • **ess-client**: client node • **ess-master**: master node **Default value**: N/A **NOTE** All mission-critical data has been backed up before an AZ switchover. This is to prevent data loss.

Request Parameters

Table 5-108 Request body parameters

Parameter	Mandatory	Type	Description
source_az	Yes	String	**Definition**: AZ where the node is located. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
target_az	Yes	String	**Definition**: AZ where the node is expected to be distributed. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
migrate_type	Yes	String	**Definition**: AZ migration method. **Constraints**: N/A **Value range**: • **multi_az_change**: HA reconstruction • **az_migrate**: AZ migration **Default value**: N/A
agency	Yes	String	**Definition**: Agency name. You can create an agency to allow CSS to call other cloud services. **Constraints**: The value can contain only letters (a-z and A-Z), digits (0-9), hyphens (-), and underscores (_). It cannot contain Chinese characters or other special characters. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
indices_backup_check	No	Boolean	**Definition**: Whether to check full index snapshots. **Constraints**: N/A **Value range**: • true: Check for full index snapshots. • false: Do not check for full index snapshots. **Default value**: true

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Change AZs for the current cluster.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/inst-type/all/azmigrate

{
  "source_az" : "cn-north-4c",
  "target_az" : "cn-north-4a",
  "migrate_type" : "az_migrate",
  "agency" : "css-test-agency"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Change AZs for the current cluster.

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

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

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```
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateAzByInstanceTypeSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateAzByInstanceTypeRequest request = new UpdateAzByInstanceTypeRequest();
        request.withClusterId("{cluster_id}");
        request.withInstType(UpdateAzByInstanceTypeRequest.InstTypeEnum.fromValue("{inst_type}"));
        UpdateAzByInstanceTypeReq body = new UpdateAzByInstanceTypeReq();
        body.withAgency("css-test-agency");
        body.withMigrateType("az_migrate");
        body.withTargetAz("cn-north-4a");
        body.withSourceAz("cn-north-4c");
        request.withBody(body);
        try {
            UpdateAzByInstanceTypeResponse response = client.updateAzByInstanceType(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Change AZs for the current cluster.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
```

```
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateAzByInstanceTypeRequest()
        request.cluster_id = "{cluster_id}"
        request.inst_type = "{inst_type}"
        request.body = UpdateAzByInstanceTypeReq(
            agency="css-test-agency",
            migrate_type="az_migrate",
            target_az="cn-north-4a",
            source_az="cn-north-4c"
        )
        response = client.update_az_by_instance_type(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Change AZs for the current cluster.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
    request := &model.UpdateAzByInstanceTypeRequest{}
    request.ClusterId = "{cluster_id}"
    request.InstType = model.GetUpdateAzByInstanceTypeRequestInstTypeEnum().INST_TYPE
    request.Body = &model.UpdateAzByInstanceTypeReq{
        Agency: "css-test-agency",
        MigrateType: "az_migrate",
        TargetAz: "cn-north-4a",
        SourceAz: "cn-north-4c",
    }
    response, err := client.UpdateAzByInstanceType(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should not repeat the request without modifications.
403	The request is rejected. The server has received the request and understood it, but the server is refusing to respond to it. The client should not repeat the request without modifications.

Error Codes

See **Error Codes**.

5.2 Word Dictionary Management

5.2.1 Querying the Status of a Custom Word Dictionary

Function

You can configure custom word dictionaries to support word segmentation. This gives the search engine enhanced performance when searching by keywords such as company names, for example, Huawei, and buzzwords from social media. You can also search text data based on a synonym dictionary. CSS uses the IK and synonym analyzers. The IK analyzer uses a main word dictionary and a stop word dictionary. The synonym analyzer uses a synonym word dictionary. The IK analyzer uses the ik_max_word and ik_smart word segmentation policies. The synonym

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analyzer uses the ik_synonym word segmentation policy. This API is used to query the loading status of a custom word dictionary.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-109 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose word dictionary status you want to query For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

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Table 5-110 Response body parameters

Parameter	Type	Description
status	String	**Definition**: Custom word dictionary loading status. **Value range**: • **Init** indicates initialization is in progress. • **Loaded** indicates that the loading succeeded. • **Loading** indicates that the loading is in progress. • **Failed** indicates that the loading failed. • **NeedReboot** indicates that a cluster restart is required. • **Undefined** indicates an undefined state.
bucket	String	**Definition**: The OBS bucket that stores the word dictionary file that is last updated. **Value range**: N/A
mainObj	String	**Definition**: Main word dictionary file. **Value range**: N/A
stopObj	String	**Definition**: Stop word dictionary file. **Value range**: N/A
synonymObj	String	**Definition**: Synonym dictionary file. **Value range**: N/A
staticMainObj	String	**Definition**: Static main word dictionary file. **Value range**: N/A

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Parameter	Type	Description
staticStopObj	String	**Definition**: Static main word dictionary file. **Value range**: N/A
extraMainObj	String	**Definition**: Extra main word dictionary file. **Value range**: N/A
extraStopObj	String	**Definition**: Extra stop word dictionary. **Value range**: N/A
updateTime	String	**Definition**: Latest update time of a dictionary. **Value range**: N/A
updateDetails	String	**Definition**: Word dictionary update details. **Value range**: N/A
clusterId	String	**Definition**: ID of the cluster where a custom word dictionary you want to configure. **Value range**: N/A
id	String	**Definition**: ID of the word dictionary. **Value range**: N/A

Example Requests

Query the loading status of a custom word dictionary.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/thesaurus
```

Example Responses

Status code: 200

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Request succeeded.

```
{
  "status" : "Loaded",
  "operateStatus" : "success",
  "id" : "e766bd5a-79b0-4d1a-8402-fdeb017a36d1",
  "bucket" : "test-bucket",
  "mainObj" : "word/main.txt",
  "stopObj" : "word/stop.txt",
  "synonymObj" : "word/synonym.txt",
  "staticMainObj" : "Unused",
  "staticStopObj" : "Unused",
  "extraMainObj" : "Unused",
  "extraStopObj" : "Unused",
  "updateTime" : 1521184757000,
  "updateDetails" : "allinstancesareloadedsuccessfully.",
  "clusterId" : "ea244205-d641-45d9-9dcb-ab2236bcd07e"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ShowIkThesaurusSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowIkThesaurusRequest request = new ShowIkThesaurusRequest();
        request.withClusterId("{cluster_id}");
        try {
            ShowIkThesaurusResponse response = client.showIkThesaurus(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowIkThesaurusRequest()
        request.cluster_id = "{cluster_id}"
        response = client.show_ik_thesaurus(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
500	The server is able to receive but unable to understand the request.

Error Codes

See **Error Codes**.

5.2.2 Loading Custom Word Dictionaries

Function

You can configure custom word dictionaries to support word segmentation. This gives the search engine enhanced performance when searching by keywords such as company names, for example, Huawei, and buzzwords from social media. You can also search text data based on a synonym dictionary. CSS uses the IK and synonym analyzers. The IK analyzer uses a main word dictionary and a stop word dictionary. The synonym analyzer uses a synonym word dictionary. The IK analyzer uses the ik_max_word and ik_smart word segmentation policies. The synonym analyzer uses the ik_synonym word segmentation policy. This API is used to load a custom word dictionary stored in OBS. When the preset word dictionaries are inadequate for tokenization, you can use custom word dictionaries.

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Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-111 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster where a custom word dictionary you want to configure. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-112 Request body parameters

Parameter	Mandatory	Type	Description
bucket_name	Yes	String	**Definition**: OBS bucket where the word dictionary file is stored. **Constraints**: The storage class of the bucket must be standard or infrequently accessed. Archive storage is not supported. **Value range**: N/A **Default value**: N/A
main_object	No	String	**Definition**: Main word dictionary file. **Constraints**: • Must be a text file encoded in UTF-8 without BOM. Each line contains one word. The maximum file size is 100 MB. • Modify the parameters of at least one of the seven word dictionaries. Note: Passing an empty "" character string will clear the word dictionary. Passing nothing or null will leave the word dictionary unchanged. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
stop_object	No	String	**Definition**: Stop word dictionary file. **Constraints**: • Must be a text file encoded in UTF-8 without BOM. Each line contains one word. The maximum file size is 100 MB. • Modify the parameters of at least one of the seven word dictionaries. Note: Passing an empty "" character string will clear the word dictionary. Passing nothing or null will leave the word dictionary unchanged. Note: Passing an empty "" character string will clear the word dictionary. Passing nothing or null will leave the word dictionary unchanged. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
synonym_object	No	String	**Definition**: Synonym dictionary file. **Constraints**: • Must be a text file encoded in UTF-8 without BOM. Each line contains one word. The maximum file size is 100 MB. • Modify the parameters of at least one of the seven word dictionaries. Note: Passing an empty "" character string will clear the word dictionary. Passing nothing or null will leave the word dictionary unchanged. Note: Passing an empty "" character string will clear the word dictionary. Passing nothing or null will leave the word dictionary unchanged. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
static_main_object	No	String	**Definition**: Static main word dictionary file. **Constraints**: • Must be a text file encoded in UTF-8 without BOM. Each line contains one group of related words. The maximum file size is 100 MB. • Modify the parameters of at least one of the seven word dictionaries. Note: Passing an empty "" character string will clear the word dictionary. Passing nothing or null will leave the word dictionary unchanged. Only new clusters created after this word dictionary function was brought online are supported. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
static_stop_object	No	String	**Definition**: Static stop word dictionary file. **Constraints**: • Must be a text file encoded in UTF-8 without BOM. Each line contains one group of related words. The maximum file size is 100 MB. • Modify the parameters of at least one of the seven word dictionaries. Note: Passing an empty "" character string will clear the word dictionary. Passing nothing or null will leave the word dictionary unchanged. Only new clusters created after this word dictionary function was brought online are supported. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
extra_main_object	No	String	**Definition**: Extra main word dictionary file. **Constraints**: • Must be a text file encoded in UTF-8 without BOM. Each line contains one group of related words. The maximum file size is 100 MB. • Modify the parameters of at least one of the seven word dictionaries. Note: Passing an empty "" character string will clear the word dictionary. Passing nothing or null will leave the word dictionary unchanged. Only new clusters created after this word dictionary function was brought online are supported. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
extra_stop_object	No	String	**Definition**: Extra stop word dictionary file. **Constraints**: • Must be a text file encoded in UTF-8 without BOM. Each line contains one group of related words. The maximum file size is 100 MB. • Modify the parameters of at least one of the seven word dictionaries. Note: Passing an empty "" character string will clear the word dictionary. Passing nothing or null will leave the word dictionary unchanged. Only new clusters created after this word dictionary function was brought online are supported. **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Enable and configure the word dictionary.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/thesaurus

{
  "bucket_name" : "test-bucket",
  "main_object" : "word/main.txt",
  "stop_object" : "word/stop.txt",
  "synonym_object" : "word/synonym.txt",
  "static_main_object" : "word/staticMain.txt",
  "static_stop_object" : "word/staticStop.txt",
  "extra_main_object" : "word/extraMain.txt",
  "extra_stop_object" : "word/extraStop.txt"
}
```

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Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Enable and configure the word dictionary.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class CreateLoadIkThesaurusSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateLoadIkThesaurusRequest request = new CreateLoadIkThesaurusRequest();
        request.withClusterId("{cluster_id}");
        LoadCustomThesaurusReq body = new LoadCustomThesaurusReq();
        body.withExtraStopObject("word/extraStop.txt");
        body.withExtraMainObject("word/extraMain.txt");
        body.withStaticStopObject("word/staticStop.txt");
        body.withStaticMainObject("word/staticMain.txt");
        body.withSynonymObject("word/synonym.txt");
        body.withStopObject("word/stop.txt");
        body.withMainObject("word/main.txt");
        body.withBucketName("test-bucket");
        request.withBody(body);
        try {
            CreateLoadIkThesaurusResponse response = client.createLoadIkThesaurus(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
```

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

Python

Enable and configure the word dictionary.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateLoadIkThesaurusRequest()
        request.cluster_id = "{cluster_id}"
        request.body = LoadCustomThesaurusReq(
            extra_stop_object="word/extraStop.txt",
            extra_main_object="word/extraMain.txt",
            static_stop_object="word/staticStop.txt",
            static_main_object="word/staticMain.txt",
            synonym_object="word/synonym.txt",
            stop_object="word/stop.txt",
            main_object="word/main.txt",
            bucket_name="test-bucket"
        )
        response = client.create_load_ik_thesaurus(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Enable and configure the word dictionary.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
```

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```
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateLoadIkThesaurusRequest{}
    request.ClusterId = "{cluster_id}"
    extraStopObjectLoadCustomThesaurusReq:= "word/extraStop.txt"
    extraMainObjectLoadCustomThesaurusReq:= "word/extraMain.txt"
    staticStopObjectLoadCustomThesaurusReq:= "word/staticStop.txt"
    staticMainObjectLoadCustomThesaurusReq:= "word/staticMain.txt"
    synonymObjectLoadCustomThesaurusReq:= "word/synonym.txt"
    stopObjectLoadCustomThesaurusReq:= "word/stop.txt"
    mainObjectLoadCustomThesaurusReq:= "word/main.txt"
    request.Body = &model.LoadCustomThesaurusReq{
        ExtraStopObject: &extraStopObjectLoadCustomThesaurusReq,
        ExtraMainObject: &extraMainObjectLoadCustomThesaurusReq,
        StaticStopObject: &staticStopObjectLoadCustomThesaurusReq,
        StaticMainObject: &staticMainObjectLoadCustomThesaurusReq,
        SynonymObject: &synonymObjectLoadCustomThesaurusReq,
        StopObject: &stopObjectLoadCustomThesaurusReq,
        MainObject: &mainObjectLoadCustomThesaurusReq,
        BucketName: "test-bucket",
    }
    response, err := client.CreateLoadIkThesaurus(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.

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Status Code	Description
403	Request rejected. The server has received the request and understood it, but refused to respond to it. The client should not repeat the request without modifications.
500	The server is able to receive the request but unable to understand the request.

Error Codes

See **Error Codes**.

5.2.3 Disabling a Word Dictionary

Function

You can configure custom word dictionaries to support word segmentation. This gives the search engine enhanced performance when searching by keywords such as company names, for example, Huawei, and buzzwords from social media. You can also search text data based on a synonym dictionary.

This API is used to clear custom word dictionaries (main word dictionary, stop word dictionary, and synonym dictionary).

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-113 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose custom word dictionary you want to delete. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Delete a custom word dictionary.

```
DELETE https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/thesaurus
```

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Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class DeleteIkThesaurusSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteIkThesaurusRequest request = new DeleteIkThesaurusRequest();
        request.withClusterId("{cluster_id}");
        try {
            DeleteIkThesaurusResponse response = client.deleteIkThesaurus(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
```

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```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteIkThesaurusRequest()
        request.cluster_id = "{cluster_id}"
        response = client.delete_ik_thesaurus(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteIkThesaurusRequest{}
    request.ClusterId = "{cluster_id}"
```

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
403	Request rejected. The server has received the request and understood it, but refused to respond to it. The client should not repeat the request without modifications.
500	The server is able to receive but unable to understand the request.

Error Codes

See **Error Codes**.

5.3 Kibana Public Network Access

5.3.1 Enabling Kibana Public Access

Function

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

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-114 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose Kibana public access you want to enable. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-115 Request body parameters

Parameter	Mandatory	Type	Description
eip_size	Yes	Integer	Bandwidth. Unit: Mbit/s
elb_white_list	Yes	**StartKibanaPublicReqElbWhitelist** object	ELB whitelist.

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Parameter	Mandatory	Type	Description
is_auto_pay	No	Integer	**Definition**: Whether to enable automatic payment from your Huawei Cloud account. **Constraints**: This parameter takes effect only for yearly/monthly clusters. **Value range**: • 1: Yes. (Discounts and coupons are automatically selected. The fee will be automatically deducted from your Huawei Cloud account.) If the automatic payment fails, an unpaid order will be generated, and you need to manually complete the payment. (During manual payment, you can still modify the discounts and coupons that were automatically selected.) • 0: No. (The customer needs to manually pay for the bill. Discounts and coupons can be used.) **Default value**: 0

Table 5-116 StartKibanaPublicReqElbWhitelist

Parameter	Mandatory	Type	Description
enable_white_list	Yes	Boolean	Whether to enable the whitelist function. • **true**: The whitelist is enabled. • **false**: The whitelist is disabled.
white_list	Yes	String	Whitelist.

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Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Enable Kibana public network access.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/publickibana/open

{
  "eip_size" : 5,
  "elb_white_list" : {
    "enable_white_list" : true,
    "white_list" : "192.168.0.xx"
  },
  "is_auto_pay" : 1
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Enable Kibana public network access.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StartKibanaPublicSolution {

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

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

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```
        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StartKibanaPublicRequest request = new StartKibanaPublicRequest();
        request.withClusterId("{cluster_id}");
        StartKibanaPublicReq body = new StartKibanaPublicReq();
        StartKibanaPublicReqElbWhitelist elbWhiteListbody = new StartKibanaPublicReqElbWhitelist();
        elbWhiteListbody.withEnableWhiteList(true)
            .withWhiteList("192.168.0.xx");
        body.withIsAutoPay(1);
        body.withElbWhiteList(elbWhiteListbody);
        body.withEipSize(5);
        request.withBody(body);
        try {
            StartKibanaPublicResponse response = client.startKibanaPublic(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Enable Kibana public network access.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StartKibanaPublicRequest()
        request.cluster_id = "{cluster_id}"
        elbWhiteListbody = StartKibanaPublicReqElbWhitelist(
            enable_white_list=True,
            white_list="192.168.0.xx"
        )
        request.body = StartKibanaPublicReq(
```

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```
            is_auto_pay=1,
            elb_white_list=elbWhiteListbody,
            eip_size=5
        )
        response = client.start_kibana_public(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Enable Kibana public network access.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.StartKibanaPublicRequest{}
    request.ClusterId = "{cluster_id}"
    elbWhiteListbody := &model.StartKibanaPublicReqElbWhitelist{
        EnableWhiteList: true,
        WhiteList: "192.168.0.xx",
    }
    isAutoPayStartKibanaPublicReq:= int32(1)
    request.Body = &model.StartKibanaPublicReq{
        IsAutoPay: &isAutoPayStartKibanaPublicReq,
        ElbWhiteList: elbWhiteListbody,
        EipSize: int32(5),
    }
    response, err := client.StartKibanaPublic(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

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More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.3.2 Disabling Kibana Public Access

Function

This API is used to disable public network access to Kibana. Kibana public network access cannot be disabled for yearly/monthly clusters by calling this API.

NOTE

If you disable Kibana public network access and then re-enable it, the public IP address for accessing Kibana may change. Exercise caution.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-117 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose Kibana public access you want to disable. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-118 Request body parameters

Parameter	Mandatory	Type	Description
eip_size	No	Integer	Bandwidth. Unit: Mbit/s
elb_white_list	No	**StartKibanaPublicReqElbWhitelist** object	ELB whitelist.

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Table 5-119 StartKibanaPublicReqElbWhitelist

Parameter	Mandatory	Type	Description
enable_white_list	Yes	Boolean	Whether to enable the whitelist function. • **true**: The whitelist is enabled. • **false**: The whitelist is disabled.
white_list	Yes	String	Whitelist.

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Disable Kibana public access.

```
PUT https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/publickibana/close

{
  "eip_size" : 5,
  "elb_white_list" : {
    "enable_white_list" : true,
    "white_list" : "192.168.0.xx"
  }
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Disable Kibana public access.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
```

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```
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateCloseKibanaSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateCloseKibanaRequest request = new UpdateCloseKibanaRequest();
        request.withClusterId("{cluster_id}");
        CloseKibanaPublicReq body = new CloseKibanaPublicReq();
        StartKibanaPublicReqElbWhitelist elbWhiteListbody = new StartKibanaPublicReqElbWhitelist();
        elbWhiteListbody.withEnableWhiteList(true)
            .withWhiteList("192.168.0.xx");
        body.withElbWhiteList(elbWhiteListbody);
        body.withEipSize(5);
        request.withBody(body);
        try {
            UpdateCloseKibanaResponse response = client.updateCloseKibana(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Disable Kibana public access.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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```
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateCloseKibanaRequest()
        request.cluster_id = "{cluster_id}"
        elbWhiteListbody = StartKibanaPublicReqElbWhitelist(
            enable_white_list=True,
            white_list="192.168.0.xx"
        )
        request.body = CloseKibanaPublicReq(
            elb_white_list=elbWhiteListbody,
            eip_size=5
        )
        response = client.update_close_kibana(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Disable Kibana public access.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateCloseKibanaRequest{}
    request.ClusterId = "{cluster_id}"
    elbWhiteListbody := &model.StartKibanaPublicReqElbWhitelist{
        EnableWhiteList: true,
```

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```
        WhiteList: "192.168.0.xx",
    }
    eipSizeCloseKibanaPublicReq:= int32(5)
    request.Body = &model.CloseKibanaPublicReq{
        ElbWhiteList: elbWhiteListbody,
        EipSize: &eipSizeCloseKibanaPublicReq,
    }
    response, err := client.UpdateCloseKibana(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.3.3 Modifying the Kibana Public Network Bandwidth

Function

This API is used to modify the public network bandwidth of Kibana.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-120 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose Kibana public network bandwidth you want to modify. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-121 Request body parameters

Parameter	Mandatory	Type	Description
band_width	Yes	**UpdatePublicKibanaBandwidthReqBandWidth** object	Bandwidth.

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Parameter	Mandatory	Type	Description
is_auto_pay	No	Integer	**Definition**: Whether to enable automatic payment from your Huawei Cloud account. **Constraints**: This parameter takes effect only for yearly/monthly clusters. **Value range**: • 1: Yes. (Discounts and coupons are automatically selected. The fee will be automatically deducted from your Huawei Cloud account.) If the automatic payment fails, an unpaid order will be generated, and you need to manually complete the payment. (During manual payment, you can still modify the discounts and coupons that were automatically selected.) • 0: No. (The customer needs to manually pay for the bill. Discounts and coupons can be used.) **Default value**: 0

Table 5-122 UpdatePublicKibanaBandwidthReqBandWidth

Parameter	Mandatory	Type	Description
size	Yes	Integer	New bandwidth size.

Response Parameters

Status code: 200

Request succeeded.

None

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Example Requests

Modify the Kibana public network bandwidth.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/publickibana/bandwidth

{
  "band_width" : {
    "size" : 5
  },
  "is_auto_pay" : 1
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Modify the Kibana public network bandwidth.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateAlterKibanaSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateAlterKibanaRequest request = new UpdateAlterKibanaRequest();
        request.withClusterId("{cluster_id}");
        UpdatePublicKibanaBandwidthReq body = new UpdatePublicKibanaBandwidthReq();
        UpdatePublicKibanaBandwidthReqBandWidth bandWidthbody = new UpdatePublicKibanaBandwidthReqBandWidth();
        bandWidthbody.withSize(5);
        body.withIsAutoPay(1);
```

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```
        body.withBandWidth(bandWidthbody);
        request.withBody(body);
        try {
            UpdateAlterKibanaResponse response = client.updateAlterKibana(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Modify the Kibana public network bandwidth.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateAlterKibanaRequest()
        request.cluster_id = "{cluster_id}"
        bandWidthbody = UpdatePublicKibanaBandwidthReqBandWidth(
            size=5
        )
        request.body = UpdatePublicKibanaBandwidthReq(
            is_auto_pay=1,
            band_width=bandWidthbody
        )
        response = client.update_alter_kibana(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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Go

Modify the Kibana public network bandwidth.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateAlterKibanaRequest{}
    request.ClusterId = "{cluster_id}"
    bandWidthbody := &model.UpdatePublicKibanaBandwidthReqBandWidth{
        Size: int32(5),
    }
    isAutoPayUpdatePublicKibanaBandwidthReq:= int32(1)
    request.Body = &model.UpdatePublicKibanaBandwidthReq{
        IsAutoPay: &isAutoPayUpdatePublicKibanaBandwidthReq,
        BandWidth: bandWidthbody,
    }
    response, err := client.UpdateAlterKibana(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.

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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**.

5.3.4 Modifying Kibana Public Access Control

Function

This API is used to modify the Kibana access permission by modifying the Kibana whitelist.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-123 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster whose Kibana access permission you want to modify. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-124 Request body parameters

Parameter	Mandatory	Type	Description
white_list	Yes	String	Whitelisted IP addresses or network segments that can access Kibana. Separate them with commas (,), and each IP address or network segment must be unique.

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

The latest whitelist.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/publickibana/whitelist/update

{
  "white_list" : "192.168.0.21"
}
```

Example Responses

None

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SDK Sample Code

The SDK sample code is as follows.

Java

The latest whitelist.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdatePublicKibanaWhitelistSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdatePublicKibanaWhitelistRequest request = new UpdatePublicKibanaWhitelistRequest();
        request.withClusterId("{cluster_id}");
        UpdatePublicKibanaWhitelistReq body = new UpdatePublicKibanaWhitelistReq();
        body.withWhiteList("192.168.0.21");
        request.withBody(body);
        try {
            UpdatePublicKibanaWhitelistResponse response = client.updatePublicKibanaWhitelist(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

The latest whitelist.

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```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdatePublicKibanaWhitelistRequest()
        request.cluster_id = "{cluster_id}"
        request.body = UpdatePublicKibanaWhitelistReq(
            white_list="192.168.0.21"
        )
        response = client.update_public_kibana_whitelist(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

The latest whitelist.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

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```
    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdatePublicKibanaWhitelistRequest{}
    request.ClusterId = "{cluster_id}"
    request.Body = &model.UpdatePublicKibanaWhitelistReq{
        WhiteList: "192.168.0.21",
    }
    response, err := client.UpdatePublicKibanaWhitelist(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.3.5 Disabling Kibana Public Network Access Control

Function

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

Calling Method

For details, see **Calling APIs**.

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URI

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

Table 5-125 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose Kibana public network access control you want to disable. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Disable Kibana public network access control.

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```
PUT https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/publickibana/whitelist/close
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StopPublicKibanaWhitelistSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StopPublicKibanaWhitelistRequest request = new StopPublicKibanaWhitelistRequest();
        request.withClusterId("{cluster_id}");
        try {
            StopPublicKibanaWhitelistResponse response = client.stopPublicKibanaWhitelist(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StopPublicKibanaWhitelistRequest()
        request.cluster_id = "{cluster_id}"
        response = client.stop_public_kibana_whitelist(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
```

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```
        WithCredential(auth).
        Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.4 Logstash

5.4.1 Creating a Configuration File

Function

This API is used to generate a configuration file that defines a data migration solution for a Logstash cluster. Based on this configuration file, the Logstash cluster can ingest data from multiple data sources and migrate the data to the specified destinations.

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Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/lgsconf/submit

Table 5-126 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster where the configuration file is to be created. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-127 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition**: Configuration file name. **Constraints**: N/A **Value range**: It can contain 4 to 32 characters. Only digits, letters, hyphens (-), and underscores (_) are allowed. The value must start with a letter. **Default value**: N/A
conf_content	Yes	String	**Definition**: Configuration file content. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
setting	Yes	**setting** object	**Definition**: Configure an entity object. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
sensitive_words	No	Array of strings	**Definition**: Sensitive character replacement. Enter the list of sensitive character strings to be hidden. For items that you enter in this box, the corresponding strings will be replaced with *** in the configurations. **Constraints**: You can enter a maximum of 20 strings, each with a maximum length of 512 bytes. **Value range**: N/A **Default value**: N/A

Table 5-128 setting

Parameter	Mandatory	Type	Description
workers	No	Integer	**Definition**: Number of worker threads that will execute the Filters and Outputs stages of the pipeline in parallel. **Constraints**: N/A **Value range**: N/A **Default value**: Number of CPU cores.

