Config

API Reference

Issue 01

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Contents

1 Before You Start 1
2 API Overview 4
3 Calling APIs 6
3.1 Making an API Request 6
3.2 Authentication 10
3.3 Response 11
4 APIs 14
4.1 Resource List 14
4.1.1 Querying Resources of a Specific Type 14
4.1.2 Querying Cloud Services 21
4.1.3 Listing All Interconnected Cloud Services 27
4.1.4 Querying a Resource 33
4.1.5 Querying All Resources Recorded by the Resource Recorder 40
4.1.6 Querying How Many Resources Are Recorded by the Resource Recorder 47
4.1.7 Querying Resource Tags Recorded by the Resource Recorder 52
4.1.8 Querying Resource Overview Recorded by the Resource Recorder 58
4.1.9 Querying a Specific Resource Recorded by the Resource Recorder 63
4.1.10 Querying All Resources Under an Account 69
4.1.11 Querying a Resource Under an Account 76
4.1.12 Querying Resource Tags 82
4.1.13 Querying the Number of Resources 88
4.1.14 Querying Resource Overview 93
4.2 Resource Recorder 98
4.2.1 Querying the Resource Recorder 98
4.2.2 Deleting the Resource Recorder 105
4.2.3 Creating or Modifying the Resource Recorder 109
4.3 Resource Relationships 116
4.3.1 Querying Resource Relationships 117
4.3.2 Querying Details About Resource Relationships 123
4.4 Resource Change Records 129
4.4.1 Querying Change Records of a Resource 129
4.5 Compliance 138

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4.5.1 Querying Built-in Policies ... 138
4.5.2 Querying Specific Built-in Policy ... 146
4.5.3 Adding a Rule ... 153
4.5.4 Querying Rules ... 164
4.5.5 Modifying a Rule ... 173
4.5.6 Querying a Specific Rule ... 185
4.5.7 Deleting a Rule ... 193
4.5.8 Enabling a Rule ... 197
4.5.9 Disabling a Rule ... 202
4.5.10 Running a Resource Compliance Evaluation ... 206
4.5.11 Querying the Evaluation Status of a Rule ... 211
4.5.12 Querying Resource Compliance Summary ... 216
4.5.13 Querying the Compliance of a Resource ... 223
4.5.14 Querying the Compliance of a Rule ... 229
4.5.15 Querying Compliance Summary by Rule ... 236
4.5.16 Querying Compliance of an Account ... 245
4.5.17 Updating the Compliance Result ... 252
4.5.18 Querying Compliance Summary by User ... 259
4.5.19 Creating an Organization Rule ... 268
4.5.20 Querying Organization Rules ... 277
4.5.21 Querying a Specific Organization Rule ... 284
4.5.22 Deleting an Organization Rule ... 290
4.5.23 Updating an Organization Rule ... 294
4.5.24 Querying the Deployment Status of an Organization Rule ... 303
4.5.25 Querying Statuses of Organization Rule Deployment to Member Accounts ... 309
4.5.26 Setting up or Updating Remediation Configurations ... 315
4.5.27 Querying Remediation Configurations ... 325
4.5.28 Deleting Remediation Configurations ... 332
4.5.29 Batch Creating Remediation Exceptions ... 336
4.5.30 Batch Deleting Remediation Exceptions ... 342
4.5.31 Querying Remediation Exceptions ... 348
4.5.32 Starting Remediation ... 353
4.5.33 Querying Remediation Results ... 358
4.5.34 Collect Remediation Results ... 364
4.6 Region Management ... 372
4.6.1 Querying Available Regions ... 372
4.7 Advanced Queries ... 378
4.7.1 Running Advanced Queries ... 378
4.7.2 Creating an Advanced Query ... 386
4.7.3 Querying Advanced Queries ... 392
4.7.4 Querying an Advanced Query ... 398
4.7.5 Updating an Advanced Query ... 404

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4.7.6 Deleting an Advanced Query ... 410
4.7.7 Querying Schemas ... 415
4.8 Resource Aggregators ... 420
4.8.1 Creating a Resource Aggregator ... 420
4.8.2 Querying Resource Aggregators ... 428
4.8.3 Querying a Specific Resource Aggregator ... 434
4.8.4 Querying Account Aggregation Statuses of a Specific Aggregator ... 440
4.8.5 Updating a Resource Aggregator ... 446
4.8.6 Deleting a Resource Aggregator ... 453
4.8.7 Authorizing an Aggregator Account ... 457
4.8.8 Querying Authorized Aggregator Accounts ... 463
4.8.9 Deleting Authorization for an Aggregator Account ... 469
4.8.10 Querying All Pending Aggregation Requests ... 472
4.8.11 Deleting Pending Authorization Requests ... 477
4.8.12 Querying the Number of Resources of an Aggregator Account ... 481
4.8.13 Querying Resources of an Aggregator Account ... 487
4.8.14 Querying Details About a Specific Resource in a Source Account ... 494
4.8.15 Performing an Advanced Query on a Specific Aggregator ... 501
4.8.16 Querying the Compliance Summary of One or More Source Accounts in an Aggregator ... 506
4.8.17 Querying Aggregated Rules ... 513
4.8.18 Querying Compliance Results of Aggregated Resources ... 520
4.8.19 Querying Details About a Specified Aggregated Rule ... 527
4.9 Conformance Packages ... 536
4.9.1 Querying Conformance Packages ... 536
4.9.2 Creating a Conformance Package ... 543
4.9.3 Querying a Specific Conformance Package ... 550
4.9.4 Deleting a Conformance Package ... 556
4.9.5 Updating Conformance Packages ... 560
4.9.6 Querying Compliance of all Conformance Packages ... 567
4.9.7 Querying Compliance of all Rules in a Conformance Package ... 573
4.9.8 Querying Compliance of All Resources Evaluated with a Conformance Package ... 579
4.9.9 Querying Scores of All Conformance Packages ... 585
4.9.10 Querying Built-in Conformance Package Templates ... 591
4.9.11 Querying the Template of a Built-in Conformance Package ... 598
4.9.12 Creating organization conformance packages ... 604
4.9.13 Querying Organization Conformance Packages ... 610
4.9.14 Querying an Organization Conformance Package ... 616
4.9.15 Delete organization conformance packages ... 622
4.9.16 Updating Organization Conformance Packages ... 626
4.9.17 Querying the Deployment Status of the Organization Conformance Package ... 633
4.9.18 Querying the Statuses of Organization Conformance Package Deployment to Members ... 639
4.10 Resource Tags ... 645

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4.10.1 Querying Resources ... 645
4.10.2 Querying Resource Statistics ... 655
4.10.3 Batch Adding Resource Tags ... 664
4.10.4 Batch Deleting Resource Tags ... 670
4.10.5 Querying Tags of a Resource ... 676
4.10.6 Querying Tags of a Resource Type ... 681
5 Permissions Policies and Supported Actions ... 688
5.1 Permissions Policies and Supported Actions ... 688
5.2 Resource Query ... 689
5.3 Resource Recorder ... 692
5.4 Compliance ... 692
5.5 Advanced Queries ... 698
5.6 Resource Aggregation ... 699
5.7 Conformance Packages ... 705
5.8 Resource Tag ... 709
6 Appendixes ... 711
6.1 Error Codes ... 711
6.2 Supported Services and Resource Types ... 722
6.3 Obtaining an Account ID ... 722
6.4 Status Codes ... 723
6.5 Obtaining a Project ID ... 724

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1 Before You Start

Config allows you to centrally record, search for, and evaluate your resources to ensure resource compliance.

This document describes the Config APIs. Parameter description and examples are provided. You can use provided APIs to perform operations on Config. For details about all supported operations, see **API Overview**.

Before using Config APIs, ensure that you are familiar with Config concepts. For details, see **What Is Config**.

Config supports Representational State Transfer (REST) APIs. For details about API calling, see **Calling APIs**.

Endpoints

An endpoint is the **request address** for calling an API. Endpoints vary depending on services and regions. For the Config endpoint, see **Regions and Endpoints**.

Concepts

- Organization

  An organization is an entity that you can create with the Organizations service to centrally manage multiple accounts. You can also use service control policies to control resource access for your organization. This helps you better meet security and compliance requirements.

- Account

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

- User

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

  The account name, username, and password will be required for API authentication.

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- Region

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

  For details, see **Region and AZ**.

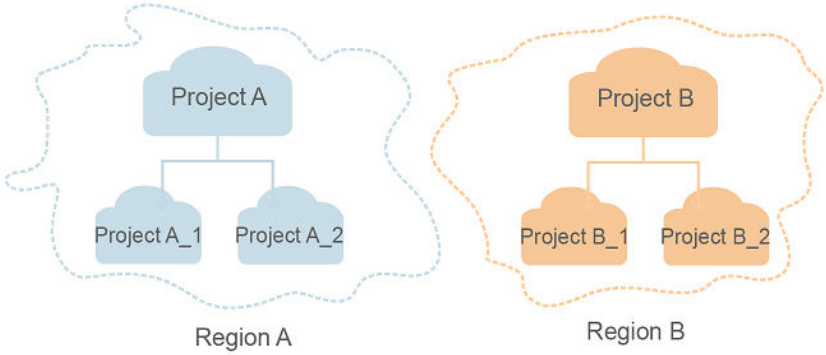
- AZ

  An AZ comprises of one or more physical data centers equipped with independent ventilation, fire suppression, moisture-proof, and power 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

  There is a default project automatically configured for each region. Default projects physically isolate resources (including compute, storage, and network resources) across regions. If you grant users permissions by project, the users can access all resources in the corresponding projects. If you need more refined access control, create subprojects under a default project and add resources to subprojects. Then you can assign users the permissions required to access only the resources in the specific subprojects.

  Figure 1-1 Project-based resource isolation

- Enterprise Project

  An enterprise project is more flexible than an IAM project. Enterprise projects isolate resources logically. You can include resources from different regions to an enterprise project and transfer resources between enterprise projects.

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

Querying Data by Page

Some Config APIs support pagination query if you add **limit** and **marker** to the request URL. To get the next page of results, you need to set the **marker** to the value of marker obtained from your last response.

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Table 1-1 Config parameter description

Parameter	Type	Mandatory	Description
limit	Integer	No	Restricts the number of records displayed on each page. If **limit** is invalid, error code 400 will be returned.
marker	String	No	The **marker** value returned in the last pagination query. If **marker** is invalid, error code 400 will be returned.

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2 API Overview

Table 2-1 API description

API	Description
Resource Query	APIs for querying resources, resource tags, resource quantity and summary, and the monitoring scope of the resource recorder.
Resource Recorder	APIs for adding, deleting, modifying, and querying the resource recorder.
Resource Relationships	APIs for querying resource relationships and details.
Resource Change Records	API for querying resource change records.
Compliance	APIs for querying compliance policies; adding, deleting, modifying, querying, and running rules (including organization rules); querying and updating resource evaluation results; and adding, deleting, modifying, querying, and running remediation.
Region Management	API for querying regions visible to a user
Advanced Queries	APIs for running, adding, deleting, modifying, and querying advanced queries
Aggregator	APIs for adding, deleting, modifying, and querying resource aggregators and aggregator account authorization; querying the number of resources aggregated; and running advanced queries for an aggregator

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API	Description
Conformance Package	APIs for adding, deleting, modifying, and querying conformance packages or organization conformance packages, and for querying compliance data.
Resource Tag	APIs for listing resources, querying the number of resources, batch adding and deleting resource tags, and querying resource and project tags.

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3 Calling APIs

3.1 Making an API Request

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

Request URI

A request URI is in the following format:

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

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

Table 3-1 URI parameter description

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

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IAM is a global service. You can create an IAM user using the endpoint of IAM in any region. For example, to create an IAM user in the **CN-Hong Kong** region, obtain the endpoint of IAM (**iam.ap-southeast-1.myhuaweicloud.com**) for this region and the **resource-path** (**/v3.0/OS-USER/users**) in the URI of the API for **creating an IAM user**. Then construct the URI as follows:

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

Figure 3-1 Example URI

NOTE

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

Request Methods

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

Table 3-2 HTTP methods

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

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

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

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Request Header

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

Common request header fields are as follows.

Table 3-3 Common request header fields

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

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Parameter	Description	Mandatory	Example Value
X-Auth-Token	Specifies the user token. It is a response to the API for **obtaining a user token** (This is the only API that does not require authentication). After the request is processed, the value of **X-Subject-Token** in the response header is the token value.	No This field is mandatory for token authentication.	The following is part of an example token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

NOTE

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

For more details, see "Authentication Using AK/SK" in **Authentication**.