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Parameter	Mandatory	Type	Description
batch_size	No	Integer	**Definition**: Maximum number of events that a worker thread collects from inputs before attempting to execute its filters and outputs. A larger value is more effective but increases memory overhead. **Constraints**: N/A **Value range**: N/A **Default value**: 125
batch_delay_ms	No	Integer	**Definition**: Minimum waiting time of an event to be scheduled by the pipeline. The unit is millisecond. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
queue_type	Yes	String	**Definition**: An internal queue for event buffering. **Constraints**: N/A **Value range**: • memory: a traditional in-memory queue. • persisted: a disk-based ACKed persistent queue. **Default value**: N/A

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Parameter	Mandatory	Type	Description
queue_check_point_writes	No	Integer	**Definition**: Maximum number of written events before forcing a checkpoint when persistent queues are enabled. **Constraints**: N/A **Value range**: N/A **Default value**: 1024
queue_max_bytes_mb	No	Integer	**Definition**: Total capacity (in MB) of a persistent queue if persistent queues are used. Make sure the disk capacity is greater than the value of this parameter. **Constraints**: N/A **Value range**: N/A **Default value**: 1024

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Configure an entity object.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/lgsconf/submit

{
  "name" : "conf1",
  "conf_content" : "xxxxxxxx",
  "setting" : {
    "workers" : 2,
    "batch_size" : 125,
    "batch_delay_ms" : 50,
    "queue_type" : "persisted",
    "queue_check_point_writes" : 1024,
```

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```
    "queue_max_bytes_mb" : 1024
  }
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Configure an entity object.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class CreateCnfSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateCnfRequest request = new CreateCnfRequest();
        request.withClusterId("{cluster_id}");
        CreateCnfReq body = new CreateCnfReq();
        Setting settingbody = new Setting();
        settingbody.withWorkers(2)
            .withBatchSize(125)
            .withBatchDelayMs(50)
            .withQueueType("persisted")
            .withQueueCheckPointWrites(1024)
            .withQueueMaxBytesMb(1024);
        body.withSetting(settingbody);
        body.withConfContent("xxxxxxxx");
        body.withName("conf1");
        request.withBody(body);
        try {
            CreateCnfResponse response = client.createCnf(request);
            System.out.println(response.toString());
```

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

Python

Configure an entity object.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateCnfRequest()
        request.cluster_id = "{cluster_id}"
        settingbody = Setting(
            workers=2,
            batch_size=125,
            batch_delay_ms=50,
            queue_type="persisted",
            queue_check_point_writes=1024,
            queue_max_bytes_mb=1024
        )
        request.body = CreateCnfReq(
            setting=settingbody,
            conf_content="xxxxxxxx",
            name="conf1"
        )
        response = client.create_cnf(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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Go

Configure an entity object.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateCnfRequest{}
    request.ClusterId = "{cluster_id}"
    workersSetting:= int32(2)
    batchSizeSetting:= int32(125)
    batchDelayMsSetting:= int32(50)
    queueCheckPointWritesSetting:= int32(1024)
    queueMaxBytesMbSetting:= int32(1024)
    settingbody := &model.Setting{
        Workers: &workersSetting,
        BatchSize: &batchSizeSetting,
        BatchDelayMs: &batchDelayMsSetting,
        QueueType: "persisted",
        QueueCheckPointWrites: &queueCheckPointWritesSetting,
        QueueMaxBytesMb: &queueMaxBytesMbSetting,
    }
    request.Body = &model.CreateCnfReq{
        Setting: settingbody,
        ConfContent: "xxxxxxxx",
        Name: "conf1",
    }
    response, err := client.CreateCnf(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, 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**.

5.4.2 Updating a Configuration File

Function

This API is used to update a configuration file.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-129 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster where the configuration file is to be updated. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-130 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition**: Configuration file name. **Constraints**: N/A **Value range**: It can contain 4 to 32 characters. Only digits, letters, hyphens (-), and underscores (_) are allowed. The value must start with a letter. **Default value**: N/A
conf_content	Yes	String	**Definition**: Configuration file content. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
setting	Yes	**setting** object	**Definition**: Configure an entity object. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
sensitive_words	No	Array of strings	**Definition**: Sensitive character replacement. Enter the list of sensitive character strings to be hidden. For items that you enter in this box, the corresponding strings will be replaced with *** in the configurations. **Constraints**: You can enter a maximum of 20 strings, each with a maximum length of 512 bytes. **Value range**: N/A **Default value**: N/A

Table 5-131 setting

Parameter	Mandatory	Type	Description
workers	No	Integer	**Definition**: Number of worker threads that will execute the Filters and Outputs stages of the pipeline in parallel. **Constraints**: N/A **Value range**: N/A **Default value**: Number of CPU cores.

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Parameter	Mandatory	Type	Description
batch_size	No	Integer	**Definition**: Maximum number of events that a worker thread collects from inputs before attempting to execute its filters and outputs. A larger value is more effective but increases memory overhead. **Constraints**: N/A **Value range**: N/A **Default value**: 125
batch_delay_ms	No	Integer	**Definition**: Minimum waiting time of an event to be scheduled by the pipeline. The unit is millisecond. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
queue_type	Yes	String	**Definition**: An internal queue for event buffering. **Constraints**: N/A **Value range**: • memory: a traditional in-memory queue. • persisted: a disk-based ACKed persistent queue. **Default value**: N/A

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Parameter	Mandatory	Type	Description
queue_check_point_writes	No	Integer	**Definition**: Maximum number of written events before forcing a checkpoint when persistent queues are enabled. **Constraints**: N/A **Value range**: N/A **Default value**: 1024
queue_max_bytes_mb	No	Integer	**Definition**: Total capacity (in MB) of a persistent queue if persistent queues are used. Make sure the disk capacity is greater than the value of this parameter. **Constraints**: N/A **Value range**: N/A **Default value**: 1024

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Update the configuration file.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/lgsconf/update

{
  "name" : "conf1",
  "conf_content" : "xxxxxxxx",
  "setting" : {
    "workers" : 2,
    "batch_size" : 125,
    "batch_delay_ms" : 50,
    "queue_type" : "persisted",
    "queue_check_point_writes" : 1024,
```

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```
    "queue_max_bytes_mb" : 1024
  }
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Update the configuration file.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateCnfSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateCnfRequest request = new UpdateCnfRequest();
        request.withClusterId("{cluster_id}");
        CreateCnfReq body = new CreateCnfReq();
        Setting settingbody = new Setting();
        settingbody.withWorkers(2)
            .withBatchSize(125)
            .withBatchDelayMs(50)
            .withQueueType("persisted")
            .withQueueCheckPointWrites(1024)
            .withQueueMaxBytesMb(1024);
        body.withSetting(settingbody);
        body.withConfContent("xxxxxxxx");
        body.withName("conf1");
        request.withBody(body);
        try {
            UpdateCnfResponse response = client.updateCnf(request);
            System.out.println(response.toString());
```

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

Python

Update the configuration file.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateCnfRequest()
        request.cluster_id = "{cluster_id}"
        settingbody = Setting(
            workers=2,
            batch_size=125,
            batch_delay_ms=50,
            queue_type="persisted",
            queue_check_point_writes=1024,
            queue_max_bytes_mb=1024
        )
        request.body = CreateCnfReq(
            setting=settingbody,
            conf_content="xxxxxxxx",
            name="conf1"
        )
        response = client.update_cnf(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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Go

Update the configuration file.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateCnfRequest{}
    request.ClusterId = "{cluster_id}"
    workersSetting:= int32(2)
    batchSizeSetting:= int32(125)
    batchDelayMsSetting:= int32(50)
    queueCheckPointWritesSetting:= int32(1024)
    queueMaxBytesMbSetting:= int32(1024)
    settingbody := &model.Setting{
        Workers: &workersSetting,
        BatchSize: &batchSizeSetting,
        BatchDelayMs: &batchDelayMsSetting,
        QueueType: "persisted",
        QueueCheckPointWrites: &queueCheckPointWritesSetting,
        QueueMaxBytesMb: &queueMaxBytesMbSetting,
    }
    request.Body = &model.CreateCnfReq{
        Setting: settingbody,
        ConfContent: "xxxxxxxx",
        Name: "conf1",
    }
    response, err := client.UpdateCnf(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, 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**.

5.4.3 Starting Pipeline Data Migration

Function

This API is used to start pipeline data migration.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/lgsconf/start

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Table 5-132 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose pipeline function you want to enable. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-133 Request body parameters

Parameter	Mandatory	Type	Description
keep_alive	No	Boolean	Whether to enable the keepalive function. • **true**: Enable the Keepalive function. • **false**: Disable the Keepalive function. Keepalive can be enabled for services that need to run for a long time. After it is enabled, a daemon process will be configured on each node. If the Logstash service is faulty, the daemon process will automatically start and rectify the fault. Keepalive is not suitable for services that only run for a short period of time. If the Logstash service is started for multiple times, data will be migrated repeatedly.
names	Yes	Array of strings	Configuration file name.

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Start pipeline data migration.

```
POST /v1.0/6204a5bd270343b5885144cf9c8c158d/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/lgsconf/start

{
  "keep_alive" : false,
  "names" : [ "confName1", "confName2", "confName3" ]
}
```

Example Responses

None

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SDK Sample Code

The SDK sample code is as follows.

Java

Start pipeline data migration.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;

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

public class StartPipelineSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StartPipelineRequest request = new StartPipelineRequest();
        request.withClusterId("{cluster_id}");
        StartPipelineReq body = new StartPipelineReq();
        List<String> listbodyNames = new ArrayList<>();
        listbodyNames.add("confName1");
        listbodyNames.add("confName2");
        listbodyNames.add("confName3");
        body.withNames(listbodyNames);
        body.withKeepAlive(false);
        request.withBody(body);
        try {
            StartPipelineResponse response = client.startPipeline(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
```

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```
    }
}
```

Python

Start pipeline data migration.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StartPipelineRequest()
        request.cluster_id = "{cluster_id}"
        listNamesbody = [
            "confName1",
            "confName2",
            "confName3"
        ]
        request.body = StartPipelineReq(
            names=listNamesbody,
            keep_alive=False
        )
        response = client.start_pipeline(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Start pipeline data migration.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
```

```
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.StartPipelineRequest{}
    request.ClusterId = "{cluster_id}"
    var listNamesbody = []string{
        "confName1",
        "confName2",
        "confName3",
    }
    keepAliveStartPipelineReq:= false
    request.Body = &model.StartPipelineReq{
        Names: listNamesbody,
        KeepAlive: &keepAliveStartPipelineReq,
    }
    response, err := client.StartPipeline(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

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

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Error Codes

See **Error Codes**.

5.4.4 Stopping Pipeline Data Migration

Function

This API is used to stop pipeline data migration.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/lgsconf/stop

Table 5-134 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose pipeline function you want to disable. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Stop a data migration pipeline.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/publickibana/lgsconf/stop
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StopPipelineSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StopPipelineRequest request = new StopPipelineRequest();
```

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```
        request.withClusterId("{cluster_id}");
        try {
            StopPipelineResponse response = client.stopPipeline(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StopPipelineRequest()
        request.cluster_id = "{cluster_id}"
        response = client.stop_pipeline(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

func main() {
```

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, 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**.

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5.4.5 Adding a Custom Template

Function

This API is used to add a custom template.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/lgsconf/favorite

Table 5-135 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster where a custom template is to be added. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-136 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Configuration file name.
template	Yes	**AddFavoriteReqTemplate** object	Custom template entity object.

Table 5-137 AddFavoriteReqTemplate

Parameter	Mandatory	Type	Description
templateName	Yes	String	Custom template name. The value can contain 4 to 32 characters. It must start with a letter and can contain only letters, digits, hyphens (-), and underscores (_).
desc	No	String	Template description. The value can contain a maximum of 256 characters.

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Configure a user-defined template.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/lgsconf/favorite

{
  "name" : "conf1",
  "template" : {
    "templateName" : "template1",
    "desc" : "Custom template"
  }
}
```

Example Responses

None

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SDK Sample Code

The SDK sample code is as follows.

Java

Configure a user-defined template.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class AddFavoriteSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        AddFavoriteRequest request = new AddFavoriteRequest();
        request.withClusterId("{cluster_id}");
        AddFavoriteReq body = new AddFavoriteReq();
        AddFavoriteReqTemplate templatebody = new AddFavoriteReqTemplate();
        templatebody.withTemplateName("template1")
            .withDesc("Custom template");
        body.withTemplate(templatebody);
        body.withName("conf1");
        request.withBody(body);
        try {
            AddFavoriteResponse response = client.addFavorite(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

Configure a user-defined template.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddFavoriteRequest()
        request.cluster_id = "{cluster_id}"
        templatebody = AddFavoriteReqTemplate(
            template_name="template1",
            desc="Custom template"
        )
        request.body = AddFavoriteReq(
            template=templatebody,
            name="conf1"
        )
        response = client.add_favorite(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Configure a user-defined template.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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```
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.AddFavoriteRequest{}
    request.ClusterId = "{cluster_id}"
    descTemplate:= "Custom template"
    templatebody := &model.AddFavoriteReqTemplate{
        TemplateName: "template1",
        Desc: &descTemplate,
    }
    request.Body = &model.AddFavoriteReq{
        Template: templatebody,
        Name: "conf1",
    }
    response, err := client.AddFavorite(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

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

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Error Codes

See **Error Codes**.

5.4.6 Querying the Pipeline List

Function

This API is used to query the pipeline list. You can obtain the pipeline configuration file name, status, and update time to verify the configuration file.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-138 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster to be queried. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Table 5-139 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	**Definition**: The start value of the query. **Constraints**: N/A **Value range**: 0-1000 **Default value**: 0
limit	No	Integer	**Definition**: Number of pipelines to be queried. The default value is **10**, indicating that 10 pipelines are queried at a time. **Constraints**: N/A **Value range**: 1-1000 **Default value**: 10

Request Parameters

None

Response Parameters

Status code: 200

Table 5-140 Response body parameters

Parameter	Type	Description
pipelines	Array of **pipelines** objects	**Definition**: Pipeline list. **Value range**: N/A

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Table 5-141 pipelines

Parameter	Type	Description
name	String	**Definition**: Configuration file name. **Value range**: N/A
status	String	**Parameter description**: Pipeline status. **Options**: • **available**: The pipeline is available. • **unavailable**: The pipeline is unavailable. • **working**: The pipeline is working. • **checking**: The pipeline is being verified. • **failed**: The pipeline failed. • **starting**: The pipeline is being started. • **stopping**: The pipeline is being stopped. • **restoring**: The pipeline is being restored. • **stopped**: The pipeline has stopped.
keepAlive	Boolean	**Definition**: Whether to enable the keepalive function. **Value range**: • **true**: enable keepalive. • **false**: disable keepalive.
events	String	**Definition**: Event. **Value range**: Only the events in the running state can be viewed in real time after a manual refresh. For events in the Stopped state, you can check the amount of migrated data at the output terminal.

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Parameter	Type	Description
updateAt	String	**Definition**: Update time. **Value range**: N/A

Example Requests

Query the list of pipelines of a Logstash cluster.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/{cluster_id}/lgsconf/listpipelines
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "pipelines" : [ {
    "name" : "conf1",
    "status" : "stopped",
    "keepAlive" : false,
    "events" : "xxxxxxxx",
    "updateAt" : "2021-09-29T02:44:44"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListPipelinesSolution {

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

        ICredential auth = new BasicCredentials()
```

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```
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

    CssClient client = CssClient.newBuilder()
            .withCredential(auth)
            .withRegion(CssRegion.valueOf("<YOUR REGION>"))
            .build();
    ListPipelinesRequest request = new ListPipelinesRequest();
    request.withClusterId("{cluster_id}");
    try {
        ListPipelinesResponse response = client.listPipelines(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
  }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListPipelinesRequest()
        request.cluster_id = "{cluster_id}"
        response = client.list_pipelines(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main
```

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```
import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

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

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Error Codes

See **Error Codes**.

5.4.7 Querying the Configuration File List

Function

This API is used to query the configuration file list.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-142 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Table 5-143 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	**Definition**: The start value of the query. The default value is 1, indicating that the query starts from the first configuration. **Constraints**: N/A **Value range**: 1-1000 **Default value**: 1
limit	No	Integer	**Definition**: Number of configurations to be queried. The default value is **10**, indicating that 10 configurations are queried at a time. **Constraints**: N/A **Value range**: 1-1000 **Default value**: 10

Request Parameters

None

Response Parameters

Status code: 200

Table 5-144 Response body parameters

Parameter	Type	Description
confs	Array of **confs** objects	Configuration file list.

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Table 5-145 confs

Parameter	Type	Description
name	String	**Definition**: Configuration file name. **Value range**: N/A
status	String	**Definition**: Configuration file status. **Value range**: • checking • available • unavailable • starting • working • stopping • stopped • restoring
confContent	String	**Definition**: Configuration file content. **Value range**: N/A
setting	**setting** object	**Definition**: Configuration content object. **Value range**: N/A
updateAt	String	**Definition**: Update time. **Value range**: N/A

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Table 5-146 setting

Parameter	Type	Description
workers	Integer	**Definition**: Number of worker threads that will execute the Filters and Outputs stages of the pipeline in parallel. **Constraints**: N/A **Value range**: N/A **Default value**: Number of CPU cores.
batch_size	Integer	**Definition**: Maximum number of events that a worker thread collects from inputs before attempting to execute its filters and outputs. A larger value is more effective but increases memory overhead. **Constraints**: N/A **Value range**: N/A **Default value**: 125
batch_delay_ms	Integer	**Definition**: Minimum waiting time of an event to be scheduled by the pipeline. The unit is millisecond. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Parameter	Type	Description
queue_type	String	**Definition**: An internal queue for event buffering. **Constraints**: N/A **Value range**: • memory: a traditional in-memory queue. • persisted: a disk-based ACKed persistent queue. **Default value**: N/A
queue_check_point_writes	Integer	**Definition**: Maximum number of written events before forcing a checkpoint when persistent queues are enabled. **Constraints**: N/A **Value range**: N/A **Default value**: 1024
queue_max_bytes_mb	Integer	**Definition**: Total capacity (in MB) of a persistent queue if persistent queues are used. Make sure the disk capacity is greater than the value of this parameter. **Constraints**: N/A **Value range**: N/A **Default value**: 1024

Example Requests

Query the configuration file list.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/lgsconf/listconfs
```

Example Responses

Status code: 200

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Request succeeded.

```
{
  "confs" : [ {
    "name" : "conf1",
    "status" : "available",
    "confContent" : "xxxxxxxx",
    "setting" : {
      "workers" : 2,
      "batchSize" : 125,
      "batchDelayMs" : 50,
      "queueType" : "persisted",
      "queueCheckPointWrites" : 1024,
      "queueMaxBytesMb" : 1024
    },
    "updateAt" : "2021-09-29T02:44:44"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListConfsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListConfsRequest request = new ListConfsRequest();
        request.withClusterId("{cluster_id}");
        try {
            ListConfsResponse response = client.listConfs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListConfsRequest()
        request.cluster_id = "{cluster_id}"
        response = client.list_confs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, 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**.

5.4.8 Performing a Connectivity Test

Function

This API is used to test connectivity.

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Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-147 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: Cluster ID. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-148 Request body parameters

Parameter	Mandatory	Type	Description
address_and_ports	Yes	Array of **AddressAndPorts** objects	Address and port list.

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Table 5-149 AddressAndPorts

Parameter	Mandatory	Type	Description
address	Yes	String	**Definition**: IP address or domain name. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
port	No	Integer	**Definition**: Port. **Constraints**: N/A **Value range**: An integer ranging from 0 to 65535. **Default value**: 0

Response Parameters

Status code: 200

Table 5-150 Response body parameters

Parameter	Type	Description
result	Array of **result** objects	**Definition**: Connectivity test result. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Table 5-151 result

Parameter	Type	Description
address	String	**Definition**: IP address or domain name. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
port	Integer	**Definition**: Port. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
status	Integer	**Definition**: Connectivity test result. **Constraints**: N/A **Value range**: • **1**: The connection is successful. • **0**: The address is unreachable. • **2**: The port is unreachable. • **3**: The domain name cannot be resolved. • **2**: The location is incorrect. **Default value**: N/A

Example Requests

Configure the port to test connectivity.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/checkconnection

{
  "address_and_ports" : [ {
    "address" : "10.0.0.83",
    "port" : "9200"
```

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```
 } ]
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "result" : [ {
    "address" : "10.0.0.83",
    "port" : "9200",
    "status" : 1
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Configure the port to test connectivity.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StartConnectivityTestSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StartConnectivityTestRequest request = new StartConnectivityTestRequest();
        request.withClusterId("{cluster_id}");
        body.withStartConnectivityTestReq("{\"address_and_ports\":[{\"address\":\"10.0.0.83\",\"port\":\"9200\"}]}");
        request.withBody(listStartConnectivityTestReqStartConnectivityTestReq);
        try {
            StartConnectivityTestResponse response = client.startConnectivityTest(request);
            System.out.println(response.toString());
```

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

Python

Configure the port to test connectivity.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StartConnectivityTestRequest()
        request.cluster_id = "{cluster_id}"
        request.body = listStartConnectivityTestReqStartConnectivityTestReq
        response = client.start_connectivity_test(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Configure the port to test connectivity.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)
```

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.StartConnectivityTestRequest{}
    request.ClusterId = "{cluster_id}"
    var startConnectivityTestReqStartConnectivityTestReq interface{} = "{\"address_and_ports\":[{\"address\":\"10.0.0.83\",\"port\":\"9200\"}]}"
    request.Body = listStartConnectivityTestReqStartConnectivityTestReq
    response, err := client.StartConnectivityTest(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

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

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Error Codes

See **Error Codes**.

5.4.9 Querying the Template List

Function

This API is used to query the template list.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1.0/{project_id}/lgsconf/template

Table 5-152 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Table 5-153 Query Parameters

Parameter	Mandatory	Type	Description
type	No	String	**Definition**: Template type. **Constraints**: N/A **Value range**: • custom: custom template. • system: system template. **Default value**: Search for custom and system templates.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-154 Response body parameters

Parameter	Type	Description
systemTemplates	Array of **systemTemplates** objects	System template list.
customTemplates	Array of **customTemplates** objects	Custom template list.

Table 5-155 systemTemplates

Parameter	Type	Description
id	String	Configuration file ID.
name	String	Configuration file name.
confContent	String	Configuration file content.
desc	String	Description.

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Table 5-156 customTemplates

Parameter	Type	Description
id	String	Configuration file ID.
name	String	Configuration file name.
confContent	String	Configuration file content.
desc	String	Description.

Example Requests

Query the template list.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/lgsconf/template?type=custom
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "systemTemplates" : [ {
    "id" : "a03b1791-6dc6-453d-961d-88939adc82aa",
    "name" : "elasticsearch",
    "confContent" : "xxxxxxxx",
    "desc" : "logstash config for es"
  } ],
  "customTemplates" : [ {
    "id" : "2e16fbba-49bf-4690-93af-3f89025c6523",
    "name" : "es_to_https_es",
    "confContent" : "xxxxxxxx",
    "desc" : "From ES to an ES security cluster"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListTemplatesSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
```

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```
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListTemplatesRequest request = new ListTemplatesRequest();
        try {
            ListTemplatesResponse response = client.listTemplates(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListTemplatesRequest()
        response = client.list_templates(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

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

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.

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Status Code	Description
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, 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**.

5.4.10 Querying Operation Records

Function

This API is used to query operation records.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-157 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Table 5-158 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	String	**Definition**: Start value of the query. The default value is 0. **Constraints**: N/A **Value range**: 0-1000 **Default value**: 0
limit	No	String	**Definition**: Number of records to query. The default value is **10**, indicating that 10 records are queried at a time. **Constraints**: N/A **Value range**: 1-1000 **Default value**: 10

Request Parameters

None

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Response Parameters

Status code: 200

Table 5-159 Response body parameters

Parameter	Type	Description
actions	Array of **actions** objects	Operation records.

Table 5-160 actions

Parameter	Type	Description
id	String	Operation record ID.
actionType	String	**Definition**: Operation type. **Value range**: • submit: indicates a submit operation. • update: indicates an update operation. • extensionStart: starts scale-out. • modifyFlavorStart: starts flavor modification. • start: starts an operation. • stop: stops an operation.
confContent	String	Configuration file content.
status	String	**Definition**: Operation status. **Value range**: • running • success • failed • warn: warning
updateAt	String	**Definition**: Update time. **Value range**: The format is CCYY-MM-DDThh:mm:ss (ISO 8601).

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Parameter	Type	Description
errorMsg	String	Error information. If the operation status is **success**, the value of this parameter is **null**.
message	String	Content.

Example Requests

Query operation records.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/lgsconf/listactions
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "actions" : [ {
    "id" : "e487cb83-1b30-435d-a11a-def463bbe9aa",
    "actionType" : "stop",
    "confContent" : "xxxxxxxx",
    "status" : "success",
    "updateAt" : "2021-09-29T02:44:44",
    "errorMsg" : "xxxxxxxx",
    "message" : {
      "keepAlive" : "0",
      "confNames" : "conf1"
    }
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListActionsSolution {

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

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```
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListActionsRequest request = new ListActionsRequest();
        request.withClusterId("{cluster_id}");
        try {
            ListActionsResponse response = client.listActions(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListActionsRequest()
        request.cluster_id = "{cluster_id}"
        response = client.list_actions(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

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

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.

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Status Code	Description
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, 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**.

5.4.11 Querying the Configuration File Content

Function

This API is used to query the content of a cluster configuration file, including the file name, status, content, and configuration details. You can use the configuration file to define a cluster migration plan and check whether the data sources and destinations are correct.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-161 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Table 5-162 Query Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition**: Configuration file name. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 5-163 Response body parameters

Parameter	Type	Description
name	String	**Definition**: Configuration file name. **Value range**: N/A

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Parameter	Type	Description
status	String	**Definition**: Configuration file status. **Value range**: • checking • available • unavailable • starting • working • stopping • stopped • restoring
confContent	String	**Definition**: Configuration file content. **Value range**: N/A
setting	**setting** object	**Definition**: Configuration content object. **Value range**: N/A
updateAt	String	**Definition**: Update time. **Value range**: N/A

Table 5-164 setting

Parameter	Type	Description
workers	Integer	**Definition**: Number of worker threads that will execute the Filters and Outputs stages of the pipeline in parallel. **Constraints**: N/A **Value range**: N/A **Default value**: Number of CPU cores.

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Parameter	Type	Description
batch_size	Integer	**Definition**: Maximum number of events that a worker thread collects from inputs before attempting to execute its filters and outputs. A larger value is more effective but increases memory overhead. **Constraints**: N/A **Value range**: N/A **Default value**: 125
batch_delay_ms	Integer	**Definition**: Minimum waiting time of an event to be scheduled by the pipeline. The unit is millisecond. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
queue_type	String	**Definition**: An internal queue for event buffering. **Constraints**: N/A **Value range**: • memory: a traditional in-memory queue. • persisted: a disk-based ACKed persistent queue. **Default value**: N/A

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Parameter	Type	Description
queue_check_point_writes	Integer	**Definition**: Maximum number of written events before forcing a checkpoint when persistent queues are enabled. **Constraints**: N/A **Value range**: N/A **Default value**: 1024
queue_max_bytes_mb	Integer	**Definition**: Total capacity (in MB) of a persistent queue if persistent queues are used. Make sure the disk capacity is greater than the value of this parameter. **Constraints**: N/A **Value range**: N/A **Default value**: 1024

Example Requests

Query the configuration file content.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/lgsconf/confdetail?name=conf1
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "name" : "conf1",
  "status" : "available",
  "confContent" : "xxxxxxxx",
  "setting" : {
    "workers" : 2,
    "batchSize" : 125,
    "batchDelayMs" : 50,
    "queueType" : "persisted",
    "queueCheckPointWrites" : 1024,
    "queueMaxBytesMb" : 1024
  },
  "updateAt" : "2021-09-29T02:44:44"
}
```

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SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ShowGetConfDetailSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowGetConfDetailRequest request = new ShowGetConfDetailRequest();
        request.withClusterId("{cluster_id}");
        try {
            ShowGetConfDetailResponse response = client.showGetConfDetail(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *
```

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowGetConfDetailRequest()
        request.cluster_id = "{cluster_id}"
        response = client.show_get_conf_detail(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

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```
  }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, 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**.

5.4.12 Deleting a Configuration File

Function

To delete a configuration file, you are advised to call the API for Deleting a Configuration File V2.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-165 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose configuration file is to be deleted. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-166 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Configuration file name.

Response Parameters

Status code: 200

Request succeeded.

None

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Example Requests

Delete a configuration file.

```
DELETE https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/lgsconf/delete
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class DeleteConfSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteConfRequest request = new DeleteConfRequest();
        request.withClusterId("{cluster_id}");
        DeleteConfReq body = new DeleteConfReq();
        request.withBody(body);
        try {
            DeleteConfResponse response = client.deleteConf(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
```

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```
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteConfRequest()
        request.cluster_id = "{cluster_id}"
        request.body = DeleteConfReq(
        )
        response = client.delete_conf(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

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```
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteConfRequest{}
    request.ClusterId = "{cluster_id}"
    request.Body = &model.DeleteConfReq{
    }
    response, err := client.DeleteConf(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, 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**.

5.4.13 Deleting a Custom Template

Function

This API is used to delete a custom template. You are advised to use the API for Deleting a Custom Template V2.

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Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1.0/{project_id}/lgsconf/deletetemplate

Table 5-167 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

Request Parameters

Table 5-168 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Template name.

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Delete a custom template.

```
DELETE https://{Endpoint}/v1.0/{project_id}/lgsconf/deletetemplate

{
  "name" : "template1"
}
```

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Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Delete a custom template.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class DeleteTemplateSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteTemplateRequest request = new DeleteTemplateRequest();
        DeleteTemplateReq body = new DeleteTemplateReq();
        body.withName("template1");
        request.withBody(body);
        try {
            DeleteTemplateResponse response = client.deleteTemplate(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

Delete a custom template.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteTemplateRequest()
        request.body = DeleteTemplateReq(
            name="template1"
        )
        response = client.delete_template(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Delete a custom template.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

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```
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteTemplateRequest{}
    request.Body = &model.DeleteTemplateReq{
        Name: "template1",
    }
    response, err := client.DeleteTemplate(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. The client should modify the request instead of re-initiating it.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, 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**.

5.4.14 Hot Starting Pipeline Data Migration

Function

This API is used to hot start the pipeline data migration.

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Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/lgsconf/hot-start

Table 5-169 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the target cluster. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-170 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Configuration file name

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Parameter	Mandatory	Type	Description
keep_alive	No	Boolean	During hot start, the Keepalive setting is inherited from existing pipes in the cluster. • **true**: Enable the Keepalive function. • **false**: Disable the Keepalive function. Keepalive can be enabled for services that need to run for a long time. After this function is enabled, a daemon process will be configured on each node. If the Logstash service is faulty, the daemon process will automatically start and rectify the fault. Keepalive is not suitable for services that only run for a short period of time. If the Logstash service is started for multiple times, data will be migrated repeatedly.

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Hot-start a data migration pipeline.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/lgsconf/hot-start

{
  "keep_alive" : false,
  "name" : "confName1"
}
```

Example Responses

None

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Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.4.15 Hot Stopping Pipeline Data Migration

Function

This API is used to hot stop pipeline data migration.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/lgsconf/hot-stop

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Table 5-171 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the target cluster. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-172 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Configuration file name

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Hot-stop a data migration pipeline.

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```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/lgsconf/hot-stop

{
  "name" : "confName"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Hot-stop a data migration pipeline.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StopHotPipelineSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StopHotPipelineRequest request = new StopHotPipelineRequest();
        request.withClusterId("{cluster_id}");
        StopHotPipelineRequestBody body = new StopHotPipelineRequestBody();
        body.withName("confName");
        request.withBody(body);
        try {
            StopHotPipelineResponse response = client.stopHotPipeline(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
```

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

Python

Hot-stop a data migration pipeline.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StopHotPipelineRequest()
        request.cluster_id = "{cluster_id}"
        request.body = StopHotPipelineRequestBody(
            name="confName"
        )
        response = client.stop_hot_pipeline(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Hot-stop a data migration pipeline.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
```

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```
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.StopHotPipelineRequest{}
    request.ClusterId = "{cluster_id}"
    request.Body = &model.StopHotPipelineRequestBody{
        Name: "confName",
    }
    response, err := client.StopHotPipeline(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

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5.4.16 Uploading a Certificate

Function

This API is used to upload a certificate.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/certs/upload

Table 5-173 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the target cluster. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-174 Request body parameters

Parameter	Mandatory	Type	Description
bucket_name	Yes	String	OBS bucket where a certificate is stored. The bucket type must be **Standard** or **Infrequent Access**. **Archive** is not supported.
certs_object	Yes	String	Certificate. The certificate size cannot exceed 1 MB. The certificate name contains 4 to 32 characters, must start with a letter, and end with **.cer**, **.crt**, **.rsa**, **.jks**, **.pem**, **.p10**, **.pfx**, **.p12**, **.csr**, **.der**, or **.keystore**. The value can contain letters, digits, hyphens (-), underscores (_), and dots (.). Other special characters are not allowed.

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Upload a certificate.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/certs/upload

{
  "bucket_name" : "test-bucket",
  "certs_object" : "test/cert.cer"
}
```

Example Responses

None

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Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.4.17 Querying the Certificate List

Function

This API is used to query the certificate list.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-175 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Table 5-176 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	String	Start value of the query. The default value is **1**, indicating that the query starts from the first certificate.
limit	No	String	Number of certificates to be queried. The default value is **10**, indicating that 10 certificates are queried at a time.

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Parameter	Mandatory	Type	Description
certsType	No	String	**Definition**: Certificate type. If this parameter is not specified, the system searches the custom certificate list. **Constraints**: N/A **Value range**: defaultCerts: default certificate type. **Default value**: Searches the custom certificate list.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-177 Response body parameters

Parameter	Type	Description
certsRecords	**CertsRecordsDatastore** object	**Definition**: Certificate record. **Value range**: N/A
totalSize	Integer	**Definition**: Number of certificate records. **Value range**: N/A

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Table 5-178 CertsRecordsDatastore

Parameter	Type	Description
id	String	**Definition**: Certificate record ID. **Value range**: N/A
status	String	**Definition**: Certificate status. **Value range**: • checking • **available** • **unavailable** • starting • working • stopping • stopped • restoring
fileLocation	String	**Definition**: Location of the certificate record file. **Value range**: N/A
fileName	Boolean	**Definition**: Name of the certificate record file. **Value range**: N/A
updateAt	Boolean	'**Definition**: Certificate record update time. **Value range**: N/A

Example Requests

This API is used to query the certificate list.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/certs
```

Example Responses

Status code: 200

Request succeeded.

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```
{
  "certsRecords" : [ {
    "id" : "2630b1ab-47f8-445c-a4e0-5de74683d767",
    "status" : "available",
    "fileLocation" : "/rds/datastore/logstash/v7.10.0/package/logstash-7.10.0/extend/custom_certs/",
    "fileName" : "xxxx.cer",
    "updateAt" : "2023-06-14T06:54:36"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListCertsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListCertsRequest request = new ListCertsRequest();
        request.withClusterId("{cluster_id}");
        try {
            ListCertsResponse response = client.listCerts(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListCertsRequest()
        request.cluster_id = "{cluster_id}"
        response = client.list_certs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
```

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```
        WithCredential(auth).
        Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.4.18 Querying Certificate Information

Function

This API is used to query certificate information.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-179 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
cert_id	Yes	String	ID of the certificate to be queried

Request Parameters

None

Response Parameters

Status code: 200

Table 5-180 Response body parameters

Parameter	Type	Description
id	String	Certificate ID.
fileName	String	Certificate name
fileLocation	String	Certificate path

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Parameter	Type	Description
status	String	**Definition**: Certificate status. **Value range**: • checking • available • unavailable • starting • working • stopping • stopped • restoring
updateAt	String	Time when a certificate is uploaded

Example Requests

Query information about a specified certificate.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/certs/62967551-4087-402a-b9c5-68b56ac274cb
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "636b6718-b8ae-4eb9-bf70-5fed8aa52181",
  "status" : "available",
  "fileLocation" : "/rds/datastore/logstash/vx.xx.xx/package/logstash-x.xx.xx/extend/custom_certs/",
  "fileName" : "ab.txt",
  "updateAt" : "2023-06-20T01:15:30"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.

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Status Code	Description
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.4.19 Deleting a Certificate

Function

This API is used to delete a certificate.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1.0/{project_id}/clusters/{cluster_id}/certs/{cert_id}/delete

Table 5-181 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster whose certificate is to be deleted. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
cert_id	Yes	String	ID of the certificate to be deleted

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Delete a specified cluster certificate.

```
DELTET https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/certs/62967551-4087-402a-b9c5-68b56ac274cb/delete
```

Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.

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Status Code	Description
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.4.20 Forcibly Restarting VMs in a Cluster

Function

A cluster is unavailable during the restart. Exercise caution when performing this operation. During the restart of a running cluster, the Logstash process is automatically stopped. If Keepalive is disabled for pipes, all running pipes are stopped. If Keepalived is enabled, Logstash will try restoring these pipes. If Logstash is restarted within 10 minutes, the pipes will be restored to running. Otherwise the restoration will fail.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-182 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the target cluster. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Forcibly restart VMs in a cluster.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/reboot
```

Example Responses

None

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Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.5 Log Management

5.5.1 Enabling Log Backup or Log Collection

Function

This API is used to enable log backup or log ingestion for a cluster. Log backup and log ingestion can be enabled separately. After log backup is enabled, you can configure an automatic backup policy or manually trigger backup to back up the cluster's run logs to a specified OBS bucket and directory. After log collection is enabled, the cluster's run logs will be collected in real time and saved to a specified index of a specified cluster.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-183 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster for which log backup or ingestion is to be enabled. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Table 5-184 Query Parameters

Parameter	Mandatory	Type	Description
action	No	String	**Parameter description**: Configure log backup or log collection for a cluster. **Constraints**: N/A **Options**: • base_log_collect: Backs up logs to OBS. • real_time_log_collect: Saves logs to an Elasticsearch cluster in real time. **Default value**: base_log_collect

Request Parameters

Table 5-185 Request body parameters

Parameter	Mandatory	Type	Description
agency	No	String	**Parameter description**: Agency name. Through this agency, you delete OBS permissions to CSS, so that CSS will be able to back up log files to your OBS buckets. **Constraints**: This parameter is mandatory when action is not set to real_time_log_collect. **Options**: The value can contain only letters (a-z and A-Z), digits (0-9), hyphens (-), and underscores (_). It cannot contain Chinese characters or other special characters. **Default value**: N/A

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Parameter	Mandatory	Type	Description
log_base_path	No	String	**Definition**: Storage path of backed up logs in the OBS bucket. **Constraints**: This parameter is mandatory when action is not set to real_time_log_collect. **Value range**: • The backup path cannot contain the following characters: \:*?"<>|'{}. Additionally, it cannot: • Start with a slash (/). • Start or end with a period (.). • Contain more than two consecutive slashes (/) or periods (.). • Exceed 512 characters. **Default value**: N/A
log_bucket	No	String	**Definition**: OBS bucket name for log backup. **Constraints**: This parameter is mandatory when action is not set to real_time_log_collect. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
auto_enable	No	Boolean	**Definition**: Whether to enable automatic backup of cluster logs. **Constraints**: N/A **Value range**: • true: Enable automatic backup of cluster logs. • false: Disable automatic backup of cluster logs. **Default value**: false
period	No	String	**Definition**: Cluster log backup start time. **Constraints**: Format: Greenwich Mean Time (GMT). **Value range**: N/A **Default value**: N/A
index_prefix	No	String	**Parameter description**: Index prefix for storing logs. **Constraints**: This parameter is mandatory when action is set to real_time_log_collect. **Options**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
keep_days	No	Integer	**Parameter description**: Number of days for log retention. **Constraints**: This parameter is mandatory when action is set to real_time_log_collect. **Options**: 1-3650 **Default value**: N/A
target_cluster_id	No	String	**Definition**: ID of the target cluster for log storage. **Constraints**: • The target cluster can be the current cluster or another Elasticsearch cluster. If logs are saved to another cluster, you need to use the **connectivity testing** API to test connectivity to the target cluster. If status code 200 is returned, the target cluster can be reached. Otherwise, you need to select another target cluster. • This parameter is mandatory when action is set to real_time_log_collect. **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

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Example Requests

- Enable the log backup function.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/logs/open

{
  "agency" : "css_obs_agency",
  "log_base_path" : "css_repository/logs",
  "log_Bucket" : "000-words",
  "auto_enable" : true,
  "period" : "00:00 GMT+08:00"
}
```

- Enable real-time log collection function.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/logs/open?
action=real_time_log_collect

{
  "index_prefix" : "css_log",
  "keep_days" : 30,
  "target_cluster_id" : "4f3deec3-efa8-4598-bf91-560aad1377a3"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

- Enable the log backup function.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StartLogsSolution {

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

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

        CssClient client = CssClient.newBuilder()
```

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```
            .withCredential(auth)
            .withRegion(CssRegion.valueOf("<YOUR REGION>"))
            .build();
        StartLogsRequest request = new StartLogsRequest();
        request.withClusterId("{cluster_id}");
        StartLogsReq body = new StartLogsReq();
        body.withPeriod("00:00 GMT+08:00");
        body.withAutoEnable(true);
        body.withLogBasePath("css_repository/logs");
        body.withAgency("css_obs_agency");
        request.withBody(body);
        try {
            StartLogsResponse response = client.startLogs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Enable real-time log collection function.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StartLogsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StartLogsRequest request = new StartLogsRequest();
        request.withClusterId("{cluster_id}");
        StartLogsReq body = new StartLogsReq();
        body.withTargetClusterId("4f3deec3-efa8-4598-bf91-560aad1377a3");
        body.withKeepDays(30);
        body.withIndexPrefix("css_log");
        request.withBody(body);
```

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```
        try {
            StartLogsResponse response = client.startLogs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

- Enable the log backup function.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StartLogsRequest()
        request.cluster_id = "{cluster_id}"
        request.body = StartLogsReq(
            period="00:00 GMT+08:00",
            auto_enable=True,
            log_base_path="css_repository/logs",
            agency="css_obs_agency"
        )
        response = client.start_logs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- Enable real-time log collection function.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
```

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```
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StartLogsRequest()
        request.cluster_id = "{cluster_id}"
        request.body = StartLogsReq(
            target_cluster_id="4f3deec3-efa8-4598-bf91-560aad1377a3",
            keep_days=30,
            index_prefix="css_log"
        )
        response = client.start_logs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- Enable the log backup function.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
```

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```
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

    request := &model.StartLogsRequest{}
    request.ClusterId = "{cluster_id}"
    periodStartLogsReq:= "00:00 GMT+08:00"
    autoEnableStartLogsReq:= true
    request.Body = &model.StartLogsReq{
        Period: &periodStartLogsReq,
        AutoEnable: &autoEnableStartLogsReq,
        LogBasePath: "css_repository/logs",
        Agency: "css_obs_agency",
    }
    response, err := client.StartLogs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Enable real-time log collection function.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.StartLogsRequest{}
    request.ClusterId = "{cluster_id}"
    targetClusterIdStartLogsReq:= "4f3deec3-efa8-4598-bf91-560aad1377a3"
    keepDaysStartLogsReq:= int32(30)
    indexPrefixStartLogsReq:= "css_log"
    request.Body = &model.StartLogsReq{
        TargetClusterId: &targetClusterIdStartLogsReq,
        KeepDays: &keepDaysStartLogsReq,
        IndexPrefix: &indexPrefixStartLogsReq,
    }
    response, err := client.StartLogs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
```

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```
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.5.2 Disabling the Log Backup or Collection Function

Function

This API is used to disable log backup or log ingestion for a cluster. Log backup and log ingestion can be disabled separately. After log backup is disabled, any automatic log backup policy configured earlier becomes invalid, and cluster logs cannot be manually back up to OBS either. Disabling log collection for a cluster stops the logs of that cluster from being collected and saved to a specified cluster.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-186 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster for which log backup or ingestion is to be disabled. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Table 5-187 Query Parameters

Parameter	Mandatory	Type	Description
action	No	String	**Definition**: Disables log backup or log collection. **Constraints**: You can disable log backup or log ingestion only when they have been enabled for the cluster. For details about how to enable log backup or log ingestion, see **Enabling Logs**. **Value range**: • base_log_collect: Disables log backup. • real_time_log_collect: Stops log collection. **Default value**: base_log_collect

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

- Disable log backup or log ingestion.

  ```
  PUT https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/logs/close?action=base_log_collect
  ```

- ```
  PUT https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/logs/close?action=real_time_log_collect
  ```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

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  ```

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StopLogsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StopLogsRequest request = new StopLogsRequest();
        request.withClusterId("{cluster_id}");
        try {
            StopLogsResponse response = client.stopLogs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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```
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StopLogsRequest()
        request.cluster_id = "{cluster_id}"
        response = client.stop_logs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

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More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.5.3 Querying the Log Backup Task List

Function

This API is used to query the log backup task list of a cluster. To be able to use this API, the target cluster must have log backup enabled, and log backup tasks were triggered earlier. This allows you to keep track of operations that were performed on the cluster.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-188 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Table 5-189 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	**Definition**: Start value for log query. The default value is 1, indicating that the query starts from the first log record. **Constraints**: N/A **Value range**: 1-1000 **Default value**: 1

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Parameter	Mandatory	Type	Description
limit	No	Integer	**Definition**: Number of log records to be queried. The default value is 10, indicating that 10 log records are queried at a time. **Constraints**: N/A **Value range**: 1-1000 **Default value**: 10
status	No	String	**Definition**: Status of the log tasks to be queried. If this parameter is not specified, all log task records of the cluster are queried. **Constraints**: N/A **Value range**: • **FAIL**: failed log tasks. • **NOT_FAIL**: ongoing or successful log tasks. • If this parameter is not specified, all tasks are queried. **Default value**: Empty string: Tasks of all states are queried.

Request Parameters

None

Response Parameters

Status code: 200

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Table 5-190 Response body parameters

Parameter	Type	Description
clusterLogRecord	Array of **clusterLogRecord** objects	**Parameter description**: List of cluster log backup tasks. **Options**: N/A

Table 5-191 clusterLogRecord

Parameter	Type	Description
id	String	**Definition**: Cluster log task ID, which is generated based on the system UUID. **Value range**: N/A
clusterId	String	**Parameter description**: Cluster ID. **Options**: N/A
createAt	String	**Definition**: Cluster log creation time. **Value range**: Format: Unix timestamp.
logPath	String	**Parameter description**: Storage path of backed up logs in the OBS bucket. **Options**: N/A
status	String	**Definition**: Cluster log task status. **Value range**: • **RUNNING**: The backup is ongoing. • **SUCCESS**: The backup is successful. • **FAIL**: The backup failed.

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Parameter	Type	Description
finishedAt	Long	**Definition**: End time of cluster log creation. If it is still ongoing, the value is null. **Value range**: Format: Unix timestamp.
jobTypes	String	**Definition**: Type of a log creation task. **Value range**: • Manual: Manual backup. • Auto: Automatic backup.
failedMsg	String	**Definition**: Error returned for log creation. If the task status is not failed, this parameter is null. **Value range**: N/A
jobId	String	**Definition**: ID of a log creation task. **Value range**: N/A

Example Requests

Querying the First 10 Log Backup Tasks

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/logs/records
```

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"
  } ]
}
```

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SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListLogsJobSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListLogsJobRequest request = new ListLogsJobRequest();
        request.withClusterId("{cluster_id}");
        try {
            ListLogsJobResponse response = client.listLogsJob(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *
```

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListLogsJobRequest()
        request.cluster_id = "{cluster_id}"
        response = client.list_logs_job(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

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```
  }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.5.4 Querying Basic Log Configurations

Function

This API is used to query the basic configuration of cluster log backup or real-time log collection. If the log backup or log collection function has been enabled in the cluster, you can use this API to query the basic configurations of log backup and log collection.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-192 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Table 5-193 Query Parameters

Parameter	Mandatory	Type	Description
action	No	String	**Parameter description**: Queries the log backup or log collection settings of a cluster. **Constraints**: N/A **Options**: • base_log_collect: Queries cluster log backup settings. • real_time_log_collect: Queries cluster log collection settings. **Default value**: base_log_collect

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Request Parameters

None

Response Parameters

Status code: 200

Table 5-194 Response body parameters

Parameter	Type	Description
logConfiguration	**logConfiguration** object	**Parameter description**: Log backup configuration. **Options**: N/A
realTimeLogCollectRecord	**realTimeLogCollect** object	**Parameter description**: Real-time log ingestion configuration. **Options**: N/A

Table 5-195 logConfiguration

Parameter	Type	Description
id	String	**Parameter description**: Log backup ID, which is generated using the system UUID. **Options**: N/A
clusterId	String	**Parameter description**: Cluster ID. **Options**: N/A
obsBucket	String	**Parameter description**: Name of the OBS bucket for storing logs. **Options**: N/A

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Parameter	Type	Description
agency	String	**Definition**: Agency name. You can create an agency to allow CSS to call other cloud services. An agency name cannot contain special characters or Chinese characters. **Value range**: Only a-z, A-Z, 0-9, hyphens (-) and underscores (_) are allowed.
updateAt	Long	**Definition**: Update time. **Value range**: The format is CCYY-MM-DDThh:mm:ss (ISO 8601).
basePath	String	**Parameter description**: Storage path of backed up logs in the OBS bucket. **Options**: N/A
autoEnable	Boolean	**Definition**: Whether to enable automatic backup. **Value range**: • true: Enable automatic backup. • false: Disable automatic backup.
period	String	**Definition**: Start time of automatic log backup. **Value range**: Format: Greenwich Mean Time (GMT). When **autoEnable** is set to **false**, the value of this parameter is **null**.
logSwitch	Boolean	**Definition**: Whether to enable logging. **Value range**: • true: Enable logging. • false: Disable logging.

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Table 5-196 realTimeLogCollect

Parameter	Type	Description
id	String	**Parameter description**: Log collection ID, which is generated using the system UUID. **Options**: N/A
clusterId	String	**Definition**: Cluster ID **Value range**: N/A
indexPrefix	String	**Parameter description**: Prefix of the index for saving logs. **Options**: N/A
keepDays	Integer	**Parameter description**: Log retention duration. **Options**: N/A
targetClusterId	String	**Parameter description**: ID of the target cluster where logs are saved. **Options**: N/A

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Parameter	Type	Description
status	String	**Definition**: Status of a real-time log ingestion task. **Value range**: • 100: A real-time log ingestion task is being created. • 150: Real-time log ingestion is available. • 200: The real-time log ingestion task is activated. • 300: Real-time log ingestion failed. • 302: The real-time log ingestion task failed to be deleted. • 303: The real-time log ingestion task failed to be created. • 304: The real-time log ingestion task is being disabled. • 400: The real-time log ingestion task is disabled.
createAt	Long	**Parameter description**: Start time of a real-time log collection task. **Options**: N/A
updateAt	Long	**Parameter description**: Update time of a real-time log collection task. **Options**: N/A

Example Requests

- Query the cluster's log backup settings.

  ```
  GET https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/logs/settings?action=base_log_collect
  ```

- Query the cluster's log ingestion settings.

  ```
  GET https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/logs/settings?action=real_time_log_collect
  ```

Example Responses

Status code: 200

Request succeeded.

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- Example response to a request to query the cluster's log backup settings.

```
{
  "logConfiguration" : {
    "id" : "00032118-aff5-40e8-b19a-dd4bb576e572",
    "clusterId" : "e3201ceb-1a3e-49f3-bb2f-23a816440b20",
    "obsBucket" : "css-autobk-notdel-cn-north-7",
    "agency" : "css_obs_agency",
    "updateAt" : 1639624882000,
    "basePath" : "css/log",
    "autoEnable" : false,
    "period" : null,
    "logSwitch" : false
  },
  "realTimeLogCollectRecord" : null
}
```

- Example response to a request to query the cluster's log ingestion settings.

```
{
  "logConfiguration" : null,
  "realTimeLogCollectRecord" : {
    "id" : "17939b7b-5a93-4ca5-8d3c-b9f2d0e715b4",
    "clusterId" : "e3201ceb-1a3e-49f3-bb2f-23a816440b20",
    "keepDays" : 30,
    "updateAt" : 1717666418870,
    "createAt" : 1717666405897,
    "targetClusterId" : "8c19644b-f2ef-44fc-abef-230a4c578ce7",
    "indexPrefix" : "aaa",
    "status" : "200"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ShowGetLogSettingSolution {

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

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

        CssClient client = CssClient.newBuilder()
```

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```
            .withCredential(auth)
            .withRegion(CssRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowGetLogSettingRequest request = new ShowGetLogSettingRequest();
        request.withClusterId("{cluster_id}");
        try {
            ShowGetLogSettingResponse response = client.showGetLogSetting(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowGetLogSettingRequest()
        request.cluster_id = "{cluster_id}"
        response = client.show_get_log_setting(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
```

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```
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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.

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Error Codes

See **Error Codes**.

5.5.5 Modifying Basic Log Configurations

Function

This API is used to modify basic configurations for cluster log backup or real-time log collection. If the log backup or log collection function has been enabled in the cluster, you can use this API to modify the basic configurations of log backup and log collection.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-197 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster whose basic log configurations you want to modify. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Table 5-198 Query Parameters

Parameter	Mandatory	Type	Description
action	No	String	**Parameter description**: Modifies the settings of log backup or log collection. **Constraints**: N/A **Options**: • base_log_collect: Modifies log backup settings. • real_time_log_collect: Modifies log collection settings. **Default value**: base_log_collect

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Request Parameters

Table 5-199 Request body parameters

Parameter	Mandatory	Type	Description
agency	No	String	**Parameter description**: Agency name. Through this agency, you delete OBS permissions to CSS, so that CSS will be able to back up log files to your OBS buckets. **Constraints**: This parameter is mandatory when action is not set to real_time_log_collect. **Options**: The value can contain only letters (a-z and A-Z), digits (0-9), hyphens (-), and underscores (_). It cannot contain Chinese characters or other special characters. **Default value**: N/A
log_base_path	No	String	**Definition**: Storage path of backed up logs in the OBS bucket. **Constraints**: This parameter is mandatory when action is not set to real_time_log_collect. **Value range**: • The backup path cannot contain the following characters: \:*?"<>|'{}. Additionally, it cannot: • Start with a slash (/). • Start or end with a period (.). • Contain more than two consecutive slashes (/) or periods (.). • Exceed 512 characters. **Default value**: N/A

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Parameter	Mandatory	Type	Description
log_bucket	No	String	**Definition**: OBS bucket name for log backup. **Constraints**: This parameter is mandatory when action is not set to real_time_log_collect. **Value range**: N/A **Default value**: N/A
index_prefix	No	String	**Parameter description**: Index prefix for storing logs. **Constraints**: This parameter is mandatory when action is set to real_time_log_collect. **Options**: N/A **Default value**: N/A
keep_days	No	Integer	**Parameter description**: Number of days for log retention. **Constraints**: This parameter is mandatory when action is set to real_time_log_collect. **Options**: 1-3650 **Default value**: N/A

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Parameter	Mandatory	Type	Description
target_cluster_id	No	String	**Definition**: ID of the target cluster for log storage. **Constraints**: • The target cluster can be the current cluster or another Elasticsearch cluster. If logs are saved to another cluster, you need to use the **connectivity testing** API to test connectivity to the target cluster. If status code 200 is returned, the target cluster can be reached. Otherwise, you need to select another target cluster. • This parameter is mandatory when action is set to real_time_log_collect. **Value range**: N/A **Default value**: N/A
auto_enable	No	Boolean	**Definition**: Whether to enable automatic backup of cluster logs. **Constraints**: N/A **Value range**: • true: Enable automatic backup of cluster logs. • false: Disable automatic backup of cluster logs. **Default value**: false

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Parameter	Mandatory	Type	Description
period	No	String	**Definition**: Cluster log backup start time. **Constraints**: Format: Greenwich Mean Time (GMT). **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

- Modify basic log configurations.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/logs/settings

{
  "agency" : "css_obs_agency",
  "log_base_path" : "css/log",
  "log_bucket" : "000-words"
}
```

- Update real-time log ingestion configuration.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/logs/settings?action=real_time_log_collect

{
  "index_prefix" : "css_log",
  "keep_days" : 30,
  "target_cluster_id" : "4f3deec3-efa8-4598-bf91-560aad1377a3",
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

- Modify basic log configurations.

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

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```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateLogSettingSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateLogSettingRequest request = new UpdateLogSettingRequest();
        request.withClusterId("{cluster_id}");
        UpdateLogSettingReq body = new UpdateLogSettingReq();
        body.withLogBucket("000-words");
        body.withLogBasePath("css/log");
        body.withAgency("css_obs_agency");
        request.withBody(body);
        try {
            UpdateLogSettingResponse response = client.updateLogSetting(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Update real-time log ingestion configuration.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateLogSettingSolution {
```

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateLogSettingRequest request = new UpdateLogSettingRequest();
        request.withClusterId("{cluster_id}");
        UpdateLogSettingReq body = new UpdateLogSettingReq();
        body.withTargetClusterId("4f3deec3-efa8-4598-bf91-560aad1377a3");
        body.withKeepDays(30);
        body.withIndexPrefix("css_log");
        request.withBody(body);
        try {
            UpdateLogSettingResponse response = client.updateLogSetting(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

- Modify basic log configurations.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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

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```
    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateLogSettingRequest()
        request.cluster_id = "{cluster_id}"
        request.body = UpdateLogSettingReq(
            log_bucket="000-words",
            log_base_path="css/log",
            agency="css_obs_agency"
        )
        response = client.update_log_setting(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- Update real-time log ingestion configuration.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateLogSettingRequest()
        request.cluster_id = "{cluster_id}"
        request.body = UpdateLogSettingReq(
            target_cluster_id="4f3deec3-efa8-4598-bf91-560aad1377a3",
            keep_days=30,
            index_prefix="css_log"
        )
        response = client.update_log_setting(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- Modify basic log configurations.

```
package main
```

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```
import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateLogSettingRequest{}
    request.ClusterId = "{cluster_id}"
    request.Body = &model.UpdateLogSettingReq{
        LogBucket: "000-words",
        LogBasePath: "css/log",
        Agency: "css_obs_agency",
    }
    response, err := client.UpdateLogSetting(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Update real-time log ingestion configuration.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

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```
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateLogSettingRequest{}
    request.ClusterId = "{cluster_id}"
    targetClusterIdUpdateLogSettingReq:= "4f3deec3-efa8-4598-bf91-560aad1377a3"
    keepDaysUpdateLogSettingReq:= int32(30)
    indexPrefixUpdateLogSettingReq:= "css_log"
    request.Body = &model.UpdateLogSettingReq{
        TargetClusterId: &targetClusterIdUpdateLogSettingReq,
        KeepDays: &keepDaysUpdateLogSettingReq,
        IndexPrefix: &indexPrefixUpdateLogSettingReq,
    }
    response, err := client.UpdateLogSetting(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

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5.5.6 Enabling the Automatic Log Backup Policy

Function

CSS provides log query and log backup, enabling you to easily manage and analyze logs to efficiently locate faults, optimize performance, and enhance system security.

- Log query: On the log management page of the CSS management console, you can query the latest 10,000 log records by node type and other criteria. A maximum of 100 results are displayed, enabling you to quickly locate issues.
- Log backup: Cluster logs are periodically synchronized to OBS buckets. You can download them for in-depth analysis at any time. You can configure custom log backup policies by specifying backup schedules and storage locations. The system backs up all critical logs, including run logs and deprecation logs. They provide comprehensive data for auditing and troubleshooting purposes.