The following shows an example request of the API for **creating an IAM user** when AK/SK authentication is used:

```
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=**********
```

(Optional) Request Body

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

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

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

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

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Sdk-Date: 20240416T095341Z
```

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```
Authorization: SDK-HMAC-SHA256 Access=**********, SignedHeaders=content-type;host;x-sdk-date,
Signature=**********

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

If all data required for the API request is available, you can send the request to call the API through **curl**, **Postman**, or coding.

3.2 Authentication

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

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

Token Authentication

NOTE

- The validity period of a token is 24 hours. When using a token for authentication, cache it, so that you do not need to frequently call the API for obtaining the token.
- Ensure that the token is valid when you use it. Using a token that will soon expire may cause API calling failures.

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

You can obtain a token by calling the **Obtaining a User Token** API.

A cloud service can be at either the project or the global level.

- To obtain a token for a project-level service by calling an API, set **auth.scope** in the request body to **project**.
- To obtain a token for a global-level service by calling an API, set **auth.scope** in the request body to **domain**.

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

```
{
   "auth": {
      "identity": {
         "methods": [
            "password"
         ],
         "password": {
            "user": {
               "name": "username",   // IAM user name
```

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```
                "password": "********",  // IAM user password
                "domain": {
                    "name": "domainname"  // Name of the account to which the IAM user belongs
                }
            }
        }
    },
    "scope": {
        "domain": {
            "name": "xxxxxxxx"    // Tenant name
        }
    }
  }
}
```

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

AK/SK Authentication

NOTE

- AK/SK authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token authentication is recommended.
- The AK/SK can either be permanent or temporary. If it is temporary, the **X-Security-Token** field must be included in the request header. The value is the security token of the temporary AK/SK.

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

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

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

NOTE

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

3.3 Response

Status Code

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

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

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

Response Header

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

Figure 3-2 shows the response header fields for the API used to **create an IAM user**. The **X-Subject-Token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.

NOTE

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

Figure 3-2 Header fields of the response to the request for creating an IAM user

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

(Optional) Response Body

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

The following shows part of the response body for the API used to **create an IAM user**.

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

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

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

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

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

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4 APIs

4.1 Resource List

4.1.1 Querying Resources of a Specific Type

Function

This API is used to query resources. To call this API, you must have the rms:resources:list permission. If you need to query ECSs (ecs.cloudservers), set the provider to ecs, and type to cloudservers for the request. For details about the cloud services (provider) and resource types (type), see the Supported Services and Resource Types section in the appendix.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/provider/{provider}/type/{type}/resources

Table 4-1 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
provider	Yes	String	Specifies the cloud service name. Maximum: **20**

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Parameter	Mandatory	Type	Description
type	Yes	String	Specifies the resource type. Maximum: **32**

Table 4-2 Query Parameters

Parameter	Mandatory	Type	Description
region_id	No	String	Specifies the region ID. Maximum: **36**
ep_id	No	String	Specifies the enterprise project ID. Maximum: **36**
tag	No	Map<String,String>	Specifies the tag.
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-3 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

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Response Parameters

Status code: 200

Table 4-4 Response body parameters

Parameter	Type	Description
resources	Array of **ResourceEntity** objects	Specifies the resource list.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-5 ResourceEntity

Parameter	Type	Description
id	String	Specifies the resource ID.
name	String	Specifies the resource name.
provider	String	Specifies the cloud service name.
type	String	Specifies the resource type.
region_id	String	Specifies the region ID.
project_id	String	Specifies the project ID in IaaS OpenStack.
project_name	String	Specifies the project name in IaaS OpenStack.
ep_id	String	Specifies the enterprise project ID.
ep_name	String	Specifies the name of an enterprise project.
checksum	String	Specifies the resource checksum.
created	String	Specifies the time when the resource was created.
updated	String	Specifies the time when the resource was updated.
provisioning_state	String	Specifies the status of a resource operation. Enumeration values include Succeeded, Failed, Canceled, and Processing.
tags	Map<String,String>	Specifies the resource tag.

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Parameter	Type	Description
properties	Map<String,Object>	Specifies the detailed properties of the resource.
state	String	Specifies the resource state. Possible values include Normal and Deleted.

Table 4-6 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-7 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-8 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-9 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying all ECSs in current account

```
GET https://{endpoint}/v1/resource-manager/domains/{domain_id}/provider/ecs/type/cloudServers/resources
```

Example Responses

Status code: 200

Operation succeeded.


```
{
  "page_info" : {
    "current_count" : 2,
    "next_marker" : null
  },
  "resources" : [ {
    "checksum" : "89ca775e88e04b2c200ccbf9e219ad0d7da42e3f446e5c953d443288134eec41",
    "created" : "2020-02-21T08:41:05Z",
    "ep_id" : "0",
    "ep_name" : "default",
    "id" : "7ffd8564-d88a-4bc9-ab51-d8b79a57d0e6",
    "name" : "ecs-test-1",
    "project_id" : "059b5e0a2500d5552fa1c00adada8c06",
    "project_name" : "project_name",
    "properties" : {
      "status" : "ACTIVE"
    },
    "provider" : "ecs",
    "provisioning_state" : "Succeeded",
    "region_id" : "regionid1",
    "tags" : {
      "use" : "test"
    },
    "type" : "cloudServers",
    "updated" : "2020-02-21T08:41:05Z"
  }, {
    "checksum" : "db2aad42804951c03a724b7501da9b6b4c14d319dd319d76bb7c658f256a37b0",
    "created" : "2020-02-24T08:43:05Z",
    "ep_id" : "0",
    "ep_name" : "default",
    "id" : "b63b33b7-f48c-4048-995b-0445d124a445",
    "name" : "ecs-test-2",
    "project_id" : "059b5e0a2500d5552fa1c00adada8c06",
    "project_name" : "project_name_1",
    "properties" : {
      "status" : "ACTIVE"
    },
    "provider" : "ecs",
    "provisioning_state" : "Succeeded",
    "region_id" : "regionid1",
    "tags" : {
      "use" : "test1"
    },
    "type" : "cloudServers",
```