This API is used to enable an automatic log backup policy. If log backup is enabled for a cluster, you can use this API to configure an automatic backup policy to periodically back up cluster logs to a specified OBS bucket and directory.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-200 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster for which automatic log backup is to be enabled. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-201 Request body parameters

Parameter	Mandatory	Type	Description
period	Yes	String	**Definition**: Log backup start time. Format: Greenwich Mean Time (GMT). **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Enable the automatic log backup policy.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/logs/policy/update

{
```

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

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Enable the automatic log backup policy.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StartLogAutoBackupPolicySolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StartLogAutoBackupPolicyRequest request = new StartLogAutoBackupPolicyRequest();
        request.withClusterId("{cluster_id}");
        StartLogAutoBackupPolicyReq body = new StartLogAutoBackupPolicyReq();
        body.withPeriod("00:00 GMT+08:00");
        request.withBody(body);
        try {
            StartLogAutoBackupPolicyResponse response = client.startLogAutoBackupPolicy(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
```

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```
        }
    }
}
```

Python

Enable the automatic log backup policy.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StartLogAutoBackupPolicyRequest()
        request.cluster_id = "{cluster_id}"
        request.body = StartLogAutoBackupPolicyReq(
            period="00:00 GMT+08:00"
        )
        response = client.start_log_auto_backup_policy(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Enable the automatic log backup policy.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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```
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.StartLogAutoBackupPolicyRequest{}
    request.ClusterId = "{cluster_id}"
    request.Body = &model.StartLogAutoBackupPolicyReq{
        Period: "00:00 GMT+08:00",
    }
    response, err := client.StartLogAutoBackupPolicy(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

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5.5.7 Disabling the Automatic Log Backup Policy

Function

CSS provides log query and log backup, enabling you to easily manage and analyze logs to efficiently locate faults, optimize performance, and enhance system security.

- Log query: On the log management page of the CSS management console, you can query the latest 10,000 log records by node type and other criteria. A maximum of 100 results are displayed, enabling you to quickly locate issues.
- Log backup: Cluster logs are periodically synchronized to OBS buckets. You can download them for in-depth analysis at any time. You can configure custom log backup policies by specifying backup schedules and storage locations. The system backs up all critical logs, including run logs and deprecation logs. They provide comprehensive data for auditing and troubleshooting purposes.

This API is used to disable an automatic log backup policy. If an automatic log backup policy is enabled for a cluster, you can use this API to disable it.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-202 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster whose automatic log backup policy you want to disable. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Disable an automatic log backup policy.

```
PUT https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/logs/policy/close
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
```

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```
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StopLogAutoBackupPolicySolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StopLogAutoBackupPolicyRequest request = new StopLogAutoBackupPolicyRequest();
        request.withClusterId("{cluster_id}");
        try {
            StopLogAutoBackupPolicyResponse response = client.stopLogAutoBackupPolicy(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
```

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```
        .build()

    try:
        request = StopLogAutoBackupPolicyRequest()
        request.cluster_id = "{cluster_id}"
        response = client.stop_log_auto_backup_policy(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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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**.

5.5.8 Backing Up Logs

Function

This API is used to back up logs. If log backup is enabled for a cluster, you can call this API to back up the cluster's run logs to the specified OBS bucket. This ensures traceability, security, and reliability of cluster data.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-203 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose logs you want to back up. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Back up logs.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/logs/collect
```

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Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class CreateLogBackupSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateLogBackupRequest request = new CreateLogBackupRequest();
        request.withClusterId("{cluster_id}");
        try {
            CreateLogBackupResponse response = client.createLogBackup(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
```

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```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateLogBackupRequest()
        request.cluster_id = "{cluster_id}"
        response = client.create_log_backup(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateLogBackupRequest{}
    request.ClusterId = "{cluster_id}"
```

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.5.9 Searching for Logs

Function

CSS supports log backup and query, helping you efficiently locate issues. You can periodically back up cluster logs to OBS buckets for long-term storage, from which you download log data for troubleshooting or auditing purposes. You can also query cluster logs through an API. You can search for specific run logs by specifying a time period, node names, and log levels. This helps you quickly locate faults or performance bottlenecks. This API is used to query cluster logs by specifying the node name, log level, and log type.

Calling Method

For details, see **Calling APIs**.

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URI

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

Table 5-204 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-205 Request body parameters

Parameter	Mandatory	Type	Description
instance_name	Yes	String	**Definition**: Node name. Obtain the **name** attribute in instances by referring to **Querying Cluster Details**. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
level	No	String	**Definition**: Queried log level. **Constraints**: N/A **Value range**: • DEBUG: Queries DEBUG logs. • INFO: Queries INFO logs. • WARN: Queries WARN logs. • ERROR: Queries ERROR logs. • ALL: Queries logs of all levels. **NOTE** If multiple log levels are required, separate them with vertical bars (|), for example, WARN|ERROR. **Default value**: ALL

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Parameter	Mandatory	Type	Description
log_type	Yes	String	**Definition**: Queried log type. **Constraints**: N/A **Value range**: • deprecation: Queries deprecation logs. (Deprecation operation logs can be queried only when all log levels are selected.) • indexingSlow: Queries slow indexing logs. • searchSlow: Queries slow query logs. • instance: Queries run logs. **Default value**: N/A
limit	No	Integer	**Definition**: Number of log records returned. By default, 100 log records are returned. A maximum of 10,000 log records can be returned, and the log size cannot exceed 1 MB. **Constraints**: N/A **Value range**: 1-10000 **Default value**: 100

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Parameter	Mandatory	Type	Description
time_index	No	String	**Definition**: Returns logs generated before a specified time. **Constraints**: The time format is yyyy-MM-ddTHH:mm:ss,SSS. **Value range**: N/A **Default value**: N/A
keyword	No	String	**Definition**: Keyword used for filtering. **Constraints**: N/A **Value range**: Only letters, digits, underscores (_), hyphens (-), periods (.), spaces, and square brackets are allowed. Maximum length: 64 characters. **Default value**: N/A

Response Parameters

Status code: 200

Table 5-206 Response body parameters

Parameter	Type	Description
logList	Array of **logList** objects	**Parameter description**: Log list. **Options**: N/A

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Parameter	Type	Description
type	String	**Definition**: Queried log type. **Value range**: • deprecation: Queries deprecation logs. • indexingSlow: Queries slow indexing logs. • searchSlow: Queries slow query logs. • instance: Queries run logs.

Table 5-207 logList

Parameter	Type	Description
content	String	**Parameter description**: Log content. **Options**: N/A
date	String	**Definition**: Date **Value range**: N/A
level	String	**Definition**: Queried log level. **Value range**: • DEBUG: Queries DEBUG logs. • INFO: Queries INFO logs. • WARN: Queries WARN logs. • ERROR: Queries ERROR logs.

Example Requests

Query logs by node name, log level, and log type.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/logs/search

{
  "instance_name" : "css-4312-ess-esn-1-1",
  "level" : "INFO",
  "log_type" : "instance",
  "limit" : 10,
  "time_index" : "2025-08-25T01:07:19,082",
```

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```
  "keyword" : "received"
}
```

Example Responses

Status code: 200

Request succeeded.

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

SDK Sample Code

The SDK sample code is as follows.

Java

Query logs by node name, log level, and log type.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ShowLogBackupSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowLogBackupRequest request = new ShowLogBackupRequest();
        request.withClusterId("{cluster_id}");
        GetLogBackupReq body = new GetLogBackupReq();
        body.withKeyword("received");
        body.withTimeIndex("2025-08-25T01:07:19,082");
        body.withLimit(10);
        body.withLogType("instance");
```

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```
        body.withLevel("INFO");
        body.withInstanceName("css-4312-ess-esn-1-1");
        request.withBody(body);
        try {
            ShowLogBackupResponse response = client.showLogBackup(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Query logs by node name, log level, and log type.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowLogBackupRequest()
        request.cluster_id = "{cluster_id}"
        request.body = GetLogBackupReq(
            keyword="received",
            time_index="2025-08-25T01:07:19,082",
            limit=10,
            log_type="instance",
            level="INFO",
            instance_name="css-4312-ess-esn-1-1"
        )
        response = client.show_log_backup(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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Go

Query logs by node name, log level, and log type.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowLogBackupRequest{}
    request.ClusterId = "{cluster_id}"
    keywordGetLogBackupReq:= "received"
    timeIndexGetLogBackupReq:= "2025-08-25T01:07:19,082"
    limitGetLogBackupReq:= int32(10)
    request.Body = &model.GetLogBackupReq{
        Keyword: &keywordGetLogBackupReq,
        TimeIndex: &timeIndexGetLogBackupReq,
        Limit: &limitGetLogBackupReq,
        LogType: "instance",
        Level: "INFO",
        InstanceName: "css-4312-ess-esn-1-1",
    }
    response, err := client.ShowLogBackup(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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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**.

5.5.10 Test connectivity.

Function

This API is used to test the connectivity between two clusters. CSS clusters provide a log collection function, allowing users to collect clusters' run logs in real time and save them to a specified index of a specified CSS cluster. The target cluster can be the current cluster or another cluster. If logs are to be saved to another cluster, you need to use the connectivity testing API to test connectivity to the target cluster. If the target cluster cannot be reached, you need to select another cluster.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-208 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: Cluster ID. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-209 Request body parameters

Parameter	Mandatory	Type	Description
target_cluster_id	Yes	String	**Definition**: Target cluster ID. **Constraints**: Only cluster IDs are supported. **Value range**: N/A **Default value**: N/A

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Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Test connectivity to the target cluster.

```
POST /v1.0/6204a5bd270343b5885144cf9c8c158d/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/logs/connectivity

{
  "target_cluster_id" : "4f3deec3-efa8-4598-bf91-560aad1377a4"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Test connectivity to the target cluster.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StartTargetClusterConnectivityTestSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
```

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```
        StartTargetClusterConnectivityTestRequest request = new StartTargetClusterConnectivityTestRequest();
        request.withClusterId("{cluster_id}");
        StartTargetClusterConnectivityTestReq body = new StartTargetClusterConnectivityTestReq();
        body.withTargetClusterId("4f3deec3-efa8-4598-bf91-560aad1377a4");
        request.withBody(body);
        try {
            StartTargetClusterConnectivityTestResponse response =
client.startTargetClusterConnectivityTest(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Test connectivity to the target cluster.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StartTargetClusterConnectivityTestRequest()
        request.cluster_id = "{cluster_id}"
        request.body = StartTargetClusterConnectivityTestReq(
            target_cluster_id="4f3deec3-efa8-4598-bf91-560aad1377a4"
        )
        response = client.start_target_cluster_connectivity_test(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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Go

Test connectivity to the target cluster.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.StartTargetClusterConnectivityTestRequest{}
    request.ClusterId = "{cluster_id}"
    request.Body = &model.StartTargetClusterConnectivityTestReq{
        TargetClusterId: "4f3deec3-efa8-4598-bf91-560aad1377a4",
    }
    response, err := client.StartTargetClusterConnectivityTest(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	The request could not be understood by the server due to malformed syntax. Modify the request instead of retrying.

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Status Code	Description
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.6 Public Network Access

5.6.1 Enabling Public Network Access

Function

Public network access is supported only when Security Mode and HTTPS Access are enabled for a cluster. When Public IP Address is enabled, a public IP address is automatically assigned, which will enable access to the security cluster from the public network. Additionally, you can configure access control from the public network by IP addresses or IP address ranges.

To enable public network access for Elasticsearch or OpenSearch clusters, a shared load balancer is typically used for load balancing. If your workloads require quicker access, you are advised to use a dedicated load balancer to connect to your clusters. For details about its configuration, see section "Configuring a Dedicated Load Balancer for an Elasticsearch Cluster."

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-210 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose public network access you want to enable. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-211 Request body parameters

Parameter	Mandatory	Type	Description
eip	Yes	**BindPublicReqEip** object	**Definition**: EIP for public network access. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
white_list	No	String	**Definition**: Public network access control whitelist. **Constraints**: Separate the whitelisted CIDR blocks or IP addresses with commas (,), and make sure each of them is unique. **Value range**: N/A **Default value**: N/A
is_auto_pay	No	Integer	**Definition**: Whether to enable automatic payment from your Huawei Cloud account. **Constraints**: This parameter takes effect only for yearly/monthly clusters. **Value range**: • 1: Yes. (Discounts and coupons are automatically selected. The fee will be automatically deducted from your Huawei Cloud account.) If the automatic payment fails, an unpaid order will be generated, and you need to manually complete the payment. (During manual payment, you can still modify the discounts and coupons that were automatically selected.) • 0: No. (The customer needs to manually pay for the bill. Discounts and coupons can be used.) **Default value**: 0

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Table 5-212 BindPublicReqEip

Parameter	Mandatory	Type	Description
band_width	Yes	BindPublicReqEipBandWidth object	**Definition**: Public network bandwidth. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Table 5-213 BindPublicReqEipBandWidth

Parameter	Mandatory	Type	Description
size	Yes	Integer	**Definition**: Public network bandwidth, in Mbit/s. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

Table 5-214 Response body parameters

Parameter	Type	Description
action	String	**Definition**: A setting required to enable public network access. **Value range**: The fixed value is **bindZone**, indicating that the binding is successful.

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Example Requests

Enable public network access.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/public/open

{
  "eip" : {
    "band_width" : {
      "size" : 5
    }
  },
  "white_list" : "127.0.0.1",
  "is_auto_pay" : 1
}
```

Example Responses

Status code: 200

Request succeeded.

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

SDK Sample Code

The SDK sample code is as follows.

Java

Enable public network access.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class CreateBindPublicSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
```

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```
            .build();
        CreateBindPublicRequest request = new CreateBindPublicRequest();
        request.withClusterId("{cluster_id}");
        BindPublicReq body = new BindPublicReq();
        body.withIsAutoPay(1);
        body.withWhiteList("127.0.0.1");
        body.withEip("{\"band_width\":{\"size\":5}}");
        request.withBody(body);
        try {
            CreateBindPublicResponse response = client.createBindPublic(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Enable public network access.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateBindPublicRequest()
        request.cluster_id = "{cluster_id}"
        request.body = BindPublicReq(
            is_auto_pay=1,
            white_list="127.0.0.1",
            eip="{\"band_width\":{\"size\":5}}"
        )
        response = client.create_bind_public(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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Go

Enable public network access.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateBindPublicRequest{}
    request.ClusterId = "{cluster_id}"
    isAutoPayBindPublicReq:= int32(1)
    whiteListBindPublicReq:= "127.0.0.1"
    var eipEip interface{} = "{\"band_width\":{\"size\":5}}"
    request.Body = &model.BindPublicReq{
        IsAutoPay: &isAutoPayBindPublicReq,
        WhiteList: &whiteListBindPublicReq,
        Eip: &eipEip,
    }
    response, err := client.CreateBindPublic(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.

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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**.

5.6.2 Disabling Public Network Access

Function

This API is used to disable public network access. Public network access cannot be disabled for yearly/monthly clusters by calling this API.

NOTE

After public network access is disabled, users can no longer access the cluster via a public IP address. If you disable public network access and then re-enable it, the public IP address of the cluster may change. Exercise caution.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-215 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose public network access you want to disable. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-216 Request body parameters

Parameter	Mandatory	Type	Description
eip	No	**UnBindPublicReqEipReq** object	EIP information.

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Table 5-217 UnBindPublicReqEipReq

Parameter	Mandatory	Type	Description
bandWidth	No	BindPublicReqEipBandWidth object	**Definition**: Public network bandwidth. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Table 5-218 BindPublicReqEipBandWidth

Parameter	Mandatory	Type	Description
size	Yes	Integer	**Definition**: Public network bandwidth, in Mbit/s. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

Table 5-219 Response body parameters

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

Example Requests

Disable public network access.

```
PUT https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/public/close
```

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

Example Responses

Status code: 200

Request succeeded.

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

SDK Sample Code

The SDK sample code is as follows.

Java

Disable public network access.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateUnbindPublicSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateUnbindPublicRequest request = new UpdateUnbindPublicRequest();
        request.withClusterId("{cluster_id}");
        UnBindPublicReq body = new UnBindPublicReq();
        BindPublicReqEipBandWidth bandWidthEip = new BindPublicReqEipBandWidth();
        bandWidthEip.withSize(5);
        UnBindPublicReqEipReq eipbody = new UnBindPublicReqEipReq();
        eipbody.withBandWidth(bandWidthEip);
```

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```
        body.withEip(eipbody);
        request.withBody(body);
        try {
            UpdateUnbindPublicResponse response = client.updateUnbindPublic(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Disable public network access.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateUnbindPublicRequest()
        request.cluster_id = "{cluster_id}"
        bandWidthEip = BindPublicReqEipBandWidth(
            size=5
        )
        eipbody = UnBindPublicReqEipReq(
            band_width=bandWidthEip
        )
        request.body = UnBindPublicReq(
            eip=eipbody
        )
        response = client.update_unbind_public(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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Go

Disable public network access.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateUnbindPublicRequest{}
    request.ClusterId = "{cluster_id}"
    bandWidthEip := &model.BindPublicReqEipBandWidth{
        Size: int32(5),
    }
    eipbody := &model.UnBindPublicReqEipReq{
        BandWidth: bandWidthEip,
    }
    request.Body = &model.UnBindPublicReq{
        Eip: eipbody,
    }
    response, err := client.UpdateUnbindPublic(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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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**.

5.6.3 Modifying Public Network Access Bandwidth

Function

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

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-220 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose public network access bandwidth you want to modify. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-221 Request body parameters

Parameter	Mandatory	Type	Description
band_width	Yes	**BindPublicReqEipBandWidth** object	**Definition**: Public network bandwidth. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
is_auto_pay	No	Integer	**Definition**: Whether to enable automatic payment from your Huawei Cloud account. **Constraints**: This parameter takes effect only for yearly/monthly clusters. **Value range**: • 1: Yes. (Discounts and coupons are automatically selected. The fee will be automatically deducted from your Huawei Cloud account.) If the automatic payment fails, an unpaid order will be generated, and you need to manually complete the payment. (During manual payment, you can still modify the discounts and coupons that were automatically selected.) • 0: No. (The customer needs to manually pay for the bill. Discounts and coupons can be used.) **Default value**: 0

Table 5-222 BindPublicReqEipBandWidth

Parameter	Mandatory	Type	Description
size	Yes	Integer	**Definition**: Public network bandwidth, in Mbit/s. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Modify public network access bandwidth.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/public/
bandwidth

{
  "band_width" : {
    "size" : 5
  },
  "is_auto_pay" : 1
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Modify public network access bandwidth.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdatePublicBandWidthSolution {

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

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

        CssClient client = CssClient.newBuilder()
```

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```
            .withCredential(auth)
            .withRegion(CssRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdatePublicBandWidthRequest request = new UpdatePublicBandWidthRequest();
        request.withClusterId("{cluster_id}");
        BindPublicReqEipReq body = new BindPublicReqEipReq();
        BindPublicReqEipBandWidth bandWidthbody = new BindPublicReqEipBandWidth();
        bandWidthbody.withSize(5);
        body.withIsAutoPay(1);
        body.withBandWidth(bandWidthbody);
        request.withBody(body);
        try {
            UpdatePublicBandWidthResponse response = client.updatePublicBandWidth(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Modify public network access bandwidth.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdatePublicBandWidthRequest()
        request.cluster_id = "{cluster_id}"
        bandWidthbody = BindPublicReqEipBandWidth(
            size=5
        )
        request.body = BindPublicReqEipReq(
            is_auto_pay=1,
            band_width=bandWidthbody
        )
        response = client.update_public_band_width(request)
        print(response)
```

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```
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Modify public network access bandwidth.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdatePublicBandWidthRequest{}
    request.ClusterId = "{cluster_id}"
    bandWidthbody := &model.BindPublicReqEipBandWidth{
        Size: int32(5),
    }
    isAutoPayBindPublicReqEipReq:= int32(1)
    request.Body = &model.BindPublicReqEipReq{
        IsAutoPay: &isAutoPayBindPublicReqEipReq,
        BandWidth: bandWidthbody,
    }
    response, err := client.UpdatePublicBandWidth(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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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**.

5.6.4 Enabling the Public Network Access Control Whitelist

Function

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

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-223 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose public network access control whitelist you want to enable. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-224 Request body parameters

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

Response Parameters

Status code: 200

Request succeeded.

None

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Example Requests

Enable the public network access control whitelist.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/public/whitelist/update

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

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Enable the public network access control whitelist.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StartPublicWhitelistSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StartPublicWhitelistRequest request = new StartPublicWhitelistRequest();
        request.withClusterId("{cluster_id}");
        StartPublicWhitelistReq body = new StartPublicWhitelistReq();
        body.withWhiteList("192.168.0.xx");
        request.withBody(body);
        try {
            StartPublicWhitelistResponse response = client.startPublicWhitelist(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
```

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

Python

Enable the public network access control whitelist.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StartPublicWhitelistRequest()
        request.cluster_id = "{cluster_id}"
        request.body = StartPublicWhitelistReq(
            white_list="192.168.0.xx"
        )
        response = client.start_public_whitelist(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Enable the public network access control whitelist.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)
```

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.StartPublicWhitelistRequest{}
    request.ClusterId = "{cluster_id}"
    request.Body = &model.StartPublicWhitelistReq{
        WhiteList: "192.168.0.xx",
    }
    response, err := client.StartPublicWhitelist(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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.

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Error Codes

See **Error Codes**.

5.6.5 Disabling the Public Network Access Control Whitelist

Function

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

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-225 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose public network access control whitelist you want to disable. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Disable the public network access control whitelist.

```
PUT https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/public/whitelist/close
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StopPublicWhitelistSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StopPublicWhitelistRequest request = new StopPublicWhitelistRequest();
```

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```
        request.withClusterId("{cluster_id}");
        try {
            StopPublicWhitelistResponse response = client.stopPublicWhitelist(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StopPublicWhitelistRequest()
        request.cluster_id = "{cluster_id}"
        response = client.stop_public_whitelist(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

func main() {
```

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

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5.7 Snapshot Management

5.7.1 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.

- **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.

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

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-226 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the target cluster For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-227 Request body parameters

Parameter	Mandatory	Type	Description
bucket	Yes	String	**Definition**: Name of the OBS bucket used for backup. **Constraints**: • Storage class: standard. • Region: the same as that of the cluster. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
agency	Yes	String	**Definition**: Agency name. You can create an agency to allow CSS to call other cloud services. **Constraints**: The value can contain only letters (a-z and A-Z), digits (0-9), hyphens (-), and underscores (_). It cannot contain Chinese characters or other special characters. **Value range**: N/A **Default value**: N/A
base_path	No	String	**Definition**: Storage path of the snapshot in the OBS bucket. **Constraints**: N/A **Value range**: • The backup path cannot contain the following characters: \:*?"<>|'{}. Additionally, it cannot: • Start with a slash (/). • Start or end with a period (.). • Contain more than two consecutive slashes (/) or periods (.). • Exceed 512 characters. **Default value**: N/A

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Parameter	Mandatory	Type	Description
max_snapshot_bytes_per_seconds	No	String	**Definition**: This parameter sets the maximum backup speed per node (bytes per second). When it is exceeded, flow control is triggered to prevent excessive resource usage and ensure system stability. The actual backup speed may not reach the configured value, as it depends on many factors, such as OBS performance and disk I/O. **Constraints**: N/A **Value range**: The following values and formats are allowed: ● Number + Unit The number ranges from 0 to 9999. The unit can be k, kb, m, mb, g, gb, t, tb, p, pb, or b (case-insensitive). **0mb** means there is no speed limit. An overly high backup speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. ● 0 There is no speed limit. An overly high backup speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. ● -1 There is no speed limit. An overly high backup speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. **Default value**:

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Parameter	Mandatory	Type	Description
			The default value is 40 MB. If this parameter is left blank, the default value is used.

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Parameter	Mandatory	Type	Description
max_restore_bytes_per_seconds	No	String	**Definition**: This parameter sets the maximum recovery speed per node (bytes per second). When it is exceeded, flow control is triggered to prevent excessive resource usage and ensure system stability. The actual recovery speed may not reach the configured value, as it depends on many factors, such as OBS performance and disk I/O. **Constraints**: For OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter. If Maximum recovery speed (per second) is lower than indices.recovery.max_bytes_per_sec, flow control is triggered when the former is reached. If Maximum recovery speed (per second) is higher than indices.recovery.max_bytes_per_sec, flow control is triggered when the latter is reached. **Value range**: The following values and formats are allowed: • Number + Unit The number ranges from 0 to 9999. The unit can be k, kb, m, mb, g, gb, t, tb, p, pb, or b (case-insensitive). **0mb** means there is no speed limit. (However, for OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter.) An overly high recovery speed may lead

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Parameter	Mandatory	Type	Description
			to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. • 0 There is no speed limit. (However, for OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter.) An overly high recovery speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. • -1 There is no speed limit. (However, for OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter.) An overly high recovery speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. **Default value**: For Elasticsearch clusters of 7.6.2 or earlier, the default setting is **40mb**. For OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the default setting is no limit, but the recovery speed is still limited by the indices.recovery.max_bytes_per_sec parameter. If this parameter is left blank, the default setting is used.