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```
    "updated" : "2020-08-11T11:55:08Z"
  } ]
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListResourcesSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListResourcesRequest request = new ListResourcesRequest();
        request.withProvider("{provider}");
        request.withType("{type}");
        try {
            ListResourcesResponse response = client.listResources(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 GlobalCredentials
```

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```
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListResourcesRequest()
        request.provider = "{provider}"
        request.type = "{type}"
        response = client.list_resources(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListResourcesRequest{}
    request.Provider = "{provider}"
    request.Type = "{type}"
    response, err := client.ListResources(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.1.2 Querying Cloud Services

Function

Querying cloud services, resources, and regions

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/providers

Table 4-10 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Table 4-11 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Specifies the pagination offset. Minimum: **1** Maximum: **1000**
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
track	No	String	Specifies whether resources are collected by default. **tracked** indicates that resources are collected by default, and **untracked** indicates that resources are not collected by default.

Request Parameters

Table 4-12 Request header parameters

Parameter	Mandatory	Type	Description
X-Language	No	String	Specifies the language of the information to return. The default name is **zh-cn**, which can be **zh-cn** and **en-us**. Default: **zh-cn**
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

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Table 4-13 Response body parameters

Parameter	Type	Description
resource_providers	Array of **ResourceProviderResponse** objects	Specifies the list of cloud service details.
total_count	Integer	Specifies the total number of cloud services.

Table 4-14 ResourceProviderResponse

Parameter	Type	Description
provider	String	Specifies the cloud service name.
display_name	String	Specifies the display name of the cloud service. You can set the language by configuring **X-Language** in the request header.
category_display_name	String	Specifies the display name of the cloud service type. You can set the language by configuring **X-Language** in the request header.
resource_types	Array of **ResourceTypeResponse** objects	Specifies the resource type list.

Table 4-15 ResourceTypeResponse

Parameter	Type	Description
name	String	Specifies the resource type.
display_name	String	Specifies the display name of the resource type. You can set the language by configuring **X-Language** in the request header.
global	Boolean	Specifies whether the resource is a global resource.
regions	Array of strings	Specifies the list of supported regions.
console_endpoint_id	String	Specifies the console endpoint ID.
console_list_url	String	Specifies the URL of the resource list page on the console.

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Parameter	Type	Description
console_detail_url	String	Specifies the URL of the resource details page on the console.
track	String	Specifies whether resources are collected by default. **tracked** indicates that resources are collected by default, and **untracked** indicates that resources are not collected by default.

Status code: 500

Table 4-16 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.


```
{
  "total_count" : 2,
  "resource_providers" : [ {
    "provider" : "ecs",
    "display_name" : "ECS",
    "category_display_name" : "Compute",
    "resource_types" : [ {
      "name" : "cloudservers",
      "display_name" : "Cloud servers",
      "global" : false,
      "regions" : [ "regionid1", "regionid2", "regionid3", "regionid4", "regionid5", "regionid6" ],
      "console_endpoint_id" : "ecm",
      "console_list_url" : "#/ecs/manager/vmList",
      "console_detail_url" : "#/ecs/manager/ecsDetail?instanceId={id}",
      "track" : "tracked"
    } ]
  }, {
    "provider" : "vpc",
    "display_name" : "VPC",
    "category_display_name" : "Networking",
    "resource_types" : [ {
      "name" : "vpcs",
      "display_name" : "VPC",
      "global" : false,
      "regions" : [ "regionid1", "regionid2", "regionid3", "regionid4", "regionid5", "regionid6" ],
      "console_endpoint_id" : "vpc",
```


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```
    "console_list_url" : "#/vpcs",
    "console_detail_url" : "#/vpc/vpcmanager/vpcDetail/subnets?vpcId={id}",
    "track" : "tracked"
   }, {
    "name" : "bandwidths",
    "display_name" : "Shared bandwidth",
    "global" : false,
    "regions" : [ "regionid1", "regionid2", "regionid3", "regionid4", "regionid5", "regionid6" ],
    "console_endpoint_id" : "vpc",
    "console_list_url" : "#/vpc/vpcmanager/shareBandwidth",
    "console_detail_url" : "#/vpc/vpcmanager/shareBandwidth?bandwidthId={id}",
    "track" : "tracked"
   }, {
    "name" : "securityGroups",
    "display_name" : "Security groups",
    "global" : false,
    "regions" : [ "regionid1", "regionid2", "regionid5", "regionid6" ],
    "console_endpoint_id" : "vpc",
    "console_list_url" : "#/secGroups",
    "console_detail_url" : "#/vpc/vpcmanager/sgDetail/sgRules?instanceId={id}",
    "track" : "tracked"
   }, {
    "name" : "publicips",
    "display_name" : "EIPs",
    "global" : false,
    "regions" : [ "regionid1", "regionid2", "regionid3", "regionid4", "regionid6" ],
    "console_endpoint_id" : "vpc",
    "console_list_url" : "#/vpc/vpcmanager/eips",
    "console_detail_url" : "#/vpc/vpcmanager/eipDetailNew?eipId={id}",
    "track" : "tracked"
   } ]
  } ]
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListProvidersSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
```

```
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListProvidersRequest request = new ListProvidersRequest();
        try {
            ListProvidersResponse response = client.listProviders(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListProvidersRequest()
        response = client.list_providers(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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")

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListProvidersRequest{}
    response, err := client.ListProviders(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	Operation succeeded.
500	Server error.

Error Codes

See **Error Codes**.

4.1.3 Listing All Interconnected Cloud Services

Function

This API is used to query all cloud services and resources interconnected with Config.

Calling Method

For details, see **Calling APIs**.

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URI

GET /v1/resource-manager/domains/{domain_id}/all-providers

Table 4-17 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-18 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Specifies the pagination offset. Minimum: **1** Maximum: **1000**
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**

Request Parameters

Table 4-19 Request header parameters

Parameter	Mandatory	Type	Description
X-Language	No	String	Specifies the language of the information to return. The default name is **zh-cn**, which can be **zh-cn** and **en-us**. Default: **zh-cn**
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

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Response Parameters

Status code: 200

Table 4-20 Response body parameters

Parameter	Type	Description
resource_providers	Array of **ResourceProviderResponse** objects	Specifies the list of cloud service details.
total_count	Integer	Specifies the total number of cloud services.

Table 4-21 ResourceProviderResponse

Parameter	Type	Description
provider	String	Specifies the cloud service name.
display_name	String	Specifies the display name of the cloud service. You can set the language by configuring **X-Language** in the request header.
category_display_name	String	Specifies the display name of the cloud service type. You can set the language by configuring **X-Language** in the request header.
resource_types	Array of **ResourceTypeResponse** objects	Specifies the resource type list.

Table 4-22 ResourceTypeResponse

Parameter	Type	Description
name	String	Specifies the resource type.
display_name	String	Specifies the display name of the resource type. You can set the language by configuring **X-Language** in the request header.
global	Boolean	Specifies whether the resource is a global resource.
regions	Array of strings	Specifies the list of supported regions.

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Parameter	Type	Description
console_endpoint_id	String	Specifies the console endpoint ID.
console_list_url	String	Specifies the URL of the resource list page on the console.
console_detail_url	String	Specifies the URL of the resource details page on the console.
track	String	Specifies whether resources are collected by default. **tracked** indicates that resources are collected by default, and **untracked** indicates that resources are not collected by default.

Status code: 500

Table 4-23 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation successful.


```
{
  "total_count" : 2,
  "resource_providers" : [ {
    "provider" : "ecs",
    "display_name" : "Elastic Cloud Server (ECS)",
    "category_display_name" : "Compute",
    "resource_types" : [ {
      "name" : "cloudservers",
      "display_name" : "Cloud server",
      "global" : false,
      "regions" : null,
      "console_endpoint_id" : "ecm",
      "console_list_url" : "#/ecs/manager/vmList",
      "console_detail_url" : "#/ecs/manager/ecsDetail?instanceId={id}",
      "track" : "tracked"
    } ]
  }, {
    "provider" : "vpc",
    "display_name" : "Virtual Private Cloud (VPC)",
```


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```
    "category_display_name" : "Network",
    "resource_types" : [ {
      "name" : "vpcs",
      "display_name" : "VPC",
      "global" : false,
      "regions" : null,
      "console_endpoint_id" : "vpc",
      "console_list_url" : "#/vpcs",
      "console_detail_url" : "#/vpc/vpcmanager/vpcDetail/subnets?vpcId={id}",
      "track" : "tracked"
    }, {
      "name" : "bandwidths",
      "display_name" : "Shared bandwidth",
      "global" : false,
      "regions" : null,
      "console_endpoint_id" : "vpc",
      "console_list_url" : "#/vpc/vpcmanager/shareBandwidth",
      "console_detail_url" : "#/vpc/vpcmanager/shareBandwidth?bandwidthId={id}",
      "track" : "tracked"
    }, {
      "name" : "securityGroups",
      "display_name" : "Security group",
      "global" : false,
      "regions" : null,
      "console_endpoint_id" : "vpc",
      "console_list_url" : "#/secGroups",
      "console_detail_url" : "#/vpc/vpcmanager/sgDetail/sgRules?instanceId={id}",
      "track" : "tracked"
    }, {
      "name" : "publicips",
      "display_name" : "EIP",
      "global" : false,
      "regions" : null,
      "console_endpoint_id" : "vpc",
      "console_list_url" : "#/vpc/vpcmanager/eips",
      "console_detail_url" : "#/vpc/vpcmanager/eipDetailNew?eipId={id}",
      "track" : "tracked"
    } ]
  } ]
}
```


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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListAllProvidersSolution {

    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");
```

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

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

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAllProvidersRequest request = new ListAllProvidersRequest();
        try {
            ListAllProvidersResponse response = client.listAllProviders(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListAllProvidersRequest()
        response = client.list_all_providers(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListAllProvidersRequest{}
    response, err := client.ListAllProviders(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	Operation successful.
500	Internal server error.

Error Codes

See **Error Codes**.

4.1.4 Querying a Resource

Function

This API is used to query details of a resource based on its ID. To use this API, you must have the rms:resources:get permission. When you query resources of a

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certain type, you need to set the provider to the cloud service, and the type to the resource type in a request. For example, to query cloud servers (ecs.cloudservers), you need to set provider to ecs, and type to cloudservers.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/provider/{provider}/type/{type}/resources/{resource_id}

Table 4-24 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
provider	Yes	String	Specifies the cloud service name. Maximum: **20**
type	Yes	String	Specifies the resource type. Maximum: **32**
resource_id	Yes	String	Specifies the resource ID. Maximum: **512**

Request Parameters

Table 4-25 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

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Table 4-26 Response body parameters

Parameter	Type	Description
id	String	Specifies the resource ID.
name	String	Specifies the resource name.
provider	String	Specifies the cloud service name.
type	String	Specifies the resource type.
region_id	String	Specifies the region ID.
project_id	String	Specifies the project ID in IaaS OpenStack.
project_name	String	Specifies the project name in IaaS OpenStack.
ep_id	String	Specifies the enterprise project ID.
ep_name	String	Specifies the name of an enterprise project.
checksum	String	Specifies the resource checksum.
created	String	Specifies the time when the resource was created.
updated	String	Specifies the time when the resource was updated.
provisioning_state	String	Specifies the status of a resource operation. Enumeration values include Succeeded, Failed, Canceled, and Processing.
tags	Map<String,String>	Specifies the resource tag.
properties	Map<String,Object>	Specifies the detailed properties of the resource.
state	String	Specifies the resource state. Possible values include Normal and Deleted.

Status code: 400

Table 4-27 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 403

Table 4-28 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-29 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-30 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