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Parameter	Mandatory	Type	Description
enable	No	String	**Definition**: Whether to enable the automatic snapshot creation policy. **Constraints**: N/A **Value range**: **true**: The automatic snapshot creation policy is enabled. false: disabled. **Default value**: false
indices	No	String	**Definition**: Name of the index to be backed up. **Constraints**: • indicates all indexes and is valid only when enable is set to true. • The value cannot contain uppercase letters, spaces, or the following characters: "<|>/? **Value range**: • If this parameter is left blank, all indexes in the snapshot are restored by default. • To restore specified indexes, for example, index1, index2, and Index3, specify the indexes. You can use an asterisk (*) to match multiple indexes. For example, index* indicates that all indexes with the prefix **index** will be restored. **Default value**: N/A

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Parameter	Mandatory	Type	Description
prefix	No	String	**Definition**: Prefix of a snapshot that is automatically created, which is manually entered. **Constraints**: This parameter is mandatory when **enable** is set to **true**. **Value range**: Enter up to 32 characters and start with a lowercase letter. Lowercase letters, digits, hyphens (-), and underscores (_) are allowed. **Default value**: N/A
period	No	String	**Definition**: Time when a snapshot is created every day. **Constraints**: **NOTE** When frequency is set to HOUR, you do not need to specify period. By default, snapshot creation starts from the next hour after the settings are successful. • This parameter is mandatory when enable is set to true. **Value range**: 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. **Default value**: 00:00 GMT+08:00

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Parameter	Mandatory	Type	Description
keepday	No	Integer	**Definition**: Customize the number of snapshots to be retained. Expired snapshots will be automatically deleted on the half hour. The deletion policy applies only to auto snapshots that are executed at the same frequency as the current automatic snapshot creation policy. **Constraints**: This parameter is mandatory when **enable** is set to **true**. **Value range**: 1–90 **Default value**: N/A

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Parameter	Mandatory	Type	Description
frequency	No	String	**Definition**: Frequency of automatically creating snapshots. **Constraints**: N/A **Value range**: • HOUR: Execute once every hour on the hour. • DAY: Execute once every day. • SUN, MON, TUE, WED, THU, FRI, and SAT: Execute the task at the specified day of every week. For example, SUN indicates that the task is executed once every Sunday. • The number of retained snapshots depends on the execution frequency and indexes set in the automatic snapshot creation policy. If the execution interval is short or the index data volume is large, the number of retained automatic snapshots may not reach the preset value. Set this value based on actual conditions. **Default value**: DAY

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Parameter	Mandatory	Type	Description
delete_auto	No	String	**Definition**: Whether to clear all the automatically created snapshots when the automatic snapshot creation policy is disabled. **Constraints**: This parameter is valid only when enable is set to false, indicating that automatic backup is disabled. **Value range**: **true**: Delete all automatically created snapshots when an automatic snapshot creation policy is disabled. false: Retain automatically created snapshots when an automatic snapshot creation policy is disabled. **Default value**: false

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Enable the snapshot function.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/index_snapshot/setting

{
  "bucket" : "test-bucket",
  "agency" : "usearch",
  "base_path" : "css_repository/Es-name",
  "max_snapshot_bytes_per_seconds" : 0,
  "max_restore_bytes_per_seconds" : 0
}
```

Example Responses

None

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SDK Sample Code

The SDK sample code is as follows.

Java

Enable the snapshot function.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateSnapshotSettingSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateSnapshotSettingRequest request = new UpdateSnapshotSettingRequest();
        request.withClusterId("{cluster_id}");
        UpdateSnapshotSettingReq body = new UpdateSnapshotSettingReq();
        body.withMaxRestoreBytesPerSeconds("0");
        body.withMaxSnapshotBytesPerSeconds("0");
        body.withBasePath("css_repository/Es-name");
        body.withAgency("usearch");
        body.withBucket("test-bucket");
        request.withBody(body);
        try {
            UpdateSnapshotSettingResponse response = client.updateSnapshotSetting(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

Enable the snapshot function.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateSnapshotSettingRequest()
        request.cluster_id = "{cluster_id}"
        request.body = UpdateSnapshotSettingReq(
            max_restore_bytes_per_seconds="0",
            max_snapshot_bytes_per_seconds="0",
            base_path="css_repository/Es-name",
            agency="usearch",
            bucket="test-bucket"
        )
        response = client.update_snapshot_setting(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Enable the snapshot function.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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```
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateSnapshotSettingRequest{}
    request.ClusterId = "{cluster_id}"
    maxRestoreBytesPerSecondsUpdateSnapshotSettingReq:= "0"
    maxSnapshotBytesPerSecondsUpdateSnapshotSettingReq:= "0"
    request.Body = &model.UpdateSnapshotSettingReq{
        MaxRestoreBytesPerSeconds: &maxRestoreBytesPerSecondsUpdateSnapshotSettingReq,
        MaxSnapshotBytesPerSeconds: &maxSnapshotBytesPerSecondsUpdateSnapshotSettingReq,
        BasePath: "css_repository/Es-name",
        Agency: "usearch",
        Bucket: "test-bucket",
    }
    response, err := client.UpdateSnapshotSetting(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

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5.7.2 Manually Creating a Snapshot

Function

CSS allows you to use snapshots to back up and restore Elasticsearch cluster data. By storing a snapshot in an OBS bucket, you save a point-in-time copy of the cluster's data. By restoring this snapshot, you can restore the cluster to a previous state. There are two ways to create snapshots to back up a CSS cluster: automatic and manual.

- Automatic snapshot creation: Snapshots are created periodically based on a preset time policy, for example, daily or weekly, to ensure continuous data protection. This reduces manual effort and improves backup reliability and efficiency.
- Manual snapshot creation: You can manually create snapshots when necessary, for example, before performing a mission-critical operation (such as a cluster upgrade), so you can use these snapshots to quickly restore the cluster to a previous state in case anything goes wrong. Manual snapshots provide more flexibility.

This API is used to manually create a snapshot.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-228 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster for which you want to create a snapshot. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-229 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition**: Snapshot name. **Constraints**: N/A **Value range**: Snapshot name. Enter 4 to 64 characters. Only lowercase letters, digits, hyphens (-), and underscores (_) are allowed. The value must start with a letter. **Default value**: N/A

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Parameter	Mandatory	Type	Description
description	No	String	**Definition**: Snapshot description. **Constraints**: N/A **Value range**: The value contains 0 to 256 characters and cannot contain !<>=&"' **Default value**: N/A
indices	No	String	**Definition**: Name of an index to be backed up. Multiple indexes are separated by commas (,). By default, all indexes are backed up. You can use the combination of a backslash and an asterisk (*) to back up data of certain indexes. For example, if you specify 2018-06*, then the data of the indexes with the prefix **2018-06** will be backed up. **Constraints**: N/A **Value range**: The value can contain 0 to 1,024 characters. Uppercase letters, spaces, and the following special characters are not allowed: "\<|>/? **Default value**: *, indicating all indexes.

Response Parameters

Status code: 201

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Table 5-230 Response body parameters

Parameter	Type	Description
backup	**backupRsp** object	**Definition**: The snapshot information. **Value range**: N/A

Table 5-231 backupRsp

Parameter	Type	Description
id	String	**Definition**: Snapshot ID. **Value range**: N/A
name	String	**Definition**: Snapshot name. **Value range**: Snapshot name. Enter 4 to 64 characters. Only lowercase letters, digits, hyphens (-), and underscores (_) are allowed. The value must start with a letter.

Example Requests

Create a snapshot.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/index_snapshot

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

Example Responses

Status code: 201

Resource created.

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

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SDK Sample Code

The SDK sample code is as follows.

Java

Create a snapshot.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class CreateSnapshotSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateSnapshotRequest request = new CreateSnapshotRequest();
        request.withClusterId("{cluster_id}");
        CreateSnapshotReq body = new CreateSnapshotReq();
        body.withIndices("myindex1myindex2");
        body.withName("snapshot_001");
        request.withBody(body);
        try {
            CreateSnapshotResponse response = client.createSnapshot(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Create a snapshot.

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```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateSnapshotRequest()
        request.cluster_id = "{cluster_id}"
        request.body = CreateSnapshotReq(
            indices="myindex1myindex2",
            name="snapshot_001"
        )
        response = client.create_snapshot(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Create a snapshot.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

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```
    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateSnapshotRequest{}
    request.ClusterId = "{cluster_id}"
    indicesCreateSnapshotReq:= "myindex1myindex2"
    request.Body = &model.CreateSnapshotReq{
        Indices: &indicesCreateSnapshotReq,
        Name: "snapshot_001",
    }
    response, err := client.CreateSnapshot(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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 refused to respond to it. The client should not repeat the request without modifications.
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**.

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5.7.3 Restoring a Snapshot

Function

This API is used to manually restore a snapshot.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-232 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose snapshot you want to restore. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Parameter	Mandatory	Type	Description
snapshot_id	Yes	String	**Definition**: Snapshot ID. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Request Parameters

Table 5-233 Request body parameters

Parameter	Mandatory	Type	Description
target_cluster	Yes	String	**Definition**: ID of the cluster that a snapshot is to be restored to. **Constraints**: • If the current cluster is available, snapshots are restored to the current cluster by default. Alternatively, you can choose to restore them to another specified cluster. • The destination cluster must be in the same region as the current cluster, and must have a later version than the current cluster. **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
indices	No	String	**Definition**: Specify the name of the index you want to restore. **Constraints**: You can use "*" to match multiple indexes. For example, index* indicates that all indexes with the prefix **index** will be restored. ● Or you can restore indexes by specifying their names, for example, index1,index2,index3. ● When "*" is used for index matching, the **.opendistro_security** index and any system indexes whose name is prefixed with **.kibana** are filtered out by default. The **.opendistro_security** index cannot be restored. To restore an index whose name is prefixed with **.kibana**, you need to specify the index name. **Value range**: The value is a string of 0 to 1024 characters that cannot contain uppercase letters, spaces, or the following special characters: "\<|>/? **Default value**: By default, this parameter is left blank. If you do not specify any index name, all indexes in snapshots will be restored by default.

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Parameter	Mandatory	Type	Description
rename_pattern	No	String	**Definition**: Rule for defining the indexes to be restored. **Constraints**: • Indexes that match this rule will be restored. The filtering condition must be a regular expression. • The renamePattern and renameReplacement parameters must be set at the same time in order for them to take effect. **Value range**: The value can contain 0 to 1,024 characters. Uppercase letters, spaces, and the following special characters are not allowed: "\<|>/? **Default value**: N/A
rename_replacement	No	String	**Definition**: Rule for renaming an index. **Constraints**: N/A **Value range**: • 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 renamePattern and renameReplacement parameters must be set at the same time in order for them to take effect. **Default value**: N/A

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Parameter	Mandatory	Type	Description
replace_exist_indices	No	Boolean	**Definition**: Whether to replace existing indexes. **Constraints**: N/A **Value range**: • false: Do not replace existing indexes. • true: Replace existing indexes. **Default value**: false

Response Parameters

Status code: 201

Resource created.

None

Example Requests

Restore a snapshot.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/index_snapshot/653c086f-ebe7-4383-b902-c031b354f1dd/restore

{
  "target_cluster" : "ea244205-d641-45d9-9dcb-ab2236bcd07e",
  "indices" : "myindex1,myindex2",
  "rename_pattern" : "index",
  "rename_replacement" : "restored_index_$1"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Restore a snapshot.

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

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

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```
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class RestoreSnapshotSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        RestoreSnapshotRequest request = new RestoreSnapshotRequest();
        request.withClusterId("{cluster_id}");
        request.withSnapshotId("{snapshot_id}");
        RestoreSnapshotReq body = new RestoreSnapshotReq();
        body.withRenameReplacement("restored_index_$1");
        body.withRenamePattern("index");
        body.withIndices("myindex1,myindex2");
        body.withTargetCluster("ea244205-d641-45d9-9dcb-ab2236bcd07e");
        request.withBody(body);
        try {
            RestoreSnapshotResponse response = client.restoreSnapshot(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Restore a snapshot.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
```

```
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = RestoreSnapshotRequest()
        request.cluster_id = "{cluster_id}"
        request.snapshot_id = "{snapshot_id}"
        request.body = RestoreSnapshotReq(
            rename_replacement="restored_index_$1",
            rename_pattern="index",
            indices="myindex1,myindex2",
            target_cluster="ea244205-d641-45d9-9dcb-ab2236bcd07e"
        )
        response = client.restore_snapshot(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Restore a snapshot.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
    request := &model.RestoreSnapshotRequest{}
    request.ClusterId = "{cluster_id}"
    request.SnapshotId = "{snapshot_id}"
    renameReplacementRestoreSnapshotReq:= "restored_index_$1"
    renamePatternRestoreSnapshotReq:= "index"
    indicesRestoreSnapshotReq:= "myindex1,myindex2"
    request.Body = &model.RestoreSnapshotReq{
        RenameReplacement: &renameReplacementRestoreSnapshotReq,
        RenamePattern: &renamePatternRestoreSnapshotReq,
        Indices: &indicesRestoreSnapshotReq,
        TargetCluster: "ea244205-d641-45d9-9dcb-ab2236bcd07e",
    }
    response, err := client.RestoreSnapshot(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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 refused to respond to it. The client should not repeat the request without modifications.

Error Codes

See **Error Codes**.

5.7.4 Deleting a Snapshot

Function

CSS allows you to use snapshots to back up and restore Elasticsearch cluster data. By storing a snapshot in an OBS bucket, you save a point-in-time copy of the cluster's data. By restoring this snapshot, you can restore the cluster to a previous state. There are two ways to create snapshots to back up a CSS cluster: automatic and manual.

- Automatic snapshot creation: Snapshots are created periodically based on a preset time policy, for example, daily or weekly, to ensure continuous data

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protection. This reduces manual effort and improves backup reliability and efficiency.

- Manual snapshot creation: You can manually create snapshots when necessary, for example, before performing a mission-critical operation (such as a cluster upgrade), so you can use these snapshots to quickly restore the cluster to a previous state in case anything goes wrong. Manual snapshots provide more flexibility.

This API is used to delete a snapshot.

NOTE

After a snapshot is deleted, its data cannot be restored. Exercise caution.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-234 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster to which the to-be-deleted snapshot belongs. For details about how to obtain the cluster ID, see **Obtaining a Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
snapshot_id	Yes	String	**Definition**: ID of the snapshot you want to delete. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Delete a snapshot.

```
DELETE https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/
index_snapshot/29a2254e-947f-4463-b65a-5f0b17515fae
```

Example Responses

None

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SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class DeleteSnapshotSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteSnapshotRequest request = new DeleteSnapshotRequest();
        request.withClusterId("{cluster_id}");
        request.withSnapshotId("{snapshot_id}");
        try {
            DeleteSnapshotResponse response = client.deleteSnapshot(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *
```

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteSnapshotRequest()
        request.cluster_id = "{cluster_id}"
        request.snapshot_id = "{snapshot_id}"
        response = client.delete_snapshot(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteSnapshotRequest{}
    request.ClusterId = "{cluster_id}"
    request.SnapshotId = "{snapshot_id}"
    response, err := client.DeleteSnapshot(request)
    if err == nil {
```

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

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

Error Codes

See **Error Codes**.

5.7.5 Querying the Automatic Snapshot Creation Policy

Function

CSS allows you to use snapshots to back up and restore Elasticsearch cluster data. By storing a snapshot in an OBS bucket, you save a point-in-time copy of the cluster's data. By restoring this snapshot, you can restore the cluster to a previous state. There are two ways to create snapshots to back up a CSS cluster: automatic and manual. This API is used to query the automatic snapshot creation policy.

- Automatic snapshot creation: Snapshots are automatically created daily or weekly based on a preset time schedule, ensuring ongoing data protection. By configuring an automatic snapshot policy, you reduce manual operations while improving backup reliability and efficiency.
- Manual snapshot creation: You create snapshots manually for special occasions, for example, prior to a high-risk operation (such as a cluster upgrade). This ensures you can restore data using snapshots in case anything should go wrong. Manual snapshots provide additional flexibility.

Calling Method

For details, see **Calling APIs**.

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URI

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

Table 5-235 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster where snapshots are to be automatically created. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

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Table 5-236 Response body parameters

Parameter	Type	Description
keepday	Integer	**Definition**: Customize the number of snapshots to be retained. **Value range**: N/A
period	String	**Definition**: Time when a snapshot is created every day. **Value range**: N/A
frequency	String	**Parameter description**: Frequency of automatically creating snapshots. **Options**: • **DAY**: days. • **HOUR**: hours. • **MON**: Monday. • **TUE**: Tuesday. • **WED**: Wednesday. • **THU**: Thursday. • **FRI**: Friday. • **SAT**: Saturday. • **SUN**: Sunday.
prefix	String	**Definition**: Snapshot name prefix, which needs to be manually entered. **Value range**: N/A
bucket	String	**Definition**: Name of the OBS bucket where snapshots are stored. **Value range**: N/A

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Parameter	Type	Description
basePath	String	**Definition**: Storage path of the snapshot in the OBS bucket. **Value range**: N/A
agency	String	**Definition**: Agency name. You can create an agency to allow CSS to call other cloud services. An agency name cannot contain special characters or Chinese characters. **Value range**: Only a-z, A-Z, 0-9, hyphens (-) and underscores (_) are allowed.
enable	String	**Parameter description**: Whether to enable the automatic snapshot creation policy. **Options**: • **true**: The automatic snapshot creation policy is enabled. • **false**: The automatic snapshot creation policy is disabled.
indices	String	**Definition**: Name of an index to be backed up. Multiple indexes are separated by commas (,). By default, all indexes are backed up. You can use the combination of a backslash and an asterisk (*) to back up data of certain indexes. For example, if you specify 2018-06*, then the data of the indexes with the prefix **2018-06** will be backed up. **Value range**: The value can contain 0 to 1,024 characters. Uppercase letters, spaces, and the following special characters are not allowed: "\<|>/?
snapshotCmkId	String	**Definition**: Snapshot ID. **Value range**: N/A

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Parameter	Type	Description
maxSnapshotBytesPerSeconds	String	**Definition**: This parameter sets the maximum backup speed per node (bytes per second). When it is exceeded, flow control is triggered to prevent excessive resource usage and ensure system stability. The actual backup speed may not reach the configured value, as it depends on many factors, such as OBS performance and disk I/O. **Value range**: The following values and formats are allowed: ● Number + Unit The number ranges from 0 to 9999. The unit can be k, kb, m, mb, g, gb, t, tb, p, pb, or b (case-insensitive). **0mb** means there is no speed limit. An overly high backup speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. ● 0 There is no speed limit. An overly high backup speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. ● -1 There is no speed limit. An overly high backup speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully.

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Parameter	Type	Description
maxRestoreBytes-PerSeconds	String	**Definition**: This parameter sets the maximum recovery speed per node (bytes per second). When it is exceeded, flow control is triggered to prevent excessive resource usage and ensure system stability. The actual recovery speed may not reach the configured value, as it depends on many factors, such as OBS performance and disk I/O. **Value range**: The following values and formats are allowed: ● Number + Unit The number ranges from 0 to 9999. The unit can be k, kb, m, mb, g, gb, t, tb, p, pb, or b (case-insensitive). **0mb** means there is no speed limit. (However, for OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter.) An overly high recovery speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. ● 0 There is no speed limit. (However, for OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter.) An overly high recovery speed may lead to excessive resource usage, which may impact system stability. Therefore, set this parameter carefully. ● -1 There is no speed limit. (However, for OpenSearch clusters and Elasticsearch clusters later than 7.6.2, the recovery speed is also limited by the indices.recovery.max_bytes_per_sec parameter.) An overly high recovery speed may lead to excessive resource usage, which may impact system

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Parameter	Type	Description
		stability. Therefore, set this parameter carefully.

Example Requests

Query the automatic snapshot creation policy.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/index_snapshot/policy
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "keepday" : 2,
  "period" : "16:00 GMT+08:00",
  "frequency" : "DAY",
  "prefix" : "snapshot",
  "bucket" : "es-backup",
  "basePath" : "css_repository/tests",
  "agency" : "usearch",
  "enable" : "true",
  "indices" : "*",
  "snapshotCmkId" : null,
  "maxSnapshotBytesPerSeconds" : "40MB",
  "maxRestoreBytesPerSeconds" : "0MB"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ShowAutoCreatePolicySolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowAutoCreatePolicyRequest request = new ShowAutoCreatePolicyRequest();
        request.withClusterId("{cluster_id}");
        try {
            ShowAutoCreatePolicyResponse response = client.showAutoCreatePolicy(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowAutoCreatePolicyRequest()
        request.cluster_id = "{cluster_id}"
        response = client.show_auto_create_policy(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

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5.7.6 Configuring the Automatic Snapshot Creation Policy

Function

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

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-237 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster for which you want to create snapshots automatically. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-238 Request body parameters

Parameter	Mandatory	Type	Description
indices	No	String	**Definition**: Specify the name of the index you want to restore. **Constraints**: You can use "*" to match multiple indexes. For example, index* indicates that all indexes with the prefix **index** will be restored. ● Or you can restore indexes by specifying their names, for example, index1,index2,index3. ● When "*" is used for index matching, the **.opendistro_security** index and any system indexes whose name is prefixed with **.kibana** are filtered out by default. The .opendistro_security index cannot be restored. To restore an index whose name is prefixed with .kibana, you need to specify the index name. **Value range**: The value is a string of 0 to 1024 characters that cannot contain uppercase letters, spaces, or the following special characters: "\<|>/? **Default value**: By default, this parameter is left blank. If you do not specify any index name, all indexes in snapshots will be restored by default.

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Parameter	Mandatory	Type	Description
prefix	No	String	**Definition**: Prefix of a snapshot that is automatically created, which is manually entered. **Constraints**: This parameter is mandatory when **enable** is set to **true**. **Value range**: Enter up to 32 characters and start with a lowercase letter. Lowercase letters, digits, hyphens (-), and underscores (_) are allowed. **Default value**: N/A
period	No	String	**Definition**: Time when a snapshot is generated every day. Snapshots can only be generated on the hour. The format is HH:mm z: 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. **Constraints**: N/A **Value range**: N/A **Default value**: 00:00 GMT+08:00 **NOTE** The default value is 00:00 GMT +08:00. When frequency is set to HOUR, you do not need to specify period. By default, snapshot creation starts from the next hour after the settings are successful. This parameter is mandatory when **enable** is set to **true**.

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Parameter	Mandatory	Type	Description
keepday	No	Integer	**Definition**: Customize the number of snapshots to be retained. Expired snapshots will be automatically deleted on the half hour. The deletion policy applies only to automated snapshots that are executed at the same frequency as the current automatic snapshot creation policy. **Constraints**: N/A **Value range**: 1–90 **Default value**: N/A **NOTE** This parameter is mandatory when **enable** is set to **true**.
enable	Yes	String	**Definition**: Whether to enable the automatic snapshot creation policy. **Constraints**: N/A **Value range**: • **true**: The automatic snapshot creation policy is enabled. • **false**: The automatic snapshot creation policy is disabled. **Default value**: N/A

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Parameter	Mandatory	Type	Description
delete_auto	No	String	**Definition**: Whether to clear all the automatically created snapshots when the automatic snapshot creation policy is disabled. **Constraints**: N/A **Value range**: • true: Delete all automatically created snapshots when an automatic snapshot creation policy is disabled. • false: Retain automatically created snapshots when an automatic snapshot creation policy is disabled. **Default value**: false

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Parameter	Mandatory	Type	Description
frequency	No	String	**Definition**: Frequency of automatically creating snapshots. **Constraints**: N/A **Value range**: • HOUR: Execute once every hour on the hour. • DAY: Execute once every day. • SUN, MON, TUE, WED, THU, FRI, and SAT: Execute the task at the specified day of every week. For example, SUN indicates that the task is executed once every Sunday. • The number of retained snapshots depends on the execution frequency and indexes set in the automatic snapshot creation policy. If the execution interval is short or the index data volume is large, the number of retained automatic snapshots may not reach the preset value. Set this value based on actual conditions. **Default value**: DAY

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Configure the automatic snapshot creation policy.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/index_snapshot/policy
```

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```
{
  "prefix" : "snapshot",
  "period" : "16:00 GMT+08:00",
  "keepday" : 7,
  "frequency" : "DAY",
  "enable" : "true",
  "delete_auto" : "false"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Configure the automatic snapshot creation policy.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class CreateAutoCreatePolicySolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateAutoCreatePolicyRequest request = new CreateAutoCreatePolicyRequest();
        request.withClusterId("{cluster_id}");
        SetRDSBackupCnfReq body = new SetRDSBackupCnfReq();
        body.withFrequency("DAY");
        body.withDeleteAuto("false");
        body.withEnable("true");
        body.withKeepday(7);
        body.withPeriod("16:00 GMT+08:00");
        body.withPrefix("snapshot");
        request.withBody(body);
        try {
```

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

Python

Configure the automatic snapshot creation policy.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateAutoCreatePolicyRequest()
        request.cluster_id = "{cluster_id}"
        request.body = SetRDSBackupCnfReq(
            frequency="DAY",
            delete_auto="false",
            enable="true",
            keepday=7,
            period="16:00 GMT+08:00",
            prefix="snapshot"
        )
        response = client.create_auto_create_policy(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Configure the automatic snapshot creation policy.

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```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateAutoCreatePolicyRequest{}
    request.ClusterId = "{cluster_id}"
    frequencySetRdsBackupCnfReq:= "DAY"
    deleteAutoSetRdsBackupCnfReq:= "false"
    keepdaySetRdsBackupCnfReq:= int32(7)
    periodSetRdsBackupCnfReq:= "16:00 GMT+08:00"
    prefixSetRdsBackupCnfReq:= "snapshot"
    request.Body = &model.SetRdsBackupCnfReq{
        Frequency: &frequencySetRdsBackupCnfReq,
        DeleteAuto: &deleteAutoSetRdsBackupCnfReq,
        Enable: "true",
        Keepday: &keepdaySetRdsBackupCnfReq,
        Period: &periodSetRdsBackupCnfReq,
        Prefix: &prefixSetRdsBackupCnfReq,
    }
    response, err := client.CreateAutoCreatePolicy(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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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**.

5.7.7 Querying a Snapshot List

Function

This API is used to query all snapshots of a cluster, including the snapshot creation time, data engine, snapshot ID, and snapshot status, helping you manage the lifecycle of cluster snapshots. This API enables you to quickly obtain the details of a specified snapshot, verify snapshot availability, and help you restore data, roll back versions, or analyze storage costs. This API also provides structured data support required for automatic monitoring and warning for the O&M team, significantly improving cluster O&M efficiency and stability.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-239 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster whose snapshots you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 5-240 Response body parameters

Parameter	Type	Description
backups	Array of **ListSnapshotBackupsResp** objects	**Definition**: Snapshot list. **Value range**: N/A

Table 5-241 ListSnapshotBackupsResp

Parameter	Type	Description
created	String	**Definition**: Snapshot creation time. **Value range**: The format is CCYY-MM-DDThh:mm:ss (ISO 8601).

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Parameter	Type	Description
datastore	ListSnapshotBackupsDatastoreResp object	**Definition**: Search engine. **Value range**: N/A
description	String	**Definition**: Snapshot description. **Value range**: N/A
id	String	**Definition**: Snapshot ID. **Value range**: N/A
clusterId	String	**Definition**: Cluster ID. **Value range**: N/A
clusterName	String	**Definition**: Cluster name. **Value range**: N/A
name	String	**Definition**: Snapshot name. **Value range**: N/A
status	String	**Definition**: Snapshot status. **Value range**: • **BUILDING": creating. • **COMPLETED**: available. • **FAILED**: unavailable. • **PART_FAILED**: partially available.
backupType	String	**Parameter description**: Snapshot type. **Options**: • **0**: Automatic creation. • **1**: Manual creation.

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Parameter	Type	Description
backupMethod	String	**Parameter description**: Snapshot creation mode. **Options**: • **auto**: automatic creation. • **manual**: manual creation.
backupFrequency	String	**Definition**: Cluster snapshot creation frequency. **Value range**: • **HOUR** • **DAY**
indices	String	**Definition**: Index you want to back up. **Value range**: N/A
totalShards	Integer	**Definition**: Total number of shards of the index you want to back up. **Value range**: N/A
failedShards	Integer	**Definition**: Number of shards that fail to be backed up. **Value range**: N/A
restoreStatus	String	**Definition**: Snapshot restoration status. **Value range**: • **restoring**: restoration in progress. • **success**: successful restoration. • **failed**: restoration failed.
startTime	Long	**Definition**: Snapshot start timestamp. **Value range**: N/A

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Parameter	Type	Description
endTime	Long	**Definition**: Snapshot end timestamp. **Value range**: N/A
bucketName	String	**Definition**: Name of the bucket that stores snapshot data. **Value range**: N/A

Table 5-242 ListSnapshotBackupsDatastoreResp

Parameter	Type	Description
type	String	**Definition**: Cluster engine type. **Value range**: • elasticsearch: Elasticsearch cluster. • openSearch: OpenSearch cluster.
version	String	**Definition**: Elasticsearch engine version. For details, see the supported versions in **Before You Start**. **Value range**: N/A

Example Requests

Query the cluster snapshot list.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/37cb1075-c38e-4cd8-81df-442d52df3786/index_snapshots
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "backups" : [ {
    "created" : "2018-03-07T07:34:47",
    "datastore" : {
      "type" : "elasticsearch",
      "version" : "x.x.x"
    },
```

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```
    "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",
    "backupFrequency" : "HOUR",
    "indices" : ".kibanawebsite2",
    "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",
    "indices" : ".kibana",
    "totalShards" : 1,
    "failedShards" : 0,
    "version" : "x.x.x",
    "restoreStatus" : "none",
    "startTime" : 1520350957275,
    "endTime" : 1520351284357,
    "bucketName" : "obs-b8ed"
  } ]
}
```


SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListSnapshotsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
```

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```
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListSnapshotsRequest request = new ListSnapshotsRequest();
        request.withClusterId("{cluster_id}");
        try {
            ListSnapshotsResponse response = client.listSnapshots(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListSnapshotsRequest()
        request.cluster_id = "{cluster_id}"
        response = client.list_snapshots(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

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

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

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

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Error Codes

See **Error Codes**.

5.7.8 Disabling the Snapshot Function

Function

This API is used to disable the snapshot function.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-243 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster for which snapshots are disabled. For details about how to obtain the cluster ID, see **Obtaining a Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Disable snapshots.

```
DELETE https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/
index_snapshots
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StopSnapshotSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StopSnapshotRequest request = new StopSnapshotRequest();
```

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```
        request.withClusterId("{cluster_id}");
        try {
            StopSnapshotResponse response = client.stopSnapshot(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StopSnapshotRequest()
        request.cluster_id = "{cluster_id}"
        response = client.stop_snapshot(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

func main() {
```

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.7.9 (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.

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- **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.

NOTE

The API will automatically create an OBS bucket and an agency for automatic snapshot creation. If there are multiple clusters, each cluster will create a different OBS bucket using this API, which may exhaust the OBS quota and create the inconvenience of maintaining a large number of OBS buckets. You are advised to use the API for **Modifying Basic Settings of Cluster Snapshots**.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-244 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster where snapshots you want to back up. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Automatically configure basic settings of a cluster snapshot.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/ea244205-d641-45d9-9dcb-ab2236bcd07e/
index_snapshot/auto_setting
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StartAutoSettingSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StartAutoSettingRequest request = new StartAutoSettingRequest();
```

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```
        request.withClusterId("{cluster_id}");
        try {
            StartAutoSettingResponse response = client.startAutoSetting(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StartAutoSettingRequest()
        request.cluster_id = "{cluster_id}"
        response = client.start_auto_setting(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

func main() {
```

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.8 VPC Endpoint

5.8.1 Enabling the VPC Endpoint Service

Function

This API is used to enable the VPCEP service for a cluster.

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Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-245 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose VPC endpoint you want to enable. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-246 Request body parameters

Parameter	Mandatory	Type	Description
endpoint_with_dns_name	No	Boolean	Enable the VPC endpoint.

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Parameter	Mandatory	Type	Description
profession_vpcep	No	Boolean	Create a professional VPC endpoint. • **true**: This option will be enabled. • **false**: This option will be disabled.
dualstack_enable	No	Boolean	Whether to enable the IPv4/IPv6 dual-stack network. The IPv4/IPv6 dual-stack network can be enabled only when a professional VPC endpoint is created and the VPC of the cluster supports IPv6. • **true**: This option will be enabled. • **false**: This option will be disabled.

Response Parameters

Status code: 200

Table 5-247 Response body parameters

Parameter	Type	Description
action	String	**Parameter description**: Operation. The fixed value is **createVpcepservice**, indicating that the VPC endpoint is enabled.

Example Requests

Enable the VPC endpoint service.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/vpcepservice/open

{
  "endpoint_with_dns_name" : true
}
```

Example Responses

Status code: 200

Request succeeded.

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```
{
  "action" : "createVpcepservice"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Enable the VPC endpoint service.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StartVpecpSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StartVpecpRequest request = new StartVpecpRequest();
        request.withClusterId("{cluster_id}");
        StartVpecpReq body = new StartVpecpReq();
        body.withEndpointWithDnsName(true);
        request.withBody(body);
        try {
            StartVpecpResponse response = client.startVpecp(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

Enable the VPC endpoint service.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StartVpecpRequest()
        request.cluster_id = "{cluster_id}"
        request.body = StartVpecpReq(
            endpoint_with_dns_name=True
        )
        response = client.start_vpecp(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Enable the VPC endpoint service.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

    auth := basic.NewCredentialsBuilder().
```

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```
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.StartVpecpRequest{}
    request.ClusterId = "{cluster_id}"
    endpointWithDnsNameStartVpecpReq:= true
    request.Body = &model.StartVpecpReq{
        EndpointWithDnsName: &endpointWithDnsNameStartVpecpReq,
    }
    response, err := client.StartVpecp(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.8.2 Disabling the VPC Endpoint Service

Function

This API is used to disable the VPCEP service for a cluster.

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NOTE

After the VPCEP service is disabled, users can no longer access the cluster via the VPCEP IP address or a private domain name. If you disable the VPCEP service and then re-enable it, the VPCEP IP address or private domain name may change. Exercise caution.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-248 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose VPC endpoint you want to disable. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

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Response Parameters

Status code: 200

Table 5-249 Response body parameters

Parameter	Type	Description
action	String	**Parameter description**: Action. The fixed value is **deleteVpcepservice**, indicating that the VPC endpoint is disabled.

Example Requests

Disable the VPC endpoint service.

```
PUT https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/vpcepservice/close
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "action" : "deleteVpcepservice"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class StopVpecpSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        StopVpecpRequest request = new StopVpecpRequest();
        request.withClusterId("{cluster_id}");
        try {
            StopVpecpResponse response = client.stopVpecp(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = StopVpecpRequest()
        request.cluster_id = "{cluster_id}"
        response = client.stop_vpecp(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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.

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Status Code	Description
412	The server did not meet one of the preconditions contained in the request.

Error Codes

See **Error Codes**.

5.8.3 Obtaining an Endpoint Connection

Function

The VPC endpoint service enables secure and reliable access across VPCs through a dedicated gateway, without exposing the network information of servers. The VPC endpoint address can be an IPv4 address (automatically allocated when the VPC endpoint service is enabled), an IPv6 address (allocated when a professional VPC endpoint is created and dual-stack networking is enabled), or an internal domain name (allocated when DNS is enabled). This API is used to obtain the VPCEP connection of a cluster.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-250 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Table 5-251 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	**Definition**: Start value for querying VPC endpoint connections. **Constraints**: N/A **Value range**: 0-1000 **Default value**: 0
limit	No	Integer	**Definition**: The number of VPC endpoint connections to be queried. **Constraints**: N/A **Value range**: 1-1000 **Default value**: The default value is 10, indicating that 10 tasks are queried at a time.

Request Parameters

None

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Response Parameters

Status code: 200

Table 5-252 Response body parameters

Parameter	Type	Description
connections	Array of **connections** objects	**Definition**: Cluster VPC endpoint connection information. **Value range**: N/A
vpcServiceName	String	**Definition**: Name of the VPC endpoint service. **Value range**: N/A
permissions	Array of **permissions** objects	**Definition**: Permissions of the cluster VPC endpoint whitelist. **Value range**: N/A
vpcepUpdateSwitch	Boolean	**Definition**: Whether to enable VPC endpoint. **Value range**: • **true**: The VPC endpoint is enabled. • **false**: The VPC endpoint is disabled.
total_count	Integer	**Definition**: Number of cluster VPC endpoints. **Value range**: N/A

Table 5-253 connections

Parameter	Type	Description
id	String	**Definition**: Cluster VPC endpoint ID. **Value range**: N/A

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Parameter	Type	Description
status	String	**Definition**: Cluster VPC endpoint status. **Value range**: • **accepted**: The VPC endpoint connection is enabled. • **rejected**: The VPC endpoint connection is disabled.
maxSession	String	**Definition**: Maximum number of connections to a VPC endpoint. **Value range**: N/A
specificationName	String	**Definition**: Cluster VPC endpoint name. **Value range**: N/A
created_at	String	**Definition**: Creation time. **Value range** The format is CCYY-MM-DDThh:mm:ss (ISO 8601).
update_at	String	**Definition**: Update time. The default value is null. **Value range** The format is CCYY-MM-DDThh:mm:ss (ISO 8601).
domain_id	String	**Definition**: Account ID of the owner. **Value range**: N/A
vpcepIp	String	**Definition**: IPv4 address of a cluster VPC endpoint. **Value range**: N/A
vpcepIpv6Address	String	**Definition**: IPv6 address of a cluster VPC endpoint. **Value range**: N/A

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Parameter	Type	Description
vpcepDnsName	String	**Definition**: Private domain name of a cluster VPC endpoint. **Value range**: N/A

Table 5-254 permissions

Parameter	Type	Description
id	String	**Definition**: Unique ID of the permission. **Value range**: N/A
permission	String	**Definition**: Permission details for the VPCEP connection whitelist. **Value range**: N/A
permission_type	String	**Definition**: VPC endpoint permission type. **Value range**: domainId: user account ID.
created_at	String	**Definition**: Specifies when the VPC endpoint was created. **Value range**: The format is CCYY-MM-DDThh:mm:ss (ISO 8601).

Example Requests

Obtain the VPCEP connection of a cluster.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/vpcepservice/connections
```

Example Responses

Status code: 200

Request succeeded.

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```
{
  "connections" : [ {
    "id" : "54b7f739-31a1-40d0-862b-ac85b83ab2da",
    "status" : "accepted",
    "maxSession" : "3000",
    "specificationName" : "default",
    "vpcepIp" : "192.168.0.122",
    "created_at" : "2024-06-11T09:36:24Z",
    "domain_id" : "db9b76a0d9ae431f8e85e89da2ca867c"
  }, {
    "id" : "e88ad0bc-c2c7-419c-bd9b-a961111f0a42",
    "status" : "accepted",
    "maxSession" : "3000",
    "specificationName" : "default",
    "vpcepIp" : "192.168.0.133",
    "created_at" : "2023-10-12T07:33:16Z",
    "domain_id" : "db9b76a0d9ae431f8e85e89da2ca867c"
  } ],
  "vpcepUpdateSwitch" : false,
  "total_count" : 2,
  "vpcServiceName" : "cn-north-4.css-op-no-delete.cf072729-b076-49db-83d3-020dc9f589bd",
  "permissions" : [ {
    "id" : "432a6429-f377-4168-8b24-feb5885af08c",
    "permission" : "iam:domain::db9b76a0d9ae431f8e85e89da2ca867c",
    "permission_type" : "domainId",
    "created_at" : "2023-10-12T07:33:11Z"
  } ]
}
```


SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ShowVpcepConnectionSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
```

```
        ShowVpcepConnectionRequest request = new ShowVpcepConnectionRequest();
        request.withClusterId("{cluster_id}");
        try {
            ShowVpcepConnectionResponse response = client.showVpcepConnection(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowVpcepConnectionRequest()
        request.cluster_id = "{cluster_id}"
        response = client.show_vpcep_connection(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)
```

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

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5.8.4 Updating an Endpoint Connection

Function

This API is used to update the VPCEP connection of a cluster.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/vpcepservice/connections

Table 5-255 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose VPC endpoint you want to update. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-256 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Expected behavior. • receive: Accept the VPC endpoint. • reject: Reject the VPC endpoint.
endpoint_id_list	Yes	Array of strings	Lists VPC endpoint IDs.

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Update an endpoint connection.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/vpcepservice/connections

{
  "action" : "receive",
  "endpoint_id_list" : [ "f132bb14-e1d5-4f25-9f7c-a29e4c8effd4" ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Update an endpoint connection.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
```

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```
import com.huaweicloud.sdk.css.v1.model.*;

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

public class UpdateVpcepConnectionSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateVpcepConnectionRequest request = new UpdateVpcepConnectionRequest();
        request.withClusterId("{cluster_id}");
        UpdateVpcepConnectionReq body = new UpdateVpcepConnectionReq();
        List<String> listbodyEndpointIdList = new ArrayList<>();
        listbodyEndpointIdList.add("f132bb14-e1d5-4f25-9f7c-a29e4c8effd4");
        body.withEndpointIdList(listbodyEndpointIdList);
        body.withAction("receive");
        request.withBody(body);
        try {
            UpdateVpcepConnectionResponse response = client.updateVpcepConnection(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Update an endpoint connection.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

```
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateVpcepConnectionRequest()
        request.cluster_id = "{cluster_id}"
        listEndpointIdListbody = [
            "f132bb14-e1d5-4f25-9f7c-a29e4c8effd4"
        ]
        request.body = UpdateVpcepConnectionReq(
            endpoint_id_list=listEndpointIdListbody,
            action="receive"
        )
        response = client.update_vpcep_connection(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Update an endpoint connection.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateVpcepConnectionRequest{}
    request.ClusterId = "{cluster_id}"
    var listEndpointIdListbody = []string{
        "f132bb14-e1d5-4f25-9f7c-a29e4c8effd4",
```

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```
    }
    request.Body = &model.UpdateVpcepConnectionReq{
        EndpointIdList: listEndpointIdListbody,
        Action: "receive",
    }
    response, err := client.UpdateVpcepConnection(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.8.5 Modifying the VPCEP Service Whitelist of a Cluster

Function

This API is used to modify the endpoint service whitelist.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/vpcepservice/permissions

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Table 5-257 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster to be modified For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-258 Request body parameters

Parameter	Mandatory	Type	Description
vpc_permissions	Yes	Array of strings	Whitelist (user account ID).

Response Parameters

Status code: 200

Request succeeded.

None

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Example Requests

Modify the endpoint service whitelist.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/vpcepservice/permissions

{
  "vpc_permissions" : [ "dffef70c1db243cbb373e45791165281" ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Modify the endpoint service whitelist.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;

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

public class UpdateVpcepWhitelistSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateVpcepWhitelistRequest request = new UpdateVpcepWhitelistRequest();
        request.withClusterId("{cluster_id}");
        UpdateVpcepWhitelistReq body = new UpdateVpcepWhitelistReq();
        List<String> listbodyVpcPermissions = new ArrayList<>();
        listbodyVpcPermissions.add("dffef70c1db243cbb373e45791165281");
        body.withVpcPermissions(listbodyVpcPermissions);
        request.withBody(body);
        try {
```

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

Python

Modify the endpoint service whitelist.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateVpcepWhitelistRequest()
        request.cluster_id = "{cluster_id}"
        listVpcPermissionsbody = [
            "dffef70c1db243cbb373e45791165281"
        ]
        request.body = UpdateVpcepWhitelistReq(
            vpc_permissions=listVpcPermissionsbody
        )
        response = client.update_vpcep_whitelist(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Modify the endpoint service whitelist.

```
package main
```

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```
import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateVpcepWhitelistRequest{}
    request.ClusterId = "{cluster_id}"
    var listVpcPermissionsbody = []string{
        "dffef70c1db243cbb373e45791165281",
    }
    request.Body = &model.UpdateVpcepWhitelistReq{
        VpcPermissions: listVpcPermissionsbody,
    }
    response, err := client.UpdateVpcepWhitelist(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

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

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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**.

5.9 Parameter Configuration

5.9.1 Modifying Cluster Parameters

Function

This API is used to modify the parameter settings of a cluster. Before calling this API, obtain the parameter configuration list, check the parameter settings, and modify them as required.

NOTE

Set the values of any custom parameters to those that are supported by Elasticsearch. Otherwise, the cluster will fail to be restarted. Exercise caution when performing this operation.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-259 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster whose parameter settings you want to be modify. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-260 Request body parameters

Parameter	Mandatory	Type	Description
edit	Yes	**UpdateYmlsReqEdit** object	**Definition**: Configuration file information. **Constraints**: N/A

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Table 5-261 UpdateYmlsReqEdit

Parameter	Mandatory	Type	Description
modify	No	**UpdateYmlsReqEditModify** object	**Definition**: Modify parameter settings. **Constraints**: • modify, delete, and reset: at least one of them will take effect, and each operation can be used only once. • Cannot perform multiple operations on the same parameter at the same time.
delete	No	**UpdateYmlsReqEditModify** object	**Definition**: Delete custom parameter settings. **Constraints**: • Irrelevant to the input parameter value. • modify, delete, and reset: at least one of them will take effect, and each operation can be used only once. • Cannot perform multiple operations on the same parameter at the same time.
reset	No	**UpdateYmlsReqEditModify** object	**Definition**: Reset parameter settings. **Constraints**: • Irrelevant to the input parameter value. • Custom parameters cannot be reset. • modify, delete, and reset: at least one of them will take effect, and each operation can be used only once. • Cannot perform multiple operations on the same parameter at the same time.

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Table 5-262 UpdateYmlsReqEditModify

Parameter	Mandatory	Type	Description
elasticsearch.yml	Yes	Object	**Definition**: Parameter configuration list. The value is the JSON data to be modified. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

Table 5-263 Response body parameters

Parameter	Type	Description
acknowledged	Boolean	**Definition**: Parameter settings modified successfully or not. **Value range**: • **true**: The modification is successful. • **false**: The modification fails.
externalMessage	String	**Definition**: Error description. **Value range**: If **acknowledged** was set to **true**, **null** is returned for this field.
httpErrorResponse	String	**Definition**: HTTP error information. The default value is null. **Value range**: N/A

Example Requests

Modify parameter settings.

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```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/ymls/update

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

Example Responses

Status code: 200

Request succeeded.

```
{
  "acknowledged" : true
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Modify parameter settings.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateYmlsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateYmlsRequest request = new UpdateYmlsRequest();
        request.withClusterId("{cluster_id}");
        UpdateYmlsReq body = new UpdateYmlsReq();
```

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```
        UpdateYmlsReqEditModify modifyEdit = new UpdateYmlsReqEditModify();
        modifyEdit.withElasticsearchYml("{\"thread_pool.force_merge.size\":1}");
        UpdateYmlsReqEdit editbody = new UpdateYmlsReqEdit();
        editbody.withModify(modifyEdit);
        body.withEdit(editbody);
        request.withBody(body);
        try {
            UpdateYmlsResponse response = client.updateYmls(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Modify parameter settings.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateYmlsRequest()
        request.cluster_id = "{cluster_id}"
        modifyEdit = UpdateYmlsReqEditModify(
            elasticsearch_yml="{\"thread_pool.force_merge.size\":1}"
        )
        editbody = UpdateYmlsReqEdit(
            modify=modifyEdit
        )
        request.body = UpdateYmlsReq(
            edit=editbody
        )
        response = client.update_ymls(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

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

Go

Modify parameter settings.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateYmlsRequest{}
    request.ClusterId = "{cluster_id}"
    var elasticsearchYmlModify interface{} = "{\"thread_pool.force_merge.size\":1}"
    modifyEdit := &model.UpdateYmlsReqEditModify{
        ElasticsearchYml: &elasticsearchYmlModify,
    }
    editbody := &model.UpdateYmlsReqEdit{
        Modify: modifyEdit,
    }
    request.Body = &model.UpdateYmlsReq{
        Edit: editbody,
    }
    response, err := client.UpdateYmls(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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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**.

5.9.2 Obtaining the Task List of Parameter Configurations

Function

This API is used to obtain the parameter configuration task list of a cluster. It can obtain the parameter configuration list ID, cluster ID, and parameter modification records. After a cluster is created, you can call this API to check the cluster parameter settings.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1.0/{project_id}/clusters/{cluster_id}/yml s/joblists

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Table 5-264 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Table 5-265 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	**Definition**: The start value of the query. The default value is 1, indicating that the query starts from the first task. **Constraints**: N/A **Value range**: 1-1000 **Default value**: 1

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Parameter	Mandatory	Type	Description
limit	No	Integer	**Parameter description**: Number of tasks to be queried. The default value is **10**, indicating that 10 tasks are queried at a time. **Constraints**: N/A **Options**: 1-1000 **Default value**: 10

Request Parameters

None

Response Parameters

Status code: 200

Table 5-266 Response body parameters

Parameter	Type	Description
configList	Array of **configListRsp** objects	**Definition**: List of historical configuration changes. **Value range**: N/A

Table 5-267 configListRsp

Parameter	Type	Description
id	String	**Definition**: Configuration list ID. **Value range**: N/A
clusterId	String	**Definition**: Cluster ID. **Value range**: N/A

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Parameter	Type	Description
createAt	String	**Definition**: Configuration list creation time **Value range**: Format: Unix timestamp.
status	String	**Definition**: Cluster task execution status. **Value range**: • **success**: The task is successful. • **failed**: The task failed. • **running**: The task is being executed.
finishedAt	String	**Definition**: End time. If the creation has not been completed, the end time is null. **Value range**: Format: Unix timestamp.
modifyDeleteReset	String	**Definition**: History of parameter setting modifications. **Value range**: N/A
failedMsg	String	**Definition**: Returned error message. If the status is success, the value of this parameter is null. **Value range**: N/A

Example Requests

Obtaining the Parameter Configuration Task List of a Cluster

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/ymls/joblists
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "configList" : [ {
    "id" : "7ed7258a-60a8-46fe-8814-52819d491b80",
```

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```
  "clusterId" : "4213d908-f5dc-4633-8401-cfd7175fca0c",
  "createAt" : "1755745344000,",
  "status" : "success",
  "finishedAt" : "1755745355000,",
  "modifyDeleteReset" : "{\"modify\":{\"elasticsearch.yml\":{\"thread_pool.force_merge.size\":\"1\"}}}",
  "failedMsg" : ""
 } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListYmlsJobSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListYmlsJobRequest request = new ListYmlsJobRequest();
        request.withClusterId("{cluster_id}");
        try {
            ListYmlsJobResponse response = client.listYmlsJob(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListYmlsJobRequest()
        request.cluster_id = "{cluster_id}"
        response = client.list_ymls_job(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
```

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```
        WithCredential(auth).
        Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.9.3 Obtaining the Parameter Configuration List

Function

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

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-268 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

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Table 5-269 Response body parameters

Parameter	Type	Description
configurations	Object	**Definition**: Cluster parameter configuration list. **Value range**: 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 in Chinese. • **type**: parameter type description. • **moduleDesc**: parameter function description in Chinese. • **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 in English. • **moduleDescENG**: parameter function description in English.

Example Requests

Obtain the YAML parameter configuration list of the current cluster.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/5c77b71c-5b35-4f50-8984-76387e42451a/ymls/template
```

Example Responses

Status code: 200

Request succeeded.

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```
{
  "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",
      "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"
    }
  }
}
```


SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListYmlsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListYmlsRequest request = new ListYmlsRequest();
        request.withClusterId("{cluster_id}");
        try {
            ListYmlsResponse response = client.listYmls(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListYmlsRequest()
        request.cluster_id = "{cluster_id}"
        response = client.list_ymls(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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```
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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**.

5.10 Intelligent O&M

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5.10.1 Obtaining the Intelligent O&M Task List and Details

Function

CSS provides intelligent O&M to check potential risks in clusters. After a scan task is completed, check the risks identified by the task, confirm and handle these risks in a timely manner based on risk handling suggestions. This API is used to obtain the intelligent O&M task list and details.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1.0/{project_id}/clusters/{cluster_id}/ai-ops

Table 5-270 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Table 5-271 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	**Definition**: Pagination parameter, indicating the maximum number of records on a page. The default value is 10, indicating that 10 tasks are queried at a time. **Constraints**: N/A **Value range**: 1-1000 **Default value**: 10
offset	No	Integer	**Definition**: Offset. All VPC endpoint services after this offset will be queried. The offset must be an integer greater than 0 but less than the number of VPC endpoint services. **Constraints**: N/A **Value range**: 0-1000 **Default value**: 0

Request Parameters

None

Response Parameters

Status code: 200

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Table 5-272 Response body parameters

Parameter	Type	Description
total_size	Integer	**Definition**: Number of cluster risk detection tasks. **Value range**: 1-1000
aiops_list	Array of **aiops_list** objects	**Definition**: Cluster risk detection task details. **Value range**: N/A

Table 5-273 aiops_list

Parameter	Type	Description
id	String	**Definition**: ID of a cluster risk detection task. **Value range**: N/A
name	String	**Definition**: Name of a cluster risk detection task. **Value range**: N/A
desc	String	**Definition**: Description of a cluster risk detection task. **Value range**: N/A
status	Integer	**Definition**: Task execution status. **Value range**: • **150**: The function is disabled. • **200**: The function is enabled. • **300**: A message has been sent.
summary	**summary** object	**Definition**: Cluster risk overview. **Value range**: N/A

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Parameter	Type	Description
create_time	String	**Definition**: Time when a cluster risk detection task was created. **Value range**: Format: Unix timestamp.
smn_status	String	**Definition**: Status of the task that sends cluster risk information via SMN. **Value range**: • **not_open** • **not_trigger** • **sent** • **send_fail**
smn_fail_reason	String	**Definition**: Reason why cluster risk information failed to be sent via SMN. **Value range**: N/A
task_risks	Array of **AIOpsRiskInfo** objects	**Definition**: Cluster risk details. **Value range**: N/A

Table 5-274 summary

Parameter	Type	Description
high	Integer	**Definition**: Number of high-risk items. **Value range**: 0-100
medium	Integer	**Definition**: Number of medium-risk items. **Value range**: 0-100

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Parameter	Type	Description
suggestion	Integer	**Definition**: Number of items that are just informational. **Value range**: 0-100

Table 5-275 AIOpsRiskInfo

Parameter	Type	Description
riskType	String	**Definition**: Cluster risk detection items. **Value range**: N/A
level	String	**Definition**: Cluster risk level. **Value range**: • high: high risk for the cluster. • medium: medium risk for the cluster. • suggestion: suggestion.
desc	String	**Definition**: Cluster risk description. **Value range**: N/A
suggestion	String	**Definition**: Cluster risk handling suggestions. **Value range**: N/A

Example Requests

This API is used to obtain the intelligent O&M task list and details.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/ai-ops
```

Example Responses

Status code: 200

Request succeeded.

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```
{
  "aiops_list" : [ {
    "id" : "7381a80b-68cb-4b9e-8226-37d686b18b1d",
    "name" : "aiops-test",
    "desc" : "",
    "status" : 200,
    "summary" : {
      "high" : 1,
      "medium" : 0,
      "suggestion" : 1
    },
    "create_time" : 1687944156750,
    "smn_status" : "not_open",
    "task_risks" : [ {
      "riskType" : "Check for snapshot creation failures and snapshot records in the cluster in the last seven days.",
      "level" : "suggestion",
      "desc" : "There are no snapshot records in the cluster in the last seven days.",
      "suggestion" : "You are advised to enable cluster snapshot and ensure that snapshots are successfully created within seven days. If snapshot creation fails, click the cluster name, and check the failure details on the Cluster Snapshots and Logs pages."
    }, {
      "riskType" : "Check the number of nodes in a cluster and the number of AZs to evaluate the high availability status of a distributed Elasticsearch cluster.",
      "level" : "high",
      "desc" : "The current cluster has one or two nodes. If a node is faulty, the entire cluster may become unavailable. The service availability risk is high.",
      "suggestion" : "You are advised to change the cluster to a multi-AZ cluster. Procedure: On the CSS cluster console, choose Clusters > Elasticsearch. In the Operation column of a cluster, choose More > Modify Configuration. Click the Change AZ tab and add AZs. Click the Scale Cluster tab and change the number of nodes."
    } ]
  } ],
  "total_size" : 1
}
```


SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListAiOpsSolution {

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

        ICredential auth = new BasicCredentials()
                .withProjectId(projectId)
```

```
            .withAk(ak)
            .withSk(sk);

        CssClient client = CssClient.newBuilder()
            .withCredential(auth)
            .withRegion(CssRegion.valueOf("<YOUR REGION>"))
            .build();
        ListAiOpsRequest request = new ListAiOpsRequest();
        request.withClusterId("{cluster_id}");
        try {
            ListAiOpsResponse response = client.listAiOps(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListAiOpsRequest()
        request.cluster_id = "{cluster_id}"
        response = client.list_ai_ops(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
```

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```
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

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Error Codes

See **Error Codes**.

5.10.2 Creating a Cluster Detection Task

Function

This API is used to create a cluster detection task. A maximum of 30 detection tasks can be created for a single cluster.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/ai-ops

Table 5-276 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the target cluster. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-277 Request header parameters

Parameter	Mandatory	Type	Description
X-Language	No	String	Language

Table 5-278 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Detection task name
description	No	String	Detection task description
alarm	No	**alarm** object	After the detection task is complete, an SMN alarm message is sent.

Table 5-279 alarm

Parameter	Mandatory	Type	Description
level	Yes	String	Sensitivity of an SMN alarm message. • **high** • **medium** • **suggestion** • **norisk**
smn_topic	Yes	String	SMN topic name

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Create a cluster detection task.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/ai-ops

{
    "name": " aiops-test ",
"description": "Create a cluster detection task.
```

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```
",
   "alarm":{
      "level":"high",
      "smn_topic":"aiops-test"
   }
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Create a cluster detection task.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class CreateAiOpsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateAiOpsRequest request = new CreateAiOpsRequest();
        request.withClusterId("{cluster_id}");
        CreateAiOpsRequestBody body = new CreateAiOpsRequestBody();
        CreateAiOpsRequestBodyAlarm alarmbody = new CreateAiOpsRequestBodyAlarm();
        alarmbody.withLevel("high")
            .withSmnTopic("aiops-test");
        body.withAlarm(alarmbody);
        body.withDescription("Create a cluster detection task.
");
        body.withName(" aiops-test ");
        request.withBody(body);
        try {
            CreateAiOpsResponse response = client.createAiOps(request);
            System.out.println(response.toString());
```

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

Python

Create a cluster detection task.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateAiOpsRequest()
        request.cluster_id = "{cluster_id}"
        alarmbody = CreateAiOpsRequestBodyAlarm(
            level="high",
            smn_topic="aiops-test"
        )
        request.body = CreateAiOpsRequestBody(
            alarm=alarmbody,
            description="Create a cluster detection task.
",
            name=" aiops-test "
        )
        response = client.create_ai_ops(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Create a cluster detection task.

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```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateAiOpsRequest{}
    request.ClusterId = "{cluster_id}"
    alarmbody := &model.CreateAiOpsRequestBodyAlarm{
        Level: "high",
        SmnTopic: "aiops-test",
    }
    descriptionCreateAiOpsRequestBody:= "Create a cluster detection task.
"
    request.Body = &model.CreateAiOpsRequestBody{
        Alarm: alarmbody,
        Description: &descriptionCreateAiOpsRequestBody,
        Name: " aiops-test ",
    }
    response, err := client.CreateAiOps(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.

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Status Code	Description
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.10.3 Deleting a Detection Task

Function

This API is used to delete a detection task.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1.0/{project_id}/clusters/{cluster_id}/ai-ops/{aiops_id}

Table 5-280 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster to be deleted. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
aiops_id	Yes	String	ID of a detection task

Request Parameters

None

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Delete a detection task.

```
DELETE https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/ai-ops/e19c9298-465e-42ad-a0ae-b6b552222925
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
```

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```
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class DeleteAiOpsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteAiOpsRequest request = new DeleteAiOpsRequest();
        request.withClusterId("{cluster_id}");
        request.withAiopsId("{aiops_id}");
        try {
            DeleteAiOpsResponse response = client.deleteAiOps(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
```

```
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteAiOpsRequest()
        request.cluster_id = "{cluster_id}"
        request.aiops_id = "{aiops_id}"
        response = client.delete_ai_ops(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteAiOpsRequest{}
    request.ClusterId = "{cluster_id}"
    request.AiopsId = "{aiops_id}"
    response, err := client.DeleteAiOps(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.10.4 Obtaining SMN Topics Available for Intelligent O&M Alarms

Function

This API is used to obtain SMN topics available for intelligent O&M alarms.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1.0/{project_id}/domains/{domain_id}/ai-ops/smn-topics

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Table 5-281 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
domain_id	Yes	String	Domain account ID

Request Parameters

None

Response Parameters

Status code: 200

Table 5-282 Response body parameters

Parameter	Type	Description
topicsName	Array of strings	Subject name

Example Requests

Obtain the intelligent O&M task list and details.

```
GET /v1.0/6204a5bd270343b5885144cf9c8c158d/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/ai-ops
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "topicsName" : [ "aiops-test" ]
}
```

SDK Sample Code

The SDK sample code is as follows.

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Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListSmnTopicsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListSmnTopicsRequest request = new ListSmnTopicsRequest();
        request.withDomainId("{domain_id}");
        try {
            ListSmnTopicsResponse response = client.listSmnTopics(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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```
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListSmnTopicsRequest()
        request.domain_id = "{domain_id}"
        response = client.list_smn_topics(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.11 Cluster management

5.11.1 Updating Cluster Routes

Function

This interface is used to update a cluster route.

NOTE

Modifying the cluster route may cause service network exceptions and affect the network connection between the client and the cluster. Exercise caution when performing this operation.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-283 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the target cluster For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-284 Request body parameters

Parameter	Mandatory	Type	Description
configtype	Yes	String	**Definition**: Operation type. **Constraints**: N/A **Value range**: • add_ip: Add a cluster route. • del_ip: Delete a cluster route. **Default value**: N/A

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Parameter	Mandatory	Type	Description
configkey	Yes	String	**Definition**: Route IP address, that is, the IP address of the server where the public network data source is located. **Constraints**: The value of this parameter cannot start with **0**. **Value range**: N/A **Default value**: N/A
configvalue	Yes	String	**Definition**: Subnet mask of a route. If the IP address contains 16 bits, set the subnet mask to **255.255.0.0**. If the IP address contains 24 bits, set the subnet mask to **255.255.255.0**. **Constraints**: The value of this parameter cannot start with **0**. **Value range**: N/A **Default value**: N/A

Response Parameters

Status code: 200

Request succeeded.