```
GET https://{endpoint}/v1/resource-manager/domains/059b5c937100d3e40ff0c00a7675a0a0/provider/ecs/type/cloudservers/resources/00337e93-82d1-40ca-911f-07cff94587cc
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "id" : "00337e93-82d1-40ca-911f-07cff94587cc",
  "name" : "dev_machine",
  "provider" : "ecs",
  "type" : "cloudservers",
  "region_id" : "regionid4",
  "project_id" : "39c2af998c334ed6bcbb75b27318f7cc",
  "project_name" : "project_name",
  "ep_id" : "0",
  "ep_name" : "default",
  "checksum" : "3a0075409edb156a74e041b7479f0d5993be1d62b4ccd2af3a1dd01ec80c8b39",
  "created" : "2019-11-20T06:24:43Z",
```

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```
 "updated" : "2020-07-17T08:30:52Z",
 "provisioning_state" : "Succeeded",
 "tags" : {
  "usage" : "Display"
 },
 "properties" : {
  "status" : "ACTIVE",
  "osextsrvattr" : {
   "host" : "regionid4a-pod01.regionid4",
   "instanceName" : "instance-0009cb50",
   "hostName" : "dev-machine",
   "hypervisorHostName" : "nova001@2",
   "kernelId" : "",
   "ramdiskId" : "",
   "reservationId" : "r-hhux9o7m",
   "rootDeviceName" : "/dev/vda",
   "launchIndex" : 0
  },
  "progress" : 0,
  "hostId" : "3c381dcfc3e628c1a504ad94ba8c4e8908130645527370133f32921",
  "hostName" : "dev-machine",
  "hostStatus" : "UP",
  "locked" : false,
  "userId" : "e311190745e94cc09d62d5779e55912d",
  "flavor" : {
   "disk" : "0",
   "name" : "Si2.large.2",
   "id" : "Si2.large.2",
   "vcpus" : "2",
   "ram" : "4096"
  },
  "securityGroup" : [ {
   "name" : "default",
   "id" : "5d55b397-ad9c-462d-af72-6599cb941c49"
  } ],
  "addresses" : [ {
   "OsExtIpsType" : "fixed",
   "OsExtIpsPortId" : "f2fa750a-e2ab-434f-b14a-bfe7c8cea0cc",
   "addr" : "192.168.1.212",
   "version" : 4,
   "OsExtIpsMacAddr" : "fa:16:3e:6e:cf:33"
  } ],
  "accessIpv4" : "",
  "accessIpv6" : "",
  "configDrive" : "",
  "metadata" : {
   "chargingMode" : "0",
   "meteringImageType" : "private",
   "imageName" : "resource-manager-devmachine-template",
   "meteringImageId" : "9bcaace4-b8da-4008-a352-3f72e1f25333",
   "meteringResourcesPerCode" : "si2.large.2.linux",
   "vpcId" : "cf403ef5-90df-4e7e-829d-5d21b1cb7d1e",
   "osBit" : "64",
   "osType" : "Linux"
  },
  "OsExtStsVmState" : "active",
  "OsExtStsPowerState" : 1,
  "ExtVolumesAttached" : [ {
   "bootIndex" : "0",
   "id" : "010d940e-a73e-417b-85ae-51b76c0d2ba0",
   "device" : "/dev/vda"
  } ],
  "OsDcfDiskConfig" : "MANUAL",
  "OsSrvUsgLaunchedAt" : "2019-11-20T06:24:56.000000",
  "OsExtAz" : "regionid4a"
 }
}
```


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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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowResourceByIdSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowResourceByIdRequest request = new ShowResourceByIdRequest();
        request.withProvider("{provider}");
        request.withType("{type}");
        request.withResourceId("{resource_id}");
        try {
            ShowResourceByIdResponse response = client.showResourceById(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowResourceByIdRequest()
        request.provider = "{provider}"
        request.type = "{type}"
        request.resource_id = "{resource_id}"
        response = client.show_resource_by_id(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowResourceByIdRequest{}
    request.Provider = "{provider}"
    request.Type = "{type}"
    request.ResourceId = "{resource_id}"
    response, err := client.ShowResourceById(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.1.5 Querying All Resources Recorded by the Resource Recorder

Function

Querying all resources recorded by the resource recorder. To call this API, you must have the rms:resources:list permission.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/tracked-resources

Table 4-31 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Table 4-32 Query Parameters

Parameter	Mandatory	Type	Description
region_id	No	String	Specifies the region ID. Maximum: **36**
ep_id	No	String	Specifies the enterprise project ID. Maximum: **36**
type	No	String	Specifies the resource type in the format of **provider.type**. Maximum: **40**
limit	No	Integer	Specifies the maximum number of resources to return. Minimum: **1** Maximum: **200** Default: **100**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
id	No	String	Specifies the resource ID. Maximum: **512**
name	No	String	Specifies the resource name. Maximum: **256**
tags	No	Array of strings	Specifies tags. The format is **key** or **key=value**. Array Length: **1 - 5**
resource_deleted	No	Boolean	Indicating whether deleted resources need to be returned. This parameter is set to false by default. Default: **false**

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Request Parameters

Table 4-33 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-34 Response body parameters

Parameter	Type	Description
resources	Array of **ResourceEntity** objects	Specifies the resource list.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-35 ResourceEntity

Parameter	Type	Description
id	String	Specifies the resource ID.
name	String	Specifies the resource name.
provider	String	Specifies the cloud service name.
type	String	Specifies the resource type.
region_id	String	Specifies the region ID.
project_id	String	Specifies the project ID in IaaS OpenStack.
project_name	String	Specifies the project name in IaaS OpenStack.
ep_id	String	Specifies the enterprise project ID.
ep_name	String	Specifies the name of an enterprise project.

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Parameter	Type	Description
checksum	String	Specifies the resource checksum.
created	String	Specifies the time when the resource was created.
updated	String	Specifies the time when the resource was updated.
provisioning_state	String	Specifies the status of a resource operation. Enumeration values include Succeeded, Failed, Canceled, and Processing.
tags	Map<String,String>	Specifies the resource tag.
properties	Map<String,Object>	Specifies the detailed properties of the resource.
state	String	Specifies the resource state. Possible values include Normal and Deleted.

Table 4-36 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-37 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-38 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-39 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

- Querying all resources in the current account

  ```
  GET https://{endpoint}/v1/resource-manager/domains/{domain_id}/tracked-resources
  ```