None

Example Requests

Update cluster routes.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/route

{
  "configtype" : "add_ip",
  "configkey" : "10.5.2.1",
  "configvalue" : "255.255.255.255"
}
```

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Example Responses

None

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.11.2 Obtaining a Cluster Route

Function

By default, a CSS Elasticsearch cluster cannot access a target service—such as a client program or a Lightweight Directory Access Protocol (LDAP) service—that is located in a different VPC. To enable this access, you need to configure cluster routes. This API is used to obtain cluster route information, including the route IP address and the total number of routes.

Calling Method

For details, see **Calling APIs**.

URI

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

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Table 5-285 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the target cluster. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Table 5-286 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	**Definition**: The start value of the query. The default value is 1, indicating that the query starts from the first route. **Constraints**: N/A **Value range**: 1-1000 **Default value**: 1

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Parameter	Mandatory	Type	Description
limit	No	Integer	**Parameter description**: Number of routes to be queried. The default value is **10**, indicating that 10 routes are queried at a time. **Constraints**: N/A **Options**: 1-1000 **Default value**: 10

Request Parameters

None

Response Parameters

Status code: 200

Table 5-287 Response body parameters

Parameter	Type	Description
routeResps	Array of **RouteRespsResource** objects	**Definition**: Route IP address. **Value range**: N/A
totalSize	Integer	**Definition**: Total number of routes. **Value range**: N/A

Table 5-288 RouteRespsResource

Parameter	Type	Description
ipAddress	String	**Definition**: IP address. **Value range**: N/A

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Parameter	Type	Description
ipNetMask	String	**Definition**: Subnet mask. **Value range**: N/A
updateAt	String	**Definition**: Route IP address update time. **Value range**: N/A

Example Requests

Obtain cluster routes.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/route
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "routeResps" : [ {
    "ipAddress" : "1.2.3.65",
    "ipNetMask" : "255.255.255.255",
    "updateAt" : "2023-07-17T08:09:20"
  }, {
    "ipAddress" : "1.1.1.1",
    "ipNetMask" : "255.255.255.255",
    "updateAt" : "2023-07-17T08:08:50"
  } ],
  "totalSize" : 2
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.

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Status Code	Description
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.12 Load Balancing

5.12.1 Querying ELB V3 Load Balancers Supported by a Cluster

Function

Query the ELB V3 load balancers supported by a cluster.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-289 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 5-290 Response body parameters

Parameter	Type	Description
loadbalancers	Array of **LoadbalancersResource** objects	**Definition**: Load balancer list. **Value range**: N/A

Table 5-291 LoadbalancersResource

Parameter	Type	Description
id	String	**Definition**: Load balancer ID. **Value range**: N/A
name	String	**Definition**: Load balancer name. **Value range**: N/A

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Parameter	Type	Description
l7_flavor_id	String	**Definition**: Layer-7 protocol ID. **Value range**: N/A
ip_target_enable	Boolean	**Definition**: Whether to enable the cross-VPC backend. **Value range**: N/A

Example Requests

Query ELB V3 load balancers supported by a cluster.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/loadbalancers
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "loadbalancers" : [ {
    "id" : "5d45faad-6cb3-479b-96b8-3e2de0cc6268",
    "name" : "elb-css",
    "l7_flavor_id" : "9c8c2425-e061-4bf8-ac65-cd1db92b18e1",
    "ip_target_enable" : true
  }, {
    "id" : "5d45faad-6cb3-479b-96b8-3e2de0cc6269",
    "name" : "elb-b832",
    "l7_flavor_id" : "9c8c2425-e061-4bf8-ac65-cd1db92b18e1",
    "ip_target_enable" : true
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;
```

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```
public class ListElbsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListElbsRequest request = new ListElbsRequest();
        request.withClusterId("{cluster_id}");
        try {
            ListElbsResponse response = client.listElbs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListElbsRequest()
```

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```
        request.cluster_id = "{cluster_id}"
        response = client.list_elbs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.

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Status Code	Description
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.12.2 Enabling or Disabling Load Balancers for a Cluster

Function

This API is used to enable or disable load balancers for a cluster.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/loadbalancers/es-switch

Table 5-292 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the cluster to be modified. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

Table 5-293 Request body parameters

Parameter	Mandatory	Type	Description
enable	Yes	Boolean	**Definition**: Enable or disable the ES load balancer. **Constraints**: N/A **Value range**: • **true**: Yes • **false**: This option will be disabled. **Default value**: N/A
agency	No	String	**Definition**: Name of the agency used to configure load balancing. This parameter is mandatory when **enable** is set to **true**. **Constraints**: N/A **Value range**: N/A **Default value**: N/A

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Parameter	Mandatory	Type	Description
elb_id	No	String	**Definition**: Load balancer ID. This parameter is mandatory when **enable** is set to **true**. **Constraints**: N/A **Value range**: N/A **Default value**: N/A
type	No	String	**Definition**: Load balancer type. This parameter is not required for an observability cluster. **Constraints**: N/A **Value range**: • searchTool: Enable or disable an Elasticsearch/ OpenSearch load balancer. • viewTool: Enable or disable the Kibana/OpenSearch Dashboards load balancer. **Default value**: searchTool

Response Parameters

Status code: 200

Table 5-294 Response body parameters

Parameter	Type	Description
elb_id	String	Load balancer ID.

Example Requests

Enable the load balancer.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/58ee0f27-70b3-47e0-ac72-9e3df6cd15cd/
loadbalancers/es-switch
```

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```
{
  "enable" : true,
  "elb_id" : "5d45faad-6cb3-479b-96b8-3e2de0cc6268",
  "agency" : "css_elb_agency"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "elb_id" : "5d45faad-6cb3-479b-96b8-3e2de0cc6268"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Enable the load balancer.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class EnableOrDisableElbSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        EnableOrDisableElbRequest request = new EnableOrDisableElbRequest();
        request.withClusterId("{cluster_id}");
        UpdateEsElbRequestBody body = new UpdateEsElbRequestBody();
        body.withElbId("5d45faad-6cb3-479b-96b8-3e2de0cc6268");
        body.withAgency("css_elb_agency");
        body.withEnable(true);
        request.withBody(body);
        try {
            EnableOrDisableElbResponse response = client.enableOrDisableElb(request);
```

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

Python

Enable the load balancer.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = EnableOrDisableElbRequest()
        request.cluster_id = "{cluster_id}"
        request.body = UpdateEsElbRequestBody(
            elb_id="5d45faad-6cb3-479b-96b8-3e2de0cc6268",
            agency="css_elb_agency",
            enable=True
        )
        response = client.enable_or_disable_elb(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Enable the load balancer.

```
package main

import (
    "fmt"
```

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```
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.EnableOrDisableElbRequest{}
    request.ClusterId = "{cluster_id}"
    elbIdUpdateEsElbRequestBody:= "5d45faad-6cb3-479b-96b8-3e2de0cc6268"
    agencyUpdateEsElbRequestBody:= "css_elb_agency"
    request.Body = &model.UpdateEsElbRequestBody{
        ElbId: &elbIdUpdateEsElbRequestBody,
        Agency: &agencyUpdateEsElbRequestBody,
        Enable: true,
    }
    response, err := client.EnableOrDisableElb(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.

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Status Code	Description
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.12.3 Obtain information about the load balancers of a cluster.

Function

CSS integrates shared load balancers and allows you to bind public network access and enable the VPC Endpoint service. Dedicated load balancers provide more functions and higher performance than shared load balancers.

This API is used to obtain the ELB load balancer information of a cluster, including the server certificate name, server certificate ID, ELB switch information, load balancers, listeners, and health check results.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1.0/{project_id}/clusters/{cluster_id}/es-listeners

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Table 5-295 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Table 5-296 Query Parameters

Parameter	Mandatory	Type	Description
type	No	String	**Definition**: Search type. **Constraints**: N/A **Value range**: • searchTool: Query details about the load balancers of an Elasticsearch/ OpenSearch cluster. [- viewTool: Query details about the load balancers of Kibana/OpenSearch Dashboards.] (tag:white) **Default value**: searchTool

Request Parameters

None

Response Parameters

Status code: 200

Table 5-297 Response body parameters

Parameter	Type	Description
serverCertName	String	**Definition**: Server certificate name. **Value range**: N/A
serverCertId	String	**Definition**: Server certificate ID. **Value range**: N/A
cacertName	String	**Definition**: The name of the CA certificate. **Value range**: N/A

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Parameter	Type	Description
cacertId	String	**Definition**: ID of the CA certificate. **Value range**: N/A
elb_enable	Boolean	**Definition**: Whether ELB is enabled. **Value range**: • true: ELB is enabled. • false: ELB is disabled.
authentication_type	String	**Definition**: Authentication mode. **Value range**: • single: one-way authentication. • double: two-way authentication.
loadBalancer	**LoadBalancer** object	**Definition**: Load balancer information. **Value range**: N/A
listener	**Elbv3Listener** object	**Definition**: Listener object information. **Value range**: N/A
healthmonitors	Array of **Member** objects	**Definition**: Health check result set. **Value range**: N/A

Table 5-298 LoadBalancer

Parameter	Type	Description
id	String	**Definition**: Load balancer ID. **Value range**: N/A

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Parameter	Type	Description
name	String	**Definition**: Load balancer name. **Value range**: N/A
guaranteed	String	**Definition**: Whether a dedicated load balancer is used. **Value range**: • **false**: The load balancer is a shared load balancer. • **true**: The load balancer is a dedicated load balancer.
billing_info	String	**Definition**: Specifies the resource billing information. **Value range**: • If the value is left blank, the resource is billed on a pay-per-use basis. • If the value is specified, the yearly/monthly billing mode is used.
description	String	**Definition**: Description. **Value range**: N/A
vpc_id	String	**Definition**: ID of the VPC to which the ELB instance belongs. **Value range**: N/A
provisioning_status	String	**Definition**: Provisioning status of the load balancer **Value range**: • **ACTIVE**: in use • **PENDING_DELETE**: deleting

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Parameter	Type	Description
listeners	Array of **IdListWrapper** objects	**Definition**: Associated listener list. **Value range**: N/A
vip_address	String	**Definition**: IPv4 virtual IP address bound to the load balancer. **Value range**: N/A
vip_port_id	String	**Definition**: Port ID bound to the private IPv4 IP address of the load balancer. **Value range**: N/A
ipv6_vip_address	String	**Definition**: IPv6 address of the load balancer. **Value range**: N/A
publicips	Array of **PublicIpInfo** objects	**Definition**: The EIP bound to the load balancer **Value range**: N/A

Table 5-299 IdListWrapper

Parameter	Type	Description
id	String	**Definition**: Listener ID. **Value range**: N/A

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Table 5-300 PublicIpInfo

Parameter	Type	Description
publicip_id	String	**Definition**: EIP configuration ID. **Value range**: N/A
publicip_address	String	**Definition**: Specifies the EIP. **Value range**: N/A
ip_version	Integer	**Definition**: IP address version. **Value range**: • **4**: IPv4. • **6**: IPv6.

Table 5-301 Elbv3Listener

Parameter	Type	Description
id	String	**Definition**: Listener ID. **Value range**: N/A
name	String	**Definition**: Listener name. **Value range**: N/A
protocol	String	**Definition**: Protocol used by the listener. **Value range**: N/A
protocol_port	Integer	**Definition**: Port used by the listener. **Value range**: N/A

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Parameter	Type	Description
ipgroup	ListenerIpGroup object	**Definition**: ipgroup information in the listener object. **Value range**: N/A

Table 5-302 ListenerIpGroup

Parameter	Type	Description
ipgroup_id	String	**Definition**: ID of the access control group associated with the listener. This parameter is mandatory during creation and is optional during update. **Value range**: N/A
enable_ipgroup	Boolean	**Definition**: Status of an access control group. **Value range**: • True: Access control is enabled. • False: Access control is disabled.

Table 5-303 Member

Parameter	Type	Description
name	String	**Definition**: Specifies the backend server name. **Value range**: N/A
address	String	**Definition**: Specifies the IP address bound to the backend server. **Value range**: N/A

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Parameter	Type	Description
protocol_port	Integer	**Definition**: Specifies the port used by the backend server. **Value range**: N/A
operating_status	String	**Definition**: Specifies the operating status of the backend server. **Value range**: • ONLINE: The backend server is running normally. • NO_MONITOR: No health check is configured for the backend server group to which the backend server belongs. • OFFLINE: The cloud server used as the backend server is stopped or does not exist.
instance_id	String	**Definition**: ID of the instance used as the backend server. **Value range**: An empty value indicates that the instance associated with the member is not a real device.

Example Requests

Obtain information about the load balancers of a cluster.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/es-listeners
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "loadBalancer" : {
    "id" : "5d45faad-6cb3-479b-96b8-3e2de0cc6268",
    "name" : "elb-css",
    "guaranteed" : "true",
    "description" : "",
    "listeners" : [ {
      "id" : "011d14fa-908b-4cd9-b0d6-0768ddc6cb71"
    }, {
      "id" : "04b86029-c281-4490-a3bd-5ea1266658ba"
```

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```
  } ],
  "publicips" : [ {
    "publicip_id" : "f678e23c-96a5-49e8-8ea2-bd8b47d41e78",
    "publicip_address" : "100.1.1.1",
    "ip_version" : 4
  } ],
  "vpc_id" : "4f3deec3-efa8-4598-bf91-560aad1377a3",
  "provisioning_status" : "ACTIVE",
  "vip_address" : "10.0.0.1",
  "ipv6_vip_address" : "2409:27ff:2003:3e:1fd::f3"
 },
 "listener" : {
  "id" : "41ff041d-c7b9-4142-9167-fa93d54f97da",
  "name" : "css-searchServer",
  "protocol" : "HTTPS",
  "protocol_port" : 9265
 },
 "healthmonitors" : [ {
  "instance_id" : "bac86342-2222-43e6-817f-57f040a174a6",
  "name" : "",
  "address" : "10.0.0.87",
  "protocol_port" : 9200,
  "operating_status" : "ONLINE"
 }, {
  "instance_id" : "d935b82c-f94b-4ae0-9997-ddc90885d8c6",
  "name" : "",
  "address" : "10.0.0.61",
  "protocol_port" : 9200,
  "operating_status" : "ONLINE"
 } ],
 "serverCertName" : "server1",
 "serverCertId" : "82375af01c0d40f6a44c15962c570625",
 "elb_enable" : true,
 "authentication_type" : "single"
}
```


SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ShowElbDetailSolution {

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

        ICredential auth = new BasicCredentials()
                .withProjectId(projectId)
```

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```
            .withAk(ak)
            .withSk(sk);

    CssClient client = CssClient.newBuilder()
            .withCredential(auth)
            .withRegion(CssRegion.valueOf("<YOUR REGION>"))
            .build();
    ShowElbDetailRequest request = new ShowElbDetailRequest();
    request.withClusterId("{cluster_id}");
    try {
        ShowElbDetailResponse response = client.showElbDetail(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
  }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowElbDetailRequest()
        request.cluster_id = "{cluster_id}"
        response = client.show_elb_detail(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
```

```
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

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Error Codes

See **Error Codes**.

5.12.4 Configuring Load Balancing Listeners for a Cluster

Function

This API is used to configure load balancing listeners for a cluster.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1.0/{project_id}/clusters/{cluster_id}/es-listeners

Table 5-304 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster that you want to rename. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

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Request Parameters

Table 5-305 Request body parameters

Parameter	Mandatory	Type	Description
protocol	Yes	String	Protocol type. **HTTP** and **HTTPS** are supported.
protocol_port	Yes	Integer	Port
server_cert_id	No	String	Server certificate ID. This parameter is mandatory when protocol is set to **HTTPS**.
ca_cert_id	No	String	ID of the CA certificate. This parameter is mandatory when protocol is set to **HTTPS** and bidirectional authentication is used.
type	No	String	Type: **searchTool** indicates that the listener is configured for Elasticsearch/OpenSearch. **viewTool** indicates that the listener is configured for Kibana/OpenSearch Dashboards. The default value is **searchTool**.

Response Parameters

Status code: 200

Table 5-306 Response body parameters

Parameter	Type	Description
elb_id	String	Load balancer ID.

Example Requests

Configure ELB listeners for a cluster.

```
POST https://{Endpoint}/v1.0/{project_id}/clusters/4f3deec3-efa8-4598-bf91-560aad1377a3/es-listeners

{
  "protocol" : "HTTPS",
  "protocol_port" : 9200,
  "server_cert_id" : "1b74ae4afad741e6bc9497429d3d0838",
  "ca_cert_id" : "2a7b050f598e4ea8a61cffbe2bdb312f"
}
```

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Example Responses

Status code: 200

Request succeeded.

```
{
  "elb_id" : "56a83547-a55a-407a-8245-7f9b3a0606c0"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Configure ELB listeners for a cluster.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class CreateElbListenerSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateElbListenerRequest request = new CreateElbListenerRequest();
        request.withClusterId("{cluster_id}");
        CreateEsListenerRequestBody body = new CreateEsListenerRequestBody();
        body.withCaCertId("2a7b050f598e4ea8a61cffbe2bdb312f");
        body.withServerCertId("1b74ae4afad741e6bc9497429d3d0838");
        body.withProtocolPort(9200);
        body.withProtocol("HTTPS");
        request.withBody(body);
        try {
            CreateElbListenerResponse response = client.createElbListener(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
```

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

Python

Configure ELB listeners for a cluster.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateElbListenerRequest()
        request.cluster_id = "{cluster_id}"
        request.body = CreateEsListenerRequestBody(
            ca_cert_id="2a7b050f598e4ea8a61cffbe2bdb312f",
            server_cert_id="1b74ae4afad741e6bc9497429d3d0838",
            protocol_port=9200,
            protocol="HTTPS"
        )
        response = client.create_elb_listener(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Configure ELB listeners for a cluster.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)
```

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateElbListenerRequest{}
    request.ClusterId = "{cluster_id}"
    caCertIdCreateEsListenerRequestBody:= "2a7b050f598e4ea8a61cffbe2bdb312f"
    serverCertIdCreateEsListenerRequestBody:= "1b74ae4afad741e6bc9497429d3d0838"
    request.Body = &model.CreateEsListenerRequestBody{
        CaCertId: &caCertIdCreateEsListenerRequestBody,
        ServerCertId: &serverCertIdCreateEsListenerRequestBody,
        ProtocolPort: int32(9200),
        Protocol: "HTTPS",
    }
    response, err := client.CreateElbListener(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.

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Status Code	Description
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.12.5 Updating Load Balancing Listeners for a Cluster

Function

This API is used to update load balancing listeners for a cluster.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1.0/{project_id}/clusters/{cluster_id}/es-listeners/{listener_id}

Table 5-307 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A

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Parameter	Mandatory	Type	Description
cluster_id	Yes	String	**Definition**: ID of the target cluster. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A
listener_id	Yes	String	ID of the target listener.

Request Parameters

Table 5-308 Request body parameters

Parameter	Mandatory	Type	Description
listener	Yes	**EsListenerRequest** object	Listener object
type	No	String	Type: **searchTool** indicates that the load balancer is modified for Elasticsearch/ OpenSearch. **viewTool** indicates that the load balancer is modified for Kibana/OpenSearch Dashboards. The default value is **searchTool**.

Table 5-309 EsListenerRequest

Parameter	Mandatory	Type	Description
default_tls_container_ref	Yes	String	ID of the server certificate used by the listener
client_ca_tls_container_ref	No	String	ID of the CA certificate used by the listener. This parameter is mandatory when bidirectional authentication is to be updated.

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Response Parameters

Status code: 200

Table 5-310 Response body parameters

Parameter	Type	Description
listener	**EsListenerResponse** object	Listener object

Table 5-311 EsListenerResponse

Parameter	Type	Description
protocol	String	Protocol used by the listener
id	String	Listener ID
name	String	Listener name
protocol_port	String	Port used by the listener
ipgroup	**EsIpgroupResource** object	Access control information of the listener object

Table 5-312 EsIpgroupResource

Parameter	Type	Description
ipgroup_id	String	**Definition**: ID of the access control group associated with the listener. **Value range**: N/A
enable_ipgroup	Boolean	**Definition**: Status of an access control group. **Value range**: • true: Enable the access control listener (which can be deleted directly). • false: Disable the access control listener.

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Parameter	Type	Description
type	String	**Definition**: Type of an access control group. **Value range**: • **white**: Configure a whitelist. Only IP addresses on the whitelist can have access. • **black**: Configure a blacklist. IP addresses on the blacklist are blocked access.

Example Requests

Update ELB listeners for a cluster.

```
PUT https://{Endpoint}/v1.0/{project_id}/clusters/58ee0f27-70b3-47e0-ac72-9e3df6cd15cd/es-listeners/4425eb63-78ce-4c63-b60e-492befdac0e7

{
  "listener" : {
    "default_tls_container_ref" : "9c82320a8dd049eba49b28e70a2c0c3e"
  }
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "listener" : {
    "id" : "9c82320a8dd049eba49b28e70a2c0c3e",
    "name" : "name",
    "protocol" : "tcp",
    "protocol_port" : 8080,
    "ipgroup" : {
      "ipgroup_id" : "4f3deec3-efa8-4598-bf91-560aad1377a3",
      "enable_ipgroup" : true,
      "type" : "white"
    }
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Update ELB listeners for a cluster.

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

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

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```
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class UpdateEsListenerSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateEsListenerRequest request = new UpdateEsListenerRequest();
        request.withClusterId("{cluster_id}");
        request.withListenerId("{listener_id}");
        UpdateEsListenerRequestBody body = new UpdateEsListenerRequestBody();
        EsListenerRequest listenerbody = new EsListenerRequest();
        listenerbody.withDefaultTlsContainerRef("9c82320a8dd049eba49b28e70a2c0c3e");
        body.withListener(listenerbody);
        request.withBody(body);
        try {
            UpdateEsListenerResponse response = client.updateEsListener(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Update ELB listeners for a cluster.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

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```
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateEsListenerRequest()
        request.cluster_id = "{cluster_id}"
        request.listener_id = "{listener_id}"
        listenerbody = EsListenerRequest(
            default_tls_container_ref="9c82320a8dd049eba49b28e70a2c0c3e"
        )
        request.body = UpdateEsListenerRequestBody(
            listener=listenerbody
        )
        response = client.update_es_listener(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Update ELB listeners for a cluster.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

```
    request.ClusterId = "{cluster_id}"
    request.ListenerId = "{listener_id}"
    listenerbody := &model.EsListenerRequest{
        DefaultTlsContainerRef: "9c82320a8dd049eba49b28e70a2c0c3e",
    }
    request.Body = &model.UpdateEsListenerRequestBody{
        Listener: listenerbody,
    }
    response, err := client.UpdateEsListener(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

5.12.6 Querying the Certificate List

Function

This API is used to query the certificate list.

Calling Method

For details, see **Calling APIs**.

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URI

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

Table 5-313 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Project ID. For details about how to obtain the project ID and name, see **Obtaining the Project ID and Name**. **Constraints**: N/A **Value range**: Project ID of the account. **Default value**: N/A
cluster_id	Yes	String	**Definition**: ID of the cluster you want to query. For details about how to obtain the cluster ID, see **Obtaining the Cluster ID**. **Constraints**: N/A **Value range**: Cluster ID. **Default value**: N/A

Request Parameters

None

Response Parameters

Status code: 200

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Table 5-314 Response body parameters

Parameter	Type	Description
certificates	Array of **CertificatesResource** objects	**Definition**: Certificate list information. **Value range**: N/A

Table 5-315 CertificatesResource

Parameter	Type	Description
id	String	**Definition**: Certificate ID. **Value range**: N/A
name	String	**Definition**: Certificate name. **Value range**: N/A
type	String	**Definition**: Type of the SL certificate. **Value range**: • **server**: server certificates • **client**: CA certificates

Example Requests

This API is used to query the certificate list.

```
GET https://{Endpoint}/v1.0/{project_id}/clusters/58ee0f27-70b3-47e0-ac72-9e3df6cd15cd/elb/certificates
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "certificates" : [ {
    "id" : "8c415d2e2f4c4fdbbfc9c21c98d7832b",
    "name" : "server1",
    "type" : "server"
  }, {
    "id" : "8c415d2e2f4c4fdbbfc9c21c98d7832b",
    "name" : "ca1",
    "type" : "client"
```

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```
 }, {
   "id" : "8c415d2e2f4c4fdbbfc9c21c98d7832b",
   "name" : "server-css",
   "type" : "server"
 } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.css.v1.region.CssRegion;
import com.huaweicloud.sdk.css.v1.*;
import com.huaweicloud.sdk.css.v1.model.*;


public class ListElbCertsSolution {

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

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

        CssClient client = CssClient.newBuilder()
                .withCredential(auth)
                .withRegion(CssRegion.valueOf("<YOUR REGION>"))
                .build();
        ListElbCertsRequest request = new ListElbCertsRequest();
        request.withClusterId("{cluster_id}");
        try {
            ListElbCertsResponse response = client.listElbCerts(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcss.v1.region.css_region import CssRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcss.v1 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = CssClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CssRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListElbCertsRequest()
        request.cluster_id = "{cluster_id}"
        response = client.list_elb_certs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    css "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/css/v1/region"
)

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

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

    client := css.NewCssClient(
        css.CssClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
```

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```
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request. Modify the request instead of retrying.
409	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the requested update failed due to a conflict.
412	The server does not meet one of the requirements that the requester puts on the request.

Error Codes

See **Error Codes**.

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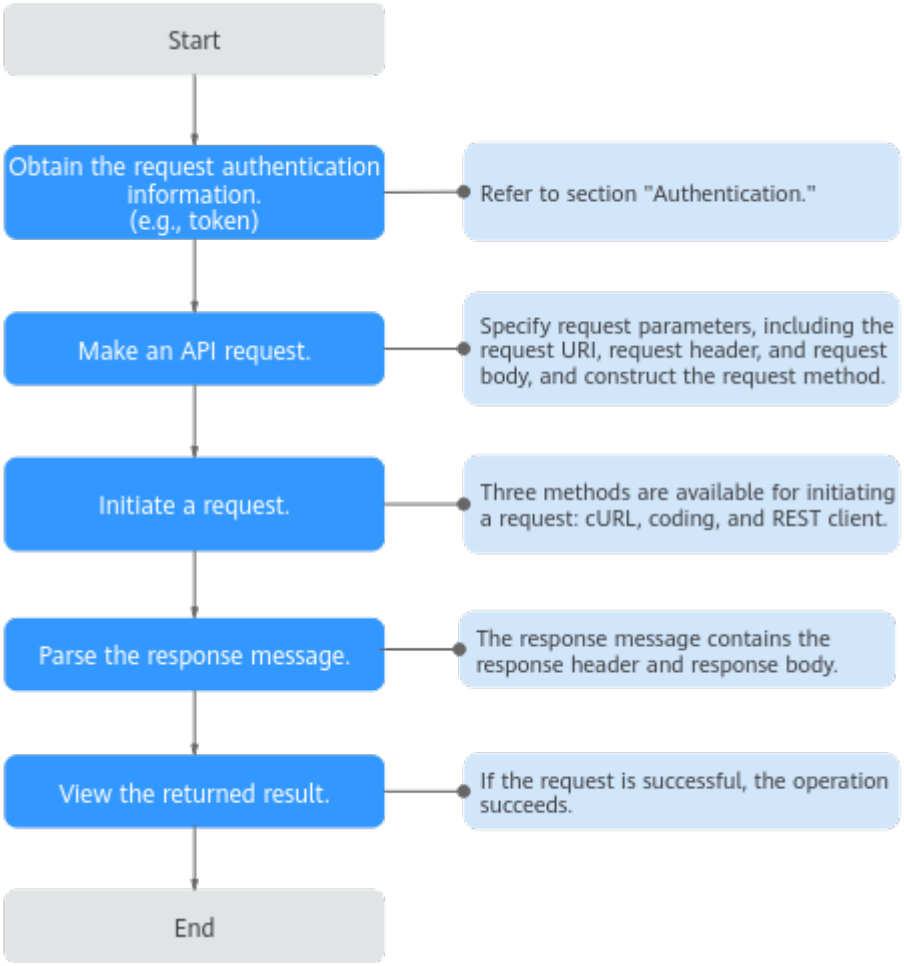
6 Examples

6.1 Creating a Pay-per-Use Elasticsearch Cluster

This section describes how to create a CSS cluster by using APIs. **Figure 6-1** illustrates the API calling process.

Figure 6-1 API calling process



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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**: 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" : {
    "instance" : {
      "flavorRef" : "ess.spec-4u16g",
      "volume" : {
        "volume_type" : "COMMON",
        "size" : 120
      },
      "nics" : {
        "vpcId" : "{VPC ID}",
        "netId" : "{NET ID}",
        "securityGroupId" : "{Security group ID}"
      },
      "availability_zone" : "{AZ CODE}"
    },
    "datastore" : {
      "version" : "{cluster-version}",
      "type" : "elasticsearch"
    },
    "name" : "cluster-name",
    "instanceNum" : 3,
    "backupStrategy" : {
      "period" : "16:00 GMT+08:00",
      "prefix" : "snapshot",
      "keepday" : 7,
      "frequency" : "DAY",
      "bucket" : "css-obs-backup",
      "basePath" : "css_repository/obs-path",
      "agency" : "css_obs_agency"
    },
    "httpsEnable" : true,
    "authorityEnable" : true,
    "adminPwd" : "{password}",
    "enterprise_project_id" : "0",
```

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```
  "tags" : [ {
    "key" : "k1",
    "value" : "v1"
  }, {
    "key" : "k2",
    "value" : "v2"
  } ]
 }
}
```

Check 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 Codes**.

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7 Permissions and Supported Actions

This section describes fine-grained permissions management for your CSS. If your Huawei Cloud 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 each IAM user must be assigned the required permissions before they can start calling APIs. 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.

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- 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. For details about the differences between IAM and enterprise projects, see **Differences Between IAM and Enterprise Management**.

  NOTE

  The check mark (√) indicates that an action takes effect. The cross mark (x) indicates that an action does not take effect.

Table 7-1 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	√	√

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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:enableAtomaticSnapsot	√	√
Modifying basic configurations of a cluster snapshot	POST /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/setting	css:snapshot:setSnapshotContiguration	√	√
Setting the automatic snapshot creation policy	POST /v1.0/{project_id}/clusters/{cluster_id}/index_snapshot/policy	css:snapshot:setSnapshotPolicy	√	√

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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:disableSnapshotFuction	√	√

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8 Appendixes

8.1 Status Codes

Table 8-1 describes the status codes.

Table 8-1 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.

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Status Code	Code	Description
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.
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 server received and understood the request but refused to fulfill it, because the request is set to deny access. The client should not repeat the request without modifications.

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Status Code	Code	Description
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.
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 exits, 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.

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Status Code	Code	Description
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.
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.

8.2 Error Codes

If an error code starting with APIGW is returned after you call an API, rectify the fault by referring to the instructions provided in **API Gateway Error Codes**.

Status Code	Error Codes	Error Message	Description	Solution
400	CSS.0001	Incorrect parameters.	Incorrect parameters.	Change the parameters based on the displayed information.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.0006	The request is null. Enter the request parameters.	The request is null. Enter the request parameters.	Enter the request parameters based on the error information.
400	CSS.0017	Invalid parameter letter case.	Invalid parameter letter case.	Set the parameter based on the naming rules.
400	CSS.0021	The account is frozen.	The account is frozen.	Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.0026	The log size is too large.	The log size is too large.	Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.0036	Internal error.	Internal error.	Try again later or Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.0047	The cluster does not exist or has been deleted.	The cluster does not exist or has been deleted.	The operation cannot be performed because the cluster does not exist.
400	CSS.0048	The OBS bucket does not exist.	The OBS bucket does not exist.	Check whether the OBS bucket exists or whether the user has the permission to access the bucket.
400	CSS.0050	Invalid cluster administrator password.	Invalid cluster administrator password.	Change the password based on the API reference.
400	CSS.0051	The current policy does not allow the #actionName # operation.	The current policy does not allow the #actionName # operation.	Grant the required permissions to the account.
400	CSS.0052	Insufficient CPU quota.	Insufficient CPU quota.	Release unused clusters, reduce the number of new CPUs, or increase the quota.
400	CSS.0053	Insufficient resource quota on the node.	Insufficient resource quota on the node.	Release unused clusters, reduce the number of new nodes, or increase the quota.
400	CSS.0054	Insufficient memory quota.	Insufficient memory quota.	Release unused clusters, reduce the memory size, or increase the quota.
400	CSS.0055	Insufficient disk quota.	Insufficient disk quota.	Release unused clusters, reduce the disk size, or increase the quota.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.0060	Insufficient disk capacity quota.	Insufficient disk capacity quota.	Release unused resources, reduce the disk capacity, or increase the quota.
400	CSS.0061	Insufficient EIP quota.	Insufficient EIP quota.	Release unused resources or increase the quota.
400	CSS.0062	Insufficient ELB quota.	Insufficient ELB quota.	Release unused resources or increase the quota.
400	CSS.0063	Insufficient VPC endpoint quota.	Insufficient VPC endpoint quota.	Release unused resources or increase the quota.
400	CSS.0064	Insufficient subnet IP address quota.	Insufficient subnet IP address quota.	Release unused resources or increase the quota.
400	CSS.0065	The disk has been sold out.	The disk has been sold out.	Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.0066	Invalid password.	Invalid password.	Change the password based on the API reference.
400	CSS.0068	The flavor has been sold out.	The flavor has been sold out.	Release unused resources.
400	CSS.0069	The disk has been sold out.	The disk has been sold out.	Release resources or increase the quota.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.0070	Interconnection with the enterprise project is not supported.	Interconnection with the enterprise project is not supported.	This site does not support enterprise projects.
400	CSS.0071	Invalid bandwidth size.	Invalid bandwidth size.	Change the bandwidth size based on the error information.
400	CSS.0072	Failed to create the SMN agency. Check whether the account has the required permission.	Failed to create the SMN agency. Check whether the account has the required permission.	Grant the required permissions to the account.
400	CSS.0074	The number of data nodes (including cold nodes) must be greater than or equal to three.	The number of data nodes (including cold nodes) must be greater than or equal to three.	Scale out the cluster or cancel the copy verification.
400	CSS.0075	The target flavor is not supported.	The target flavor is not supported.	The target flavor must be smaller than the original one.
400	CSS.0076	Invalid node role type.	Invalid node role type.	Change the role type based on the API parameter description.
400	CSS.0077	The cluster is being scaled out or scaled in.	The cluster is being scaled out or scaled in.	Perform the operation after the cluster status becomes normal.
400	CSS.0078	The cluster is in a status that does not support upgrade.	The cluster is in a status that does not support upgrade.	Perform the operation after the cluster status becomes normal.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.0080	The default agency already exists. Check whether the agency has the required permissions before using it.	The default agency already exists. Check whether the agency has the required permissions before using it.	Check whether the account has the required permissions.
400	CSS.0081	Failed to create the agency. Check whether the account has the permission to create an agency.	Failed to create the agency. Check whether the account has the permission to create an agency.	Grant the required permissions to the account.
400	CSS.0082	The record does not exist.	The record does not exist.	Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.0083	Some indexes have not been backed up. Perform full index backup in the snapshot module of the cluster.	Some indexes have not been backed up. Perform full index backup in the snapshot module of the cluster.	Perform full index backup in the snapshot module of the cluster.
400	CSS.1111	Invalid scale-out parameters.	Invalid scale-out parameters.	Check whether the scale-out parameters are correct.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.1112	The number of instances has reached the quota.	The number of instances has reached the quota.	Delete some clusters or increase the quota.
400	CSS.1119	The Kibana public access already exists.	The Kibana public access already exists.	Do not repeatedly bind an IP address for Kibana public access.
400	CSS.1120	The Kibana public access does not exist.	The Kibana public access does not exist.	Bind an IP address for Kibana public access.
400	CSS.1122	To change the security mode, disable the public access and try again.	To change the security mode, disable the public access and try again.	Disable the public access based on the error information.
400	CSS.1123	To change the security mode, disable the Kibana public access and try again.	To change the security mode, disable the Kibana public access and try again.	Disable the Kibana public access based on the error information.
400	CSS.2026	This is a weak password. Enter a strong password.	This is a weak password. Enter a strong password.	Set a strong password based on the error information.
400	CSS.3011	Invalid retention period.	Invalid retention period.	Check whether the value is an integer in the range 1 to 90.
400	CSS.3016	The backup file is being deleted. Try again later.	The backup file is being deleted. Try again later.	Perform the operation after the backup file is deleted.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.3026	The backup file does not exist.	The backup file does not exist.	Internal error. Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.3030	The new instance volume cannot be smaller than the old instance volume.	The new instance volume cannot be smaller than the old instance volume.	Change the parameter values based on the displayed information.
400	CSS.5002	Invalid database type.	Invalid database type.	Currently, only Elasticsearch is supported.
400	CSS.5003	Invalid database version.	Invalid database version.	Elasticsearch and Kibana support the versions 7.6.2 and 7.10.2.
400	CSS.5004	The datastore parameter is not specified.	The datastore parameter is not specified.	Specify the datastore parameter.
400	CSS.5005	The database type or version is not supported.	The database type or version is not supported.	Elasticsearch and Kibana support the versions 7.6.2 and 7.10.2.
400	CSS.5006	Flavor is illegal.	Flavor is illegal.	Change the flavors based on the API parameter description.
400	CSS.5007	The selected flavors do not exist.	The selected flavors do not exist.	Change the flavors based on the API parameter description.
400	CSS.5008	Invalid volume type.	Invalid volume type.	Select a correct volume type.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.5009	Invalid volume size.	Invalid volume size.	Enter a valid size.
400	CSS.5011	Invalid AZ.	Invalid AZ.	Select a correct AZ.
400	CSS.5017	Invalid retention period of automated backups.	Invalid retention period of automated backups.	Check whether the retention period of automated backups is set to 1 to 90 days.
400	CSS.5018	Invalid automated backup period.	Invalid automated backup period.	Only the full hour backup is supported. Add the time zone at the end of the time. The format is HH:mm z.
400	CSS.5020	Invalid automated backup start time.	Invalid automated backup start time.	Set a valid backup time based on the API parameter description.
400	CSS.5021	The VPC does not exist or does not belong to the user.	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.	The security group does not exist or does not belong to the VPC.	Check whether the security group is correct.
400	CSS.5033	The volume size is not an integer multiple of 10.	The volume size is not an integer multiple of 10.	Check whether the volume size is a multiple of 4 and 10.
400	CSS.5036	Datastore does not exist.	Datastore does not exist.	Currently, only Elasticsearch is supported.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.5037	The parameter does not exist.	The parameter does not exist.	Check the parameter value range based on the API reference.
400	CSS.5038	The value of the parameter is out of range.	The value of the parameter is out of range.	Change the parameter values based on the displayed information.
400	CSS.5039	Duplicate parameters.	Duplicate parameters.	Delete duplicate parameters.
400	CSS.5044	Invalid backup prefix.	Invalid backup prefix.	Change the backup prefix based on the API parameter description.
400	CSS.5046	NICS is left blank.	NICS is left blank.	Specify NICS (VPC and subnet information).
400	CSS.5047	Invalid instance quantity.	Invalid instance quantity.	Check the parameter value range based on the API parameter description.
400	CSS.5048	Invalid extended parameters.	Invalid extended parameters.	Internal error. Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.5049	Invalid cluster name.	Invalid cluster name.	Change the cluster name.
400	CSS.5050	The cluster name already exists.	The cluster name already exists.	Change the cluster name.
400	CSS.5051	Invalid IP address.	Invalid IP address.	Enter a correct IP address.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.5052	Available zone is illegal.	Available zone is illegal.	Select a correct AZ.
400	CSS.5055	Invalid flavor ID.	Invalid flavor ID.	Change the flavor ID based on the API parameter description.
400	CSS.5056	Invalid string length.	Invalid string length.	Check the supported string length based on the displayed information.
400	CSS.5057	The cluster name contains invalid characters or the name length is not allowed.	The cluster name contains invalid characters or the name length is not allowed.	Change the cluster name.
400	CSS.5059	Invalid database username.	Invalid database username.	Currently, only Elasticsearech is supported.
400	CSS.5061	Invalid volume type.	Invalid volume type.	Check whether the volume type is supported based on the API reference.
400	CSS.5063	Invalid value of the Specific parameter.	Invalid value of the Specific parameter.	Internal error. Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.5068	Invalid hard disk parameters.	Invalid hard disk parameters.	Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.5069	Invalid node quantity.	Invalid node quantity.	Change the number of nodes based on the API parameter description.
400	CSS.5073	Instances of this type cannot be restarted separately.	Instances of this type cannot be restarted separately.	Do not select a type that is not contained in the resource.
400	CSS.5074	Subnet does not belong to VPC	Subnet does not belong to VPC	Check and enter correct subnet parameters.
400	CSS.5077	Invalid cluster name.	Invalid cluster name.	Change the cluster name.
400	CSS.5078	Invalid disk size.	Invalid disk size.	Change the disk size based on the API parameter description.
400	CSS.5087	Inconsistent disk specifications are used for the same type of instances.	Inconsistent disk specifications are used for the same type of instances.	Internal error. Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.5088	The SSL is not globally consistent.	The SSL is not globally consistent.	Internal error. Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.5090	In this status, the current operation is not allowed.	In this status, the current operation is not allowed.	Rectify the fault based on the error information and then perform the operation again.
400	CSS.5091	The number of nodes has reached the upper limit. Contact the administrator.	The number of nodes has reached the upper limit. Contact the administrator.	Change the number of nodes.
400	CSS.5092	Invalid storage information.	Invalid storage information.	Internal error. Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.5093	Invalid node specifications.	Invalid node specifications.	Change the node specifications based on the description about the API used to obtain the instance specifications list.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.5094	Invalid node scale-out type.	Invalid node scale-out type.	Check and enter a valid node type.
400	CSS.5095	The current instance type does not support this operation.	The current instance type does not support this operation.	The local disk does not support this operation.
400	CSS.5098	Invalid EIP binding type.	Invalid EIP binding type.	Change the EIP binding type based on the API parameter description.
400	CSS.5106	Invalid instance type.	Invalid instance type.	Enter a correct instance type.
400	CSS.5107	Invalid cluster mode.	Invalid cluster mode.	Internal error. Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.5110	Inconsistent parameter groups are used for the same type of instances.	Inconsistent parameter groups are used for the same type of instances.	Internal error. Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.5111	The backup file ID does not exist.	The backup file ID does not exist.	Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.5130	Invalid agency name.	Invalid agency name.	Perform operations based on the error information.
400	CSS.5134	The total number of master nodes must be an odd number.	The total number of master nodes must be an odd number.	Change the parameters based on the error information.
400	CSS.5135	The disk size must be a multiple of 20.	The disk size must be a multiple of 20.	Change the parameters based on the error information.
400	CSS.5137	Invalid tag key.	Invalid tag key.	Change the parameter based on the error information.
400	CSS.5138	Invalid tag value.	Invalid tag value.	Change the parameter based on the error information.
400	CSS.5140	The cluster does not support this operation.	The cluster does not support this operation.	Perform this operation after the cluster status becomes normal.
400	CSS.5141	Tag not found.	Tag not found.	Check whether the tag in the request body belongs to the cluster.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.5158	Only bound public IP addresses can be unbound from clusters.	Only bound public IP addresses can be unbound from clusters.	Check the public access binding status.
400	CSS.5159	Only unbound public IP addresses can be bound to clusters.	Only unbound public IP addresses can be bound to clusters.	Check the public access binding status.
400	CSS.5160	Failed to bind the public IP address. Please try again.	Failed to bind the public IP address. Please try again.	Try again later or Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.5164	Failed to update the public network access whitelist. Please try again.	Failed to update the public network access whitelist. Please try again.	Try again later or Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.5167	No data nodes are selected.	No data nodes are selected.	Select at least one data node.
400	CSS.5169	The selected version does not support the security mode.	The selected version does not support the security mode.	For details about how to create a security cluster, see the Cloud Search Service User Guide.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.5170	The volume parameter is not required for local disk specifications.	The volume parameter is not required for local disk specifications.	Delete the specified volume based on the error information.
400	CSS.5171	If httpsEnable is set to true, authorityEnable cannot be set to false.	If httpsEnable is set to true, authorityEnable cannot be set to false.	If httpsEnable is set to true, authorityEnable cannot be set to false.
400	CSS.5172	The number of instances must be greater than or equal to the number of AZs.	The number of instances must be greater than or equal to the number of AZs.	Increase the number of instances.
400	CSS.5174	Failed to obtain VPC information. Try again later.	Failed to obtain VPC information. Try again later.	Check whether the VPC exists and the network is available.
400	CSS.5177	The https enable parameter is not specified.	The https enable parameter is not specified.	Specify the httpsEnable parameter (mandatory).
400	CSS.5178	Invalid time zone.	Invalid time zone.	Change the time zone format based on the API parameter description.
400	CSS.5180	Kibana public access is not enabled.	Kibana public access is not enabled.	Enable Kibana public access.
400	CSS.5181	The whitelist does not exist.	The whitelist does not exist.	The current whitelist is empty. Add IP addresses to the whitelist and then perform related operations.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.5182	The VPC endpoint service is not enabled.	The VPC endpoint service is not enabled.	Enable the VPC endpoint service and then perform related operations.
400	CSS.5300	This operation is not allowed for yearly/ monthly clusters.	This operation is not allowed for yearly/ monthly clusters.	This operation is not supported.
400	CSS.5301	This operation is not allowed because the cluster has been frozen.	This operation is not allowed because the cluster has been frozen.	If the account is frozen due to arrears, renew the account. Otherwise, Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.5302	Invalid subscription period type.	Invalid subscription period type.	Modify the subscription period type based on the API parameter description.
400	CSS.5303	Invalid subscription period.	Invalid subscription period.	Modify the subscription period based on the API parameter description.
400	CSS.5304	Invalid auto-renewal parameter.	Invalid auto-renewal parameter.	Modify the renewal parameters based on the API parameter description.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.5305	Invalid automated payment parameters.	Invalid automated payment parameters.	Modify the automated payment parameters based on the API parameter description.
400	CSS.5306	An unpaid order exists.	An unpaid order exists.	Pay for or cancel the order.
400	CSS.5307	An order is being processed.	An order is being processed.	Wait until the order is processed.
400	CSS.5308	The bandwidth exceeds the limit.	The bandwidth exceeds the limit.	Reduce the bandwidth.
400	CSS.5310	If httpsEnable is set to false, public network access cannot be enabled. If authorityEnable is set to false, Kibana public network access cannot be enabled.	If httpsEnable is set to false, public network access cannot be enabled. If authorityEnable is set to false, Kibana public network access cannot be enabled.	Enable the related functions based on the error information.
400	CSS.5312	Nodes and disks cannot be scaled out at the same time in a cluster billed in yearly/ monthly mode.	Nodes and disks cannot be scaled out at the same time in a cluster billed in yearly/ monthly mode.	The operation is not supported.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.5313	Insufficient permissions on the VPC endpoint. Check whether the user has the VPC endpoint administrator role.	Insufficient permissions on the VPC endpoint. Check whether the user has the VPC endpoint administrator role.	Check whether the user has the required permissions based on the error information.
400	CSS.6000	Failed to create the cluster. Contact technical support or try again later.	Failed to create the cluster. Contact technical support or try again later.	Try again later. If the fault persists, Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.6001	Failed to scale out the cluster. Contact technical support or try again later.	Failed to scale out the cluster. Contact technical support or try again later.	Try again later. If the fault persists, Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.6003	Failed to restore the cluster. Contact technical support or try again later.	Failed to restore the cluster. Contact technical support or try again later.	Try again later. If the fault persists, Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.6004	Failed to create the node due to an ECS exception. Contact technical support or try again later. Error code: #failedReason #.	Failed to create the node due to an ECS exception. Contact technical support or try again later. Error code: #failedReason #.	Try again later. If the fault persists, Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.6009	Failed to create the snapshot. Contact technical support or try again later.	Failed to create the snapshot. Contact technical support or try again later.	Try again later. If the fault persists, Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
400	CSS.6012	Failed to restore the snapshot because the OBS object does not exist or has been deleted.	Failed to restore the snapshot because the OBS object does not exist or has been deleted.	Check whether the OBS bucket exists.

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Status Code	Error Codes	Error Message	Description	Solution
400	CSS.6013	Parameters cannot be modified because another operation is being performed on the cluster.	Parameters cannot be modified because another operation is being performed on the cluster.	Ensure that the cluster is available before modifying parameters.
400	CSS.6014	Unchangeable parameters are contained.	Unchangeable parameters are contained.	Delete the unchangeable parameters if any and try again.
400	CSS.6015	Parameters are not in the YAML format.	Parameters are not in the YAML format.	Modify the parameter format and try again.
403	CSS.0010	The instance ID or user ID may be null, or the operation is not authorized.	The instance ID or user ID may be null, or the operation is not authorized.	Check the account permission.
403	CSS.0015	No resources are found or the access is denied.	No resources are found or the access is denied.	Insufficient permission. Add the required permission and try again.
403	CSS.5045	The current tenant is not allowed to perform this operation.	The current tenant is not allowed to perform this operation.	Check whether the tenant is frozen or has required permissions.
404	CSS.0002	The instance does not exist.	The instance does not exist.	Check whether the permission and resource exist.

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Status Code	Error Codes	Error Message	Description	Solution
404	CSS.0007	The VM information of the DB instance cannot be found.	The VM information of the DB instance cannot be found.	Try again later or Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
404	CSS.0016	Resource not found.	Resource not found.	Check whether the resource exists based on the displayed information.
404	CSS.0022	The instance does not exist or has been deleted.	The instance does not exist or has been deleted.	Check whether the resource exists.
404	CSS.0028	The object does not exist.	The object does not exist.	Check whether the current resource exists based on the displayed information.
404	CSS.1103	The instance does not exist!	The instance does not exist!	Check whether the cluster exists.
404	CSS.3027	The cluster does not exist!	The cluster does not exist!	The cluster does not exist. No operations are supported.
404	CSS.5012	The region or AZ does not exist.	The region or AZ does not exist.	Select a correct region or AZ.
404	CSS.5022	The subnet does not exist or does not belong to the VPC.	The subnet does not exist or does not belong to the VPC.	Check and enter a subnet that belongs to the VPC.

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Status Code	Error Codes	Error Message	Description	Solution
404	CSS.5042	The source instance does not exist.	The source instance does not exist.	The request body contains an instance that does not exist in the cluster.
409	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.	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.
409	CSS.0012	Operation is not allowed because the cluster has a standby instance.	Operation is not allowed because the cluster has a standby instance.	Perform the operation after the cluster backup is complete.
409	CSS.0029	The object is being created. Please wait.	The object is being created. Please wait.	The cluster or snapshot is being created. Do not perform other operations.
409	CSS.0031	The object already exists.	The object already exists.	Change the object name.
409	CSS.0043	The snapshot name already exists.	The snapshot name already exists.	Change the snapshot name.
409	CSS.1102	The instance name already exists.	The instance name already exists.	Change the instance name.
409	CSS.3004	Backup is in progress.	Backup is in progress.	Perform the operation after the backup succeeded.

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Status Code	Error Codes	Error Message	Description	Solution
413	CSS.0030	The number of snapshots reaches the quota.	The number of snapshots reaches the quota.	Release the resources that do not need to be backed up.
415	CSS.0004	Invalid operation.	Invalid operation.	Change the parameter based on the error information.
415	CSS.5108	The operation is not supported.	The operation is not supported.	The operation is not supported.
419	CSS.0023	Insufficient resource.	Insufficient resource.	Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
422	CSS.0040	The parameter cannot be processed.	The parameter cannot be processed.	Try again later or Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
500	CSS.0005	Server error.	Server error.	Internal error. Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.

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Status Code	Error Codes	Error Message	Description	Solution
500	CSS.1004	Database service error.	Database service error.	Try again later or Contact technical support. You can log in to the Huawei Cloud official website and click Contact Us in the upper right corner. Technical support will respond as soon as possible.
500	CSS.9999	Failed to process the request.	Failed to process the request.	Check whether the request path and request body are correct based on the displayed information.

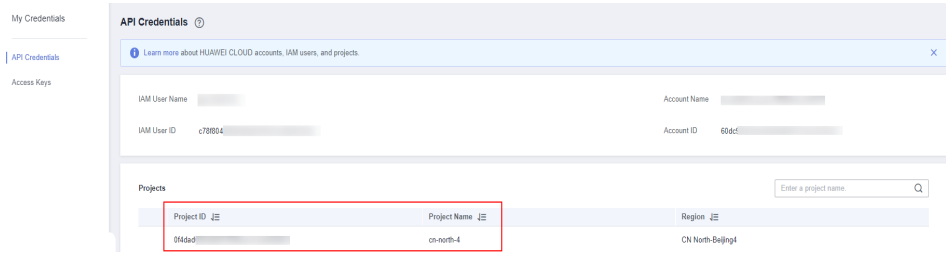
8.3 Obtaining a Project ID and Name

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 **CSS management console**.
2. In the upper-right corner of the page, hover your mouse over 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**.

Figure 8-1 Viewing the project ID and name



Obtaining a Project ID by Calling an API

A project ID can also be obtained by calling the **Querying Project Information Based on the Specified Criteria** API.

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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 **Regions and 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"
    }
}
```

8.4 Obtaining the Cluster ID

A cluster ID (**cluster_id**) is required for some URLs when an API is called. To obtain the cluster ID, perform the following steps:

Obtaining the Cluster ID by Calling an API

You can obtain the cluster ID by calling the **Querying the Cluster List** API.

The API for obtaining the cluster ID is GET https://{Endpoint}/v1.0/{project_id}/clusters, where {Endpoint} indicates the IAM endpoint, which can be obtained from **Regions and Endpoints**. For the project ID, see **Obtaining a Project ID and Name**. For API authentication, see **Authentication**.

The following is an example response. The value of **id** under **clusters** is the cluster ID.

```
{
  "totalSize" : 1,
  "clusters" : [ {
    "datastore" : {
      "type" : "elasticsearch",
      "version" : "7.10.2",
      "subVersion" : "7.10.2_24.3.0_0827",
      "isEosCluster" : false,
      "supportSecuritymode" : false
    },
    "instances" : [ {
      "status" : "200",
      "type" : "ess",
```

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```
    "id" : "{INSTANCE_ID}",
    "name" : "css-8bc5-ess-esn-1-1",
    "specCode" : "ess.spec-4u8g",
    "azCode" : "{AZ_CODE}",
    "volume" : {
      "type" : "ULTRAHIGH",
      "size" : 40,
      "resourceIds" : [ "{RESOURCE_ID}" ]
    },
    "ip" : "192.168.0.122",
    "resourceId" : "{RESOURCE_ID}"
  } ],
  "publicKibanaResp" : {
    "eipSize" : 10,
    "publicKibanaIp" : "100.95.152.28:9200",
    "elbWhiteListResp" : null,
    "bandwidthResourceId" : "18bec13f-5cc1-4631-867f-33505d15be12"
  },
  "elbWhiteList" : {
    "whiteList" : "",
    "enableWhiteList" : false
  },
  "updated" : "2023-10-09T02:07:13",
  "name" : "css-8bc5",
  "publicIp" : "100.85.222.202",
  "created" : "2023-10-09T02:07:13",
  "id" : "{CLUSTER_ID}",
  "status" : "200",
  "endpoint" : "192.168.0.122:9200",
  "vpcId" : "{VPC_ID}",
  "subnetId" : "{SUBNET_ID}",
  "securityGroupId" : "{SECURITY_GROUP_ID}",
  "bandwidthResourceId" : "{BANDWIDTH_RESOURCE_ID}",
  "bandwidthSize" : 3,
  "httpsEnable" : true,
  "authorityEnable" : true,
  "diskEncrypted" : false,
  "backupAvailable" : false,
  "actionProgress" : { },
  "actions" : [ ],
  "enterpriseProjectId" : "0",
  "tags" : [ ],
  "period" : true
 } ]
}
```


Obtaining the Cluster ID from the GaussDB(DWS) Console

1. Log in to the **CSS management console**.
2. In the navigation pane on the left, click **Clusters**.
3. In the cluster list, find the cluster and copy the cluster ID in the **Name/ID** column.

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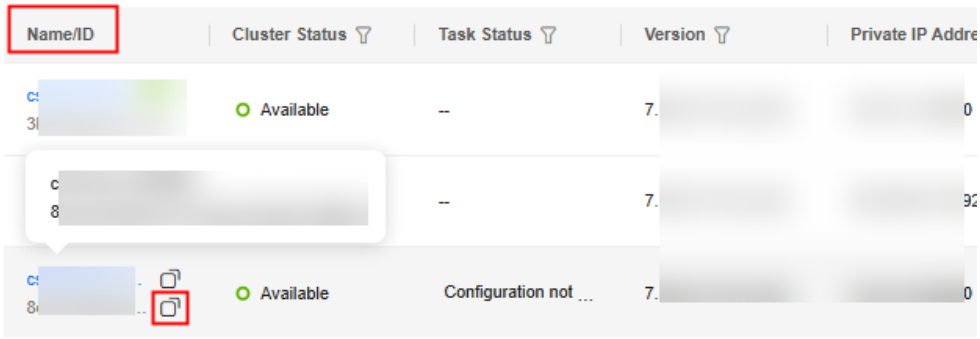
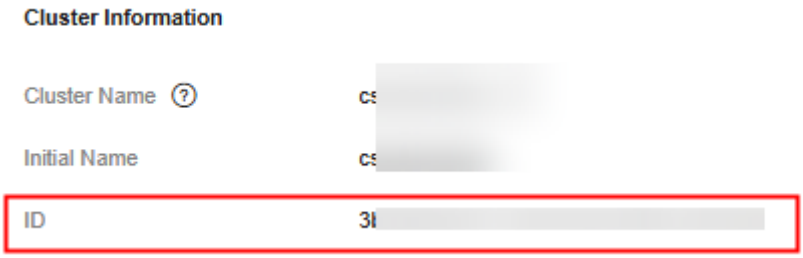
Figure 8-2 Copying the cluster ID



4. Alternatively, click the cluster name to go to its details page.
5. Check the cluster ID under cluster information.

Figure 8-3 Checking the cluster ID



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