- Querying resources in the **default** enterprise project. 100 records are returned by default.

  ```
  GET https://{endpoint}/v1/resource-manager/domains/{domain_id}/tracked-resources?
  limit=100&ep_id=0
  ```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "resources" : [ {
    "id" : "3ccd9191-6a5e-4939-a971-4652db18b370",
    "name" : "elb-265a",
    "provider" : "elb",
    "type" : "loadbalancers",
    "region_id" : "regionid1",
    "project_id" : "05498e12458025102ff5c0061a584a9f",
    "project_name" : "regionid1_region_service",
    "ep_id" : "0",
    "ep_name" : "default",
    "checksum" : "6e0271b107b764b19acb235f45c0d852f72104fe1d4b32970686e7eae8e87bf4",
    "created" : "2020-02-29T09:39:19Z",
    "updated" : "2020-02-29T09:39:19Z",
    "provisioning_state" : "Succeeded",
    "tags" : { },
    "properties" : {
      "tenant_id" : "05498e12458025102ff5c0061a584a9f",
      "listeners" : [ {
        "id" : "37de3be0-1803-43e2-9bb5-243b4b30b771"
      } ],
      "provisioning_status" : "ACTIVE",
      "description" : "",
      "pools" : [ {
```

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```
      "id" : "a7ae4e7f-3e97-48ea-bdbc-334684aafac4"
    } ],
    "created_at" : "2020-02-29T09:39:19"
  }
 } ],
 "page_info" : {
  "current_count" : 1,
  "next_marker" : "CAESJhIkNGEzNWYxMmYtZjM0NC00YTNkLWE1NDEtZWFjMDBiNDIzMjg1GgTGWJss"
 }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListTrackedResourcesSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListTrackedResourcesRequest request = new ListTrackedResourcesRequest();
        try {
            ListTrackedResourcesResponse response = client.listTrackedResources(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListTrackedResourcesRequest()
        response = client.list_tracked_resources(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

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```
    response, err := client.ListTrackedResources(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	Operation succeeded.
400	Invalid parameter
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.1.6 Querying How Many Resources Are Recorded by the Resource Recorder

Function

Querying how many resources are recorded by the resource recorder in the current account

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/tracked-resources/count

Table 4-40 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Table 4-41 Query Parameters

Parameter	Mandatory	Type	Description
id	No	String	Specifies the resource ID. Maximum: **512**
name	No	String	Specifies the resource name. Maximum: **256**
type	No	Array of strings	Specifies resource types in the format of **provider.type**. Array Length: **1 - 100**
region_id	No	Array of strings	Specifies region IDs. Array Length: **1 - 10**
ep_id	No	Array of strings	Specifies enterprise project IDs. Array Length: **1 - 10**
project_id	No	Array of strings	Specifies the project ID. Array Length: **1 - 10**
tags	No	Array of strings	Specifies tags. The format is **key** or **key=value**. Array Length: **1 - 5**
resource_deleted	No	Boolean	Indicating whether deleted resources need to be returned. This parameter is set to false by default. Default: **false**

Request Parameters

Table 4-42 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

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Response Parameters

Status code: 200

Table 4-43 Response body parameters

Parameter	Type	Description
total_count	Integer	Specifies the total number of resources.

Status code: 400

Table 4-44 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-45 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-46 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying how many resources are recorded by the resource recorder in the current account

```
GET https://{endpoint}/v1/resource-manager/domains/{domain_id}/tracked-resources/count
```

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Example Responses

Status code: 200

Operation succeeded.

```
{
  "total_count" : 345
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class CountTrackedResourcesSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CountTrackedResourcesRequest request = new CountTrackedResourcesRequest();
        try {
            CountTrackedResourcesResponse response = client.countTrackedResources(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CountTrackedResourcesRequest()
        response = client.count_tracked_resources(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

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```
    response, err := client.CountTrackedResources(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	Operation succeeded.
400	Invalid parameter.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.1.7 Querying Resource Tags Recorded by the Resource Recorder

Function

Querying resource tags recorded by the resource recorder in the current account

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/tracked-resources/tags

Table 4-47 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Table 4-48 Query Parameters

Parameter	Mandatory	Type	Description
key	No	String	Specifies the name of the tag key. Maximum: **128**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
limit	No	Integer	Specifies the maximum number of resources to return. Minimum: **1** Maximum: **200** Default: **100**
resource_deleted	No	Boolean	Indicating whether deleted resources need to be returned. This parameter is set to false by default. Default: **false**

Request Parameters

Table 4-49 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

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Table 4-50 Response body parameters

Parameter	Type	Description
tags	Array of **TagEntity** objects	Specifies tags.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-51 TagEntity

Parameter	Type	Description
key	String	Specifies the tag key.
value	Array of strings	Specifies tag values.

Table 4-52 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-53 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-54 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-55 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying resource tags recorded by the resource recorder in the current account

```
GET https://{endpoint}/v1/resource-manager/domains/{domain_id}/tracked-resources/tags
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "tags" : [ {
    "key" : "chloe",
    "value" : [ "a", "b" ]
  } ]
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListTrackedResourceTagsSolution {
```

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```
    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListTrackedResourceTagsRequest request = new ListTrackedResourceTagsRequest();
        try {
            ListTrackedResourceTagsResponse response = client.listTrackedResourceTags(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListTrackedResourceTagsRequest()
        response = client.list_tracked_resource_tags(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListTrackedResourceTagsRequest{}
    response, err := client.ListTrackedResourceTags(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	Operation succeeded.
400	Invalid parameter.
403	User authentication failed.
500	Server error.

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Error Codes

See **Error Codes**.

4.1.8 Querying Resource Overview Recorded by the Resource Recorder

Function

Querying resource overview recorded by the resource recorder in the current account

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/tracked-resources/summary

Table 4-56 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-57 Query Parameters

Parameter	Mandatory	Type	Description
name	No	String	Specifies the resource name. Maximum: **256**
type	No	Array of strings	Specifies resource types in the format of **provider.type**. Array Length: **1 - 100**
region_id	No	Array of strings	Specifies region IDs. Array Length: **1 - 10**
ep_id	No	Array of strings	Specifies enterprise project IDs. Array Length: **1 - 10**
project_id	No	Array of strings	Specifies the project ID. Array Length: **1 - 10**

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Parameter	Mandatory	Type	Description
tags	No	Array of strings	Specifies tags. The format is **key** or **key=value**. Array Length: **1 - 5**
resource_deleted	No	Boolean	Indicating whether deleted resources need to be returned. This parameter is set to false by default. Default: **false**

Request Parameters

Table 4-58 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-59 Response body parameters

Parameter	Type	Description
[items]	Array of **ResourceSummaryResponseItem** objects	Specifies the list of resource summary information.

Table 4-60 ResourceSummaryResponseItem

Parameter	Type	Description
provider	String	Specifies the cloud service name.
types	Array of **types** objects	Specifies the resource type list.

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Table 4-61 types

Parameter	Type	Description
type	String	Specifies the resource type.
regions	Array of **regions** objects	Specifies the regions.

Table 4-62 regions

Parameter	Type	Description
region_id	String	Specifies the region ID.
count	Long	Specifies the number of resources of this type in the current region.

Status code: 400

Table 4-63 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-64 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-65 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Example Requests

Querying resource overview recorded by the resource recorder in the current account

```
GET https://{endpoint}/v1/resource-manager/domains/{domain_id}/tracked-resources/summary
```

Example Responses

Status code: 200

Successful Operation

```
[ {
  "provider" : "ecs",
  "types" : [ {
    "type" : "buckets",
    "regions" : [ {
      "region_id" : "regionid1",
      "count" : 5
    } ]
  } ]
} ]
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class CollectTrackedResourcesSummarySolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CollectTrackedResourcesSummaryRequest request = new CollectTrackedResourcesSummaryRequest();
        try {
            CollectTrackedResourcesSummaryResponse response = client.collectTrackedResourcesSummary(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

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CollectTrackedResourcesSummaryRequest()
        response = client.collect_tracked_resources_summary(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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")

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CollectTrackedResourcesSummaryRequest{}
    response, err := client.CollectTrackedResourcesSummary(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	Successful Operation
400	Invalid Param Supplied
403	Authentication Failed
500	Internal Error

Error Codes

See **Error Codes**.

4.1.9 Querying a Specific Resource Recorded by the Resource Recorder

Function

Querying a specific resource recorded by the resource recorder in the current account

Calling Method

For details, see **Calling APIs**.

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URI

GET /v1/resource-manager/domains/{domain_id}/tracked-resources/{resource_id}

Table 4-66 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
resource_id	Yes	String	Specifies the resource ID. Maximum: **512**

Request Parameters

Table 4-67 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-68 Response body parameters

Parameter	Type	Description
id	String	Specifies the resource ID.
name	String	Specifies the resource name.
provider	String	Specifies the cloud service name.
type	String	Specifies the resource type.
region_id	String	Specifies the region ID.
project_id	String	Specifies the project ID in IaaS OpenStack.
project_name	String	Specifies the project name in IaaS OpenStack.

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Parameter	Type	Description
ep_id	String	Specifies the enterprise project ID.
ep_name	String	Specifies the name of an enterprise project.
checksum	String	Specifies the resource checksum.
created	String	Specifies the time when the resource was created.
updated	String	Specifies the time when the resource was updated.
provisioning_state	String	Specifies the status of a resource operation. Enumeration values include Succeeded, Failed, Canceled, and Processing.
tags	Map<String,String>	Specifies the resource tag.
properties	Map<String,Object>	Specifies the detailed properties of the resource.
state	String	Specifies the resource state. Possible values include Normal and Deleted.

Status code: 400

Table 4-69 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-70 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-71 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying a specific resource recorded by the resource recorder in the current account

```
GET https://{endpoint}/v1/resource-manager/domains/{domain_id}/tracked-resources/{resource_id}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "id" : "00337e93-82d1-40ca-911f-07cff94587cc",
  "name" : "dev_machine",
  "provider" : "vpc",
  "type" : "vpcs",
  "region_id" : "regionid1",
  "project_id" : "39c2af998c334ed6bcbb75b27318f7cc",
  "project_name" : "regionid1",
  "ep_id" : "0",
  "ep_name" : "default",
  "checksum" : "3a0075409edb156a74e041b7479f0d5993be1d62b4ccd2af3a1dd01ec80c8b39",
  "created" : "2019-11-20T06:24:43Z",
  "updated" : "2020-07-17T08:30:52Z",
  "provisioning_state" : "Succeeded",
  "tags" : {
    "usage" : "mm1"
  },
  "properties" : {
    "cidr" : "192.168.0.0/16",
    "status" : "OK"
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;
```

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```
public class ShowTrackedResourceDetailSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowTrackedResourceDetailRequest request = new ShowTrackedResourceDetailRequest();
        request.withResourceId("{resource_id}");
        try {
            ShowTrackedResourceDetailResponse response = client.showTrackedResourceDetail(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowTrackedResourceDetailRequest()
        request.resource_id = "{resource_id}"
        response = client.show_tracked_resource_detail(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

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowTrackedResourceDetailRequest{}
    request.ResourceId = "{resource_id}"
    response, err := client.ShowTrackedResourceDetail(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	Operation succeeded.
400	Invalid parameter.
403	User authentication failed.

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Status Code	Description
500	Server error.

Error Codes

See **Error Codes**.

4.1.10 Querying All Resources Under an Account

Function

This API is used to query all resources under your account and you must have the rms:resources:list permission.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/all-resources

Table 4-72 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-73 Query Parameters

Parameter	Mandatory	Type	Description
region_id	No	String	Specifies the region ID. Maximum: **36**
ep_id	No	String	Specifies the enterprise project ID. Maximum: **36**
type	No	String	Specifies the resource type in the format of **provider.type**. Maximum: **40**

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Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of resources to return. Minimum: **1** Maximum: **200** Default: **100**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
id	No	String	Specifies the resource ID. Maximum: **512**
name	No	String	Specifies the resource name. Maximum: **256**
tags	No	Array of strings	Specifies tags. The format is **key** or **key=value**. Array Length: **1 - 5**

Request Parameters

Table 4-74 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

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Table 4-75 Response body parameters

Parameter	Type	Description
resources	Array of **ResourceEntity** objects	Specifies the resource list.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-76 ResourceEntity

Parameter	Type	Description
id	String	Specifies the resource ID.
name	String	Specifies the resource name.
provider	String	Specifies the cloud service name.
type	String	Specifies the resource type.
region_id	String	Specifies the region ID.
project_id	String	Specifies the project ID in IaaS OpenStack.
project_name	String	Specifies the project name in IaaS OpenStack.
ep_id	String	Specifies the enterprise project ID.
ep_name	String	Specifies the name of an enterprise project.
checksum	String	Specifies the resource checksum.
created	String	Specifies the time when the resource was created.
updated	String	Specifies the time when the resource was updated.
provisioning_state	String	Specifies the status of a resource operation. Enumeration values include Succeeded, Failed, Canceled, and Processing.
tags	Map<String,String>	Specifies the resource tag.
properties	Map<String,Object>	Specifies the detailed properties of the resource.
state	String	Specifies the resource state. Possible values include Normal and Deleted.

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Table 4-77 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-78 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-79 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-80 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Example Requests

- Querying all resources under your account

  ```
  GET https://{endpoint}/v1/resource-manager/domains/{domain_id}/all-resources
  ```

- Querying your resources in the **default** enterprise project and setting to return the first 100 records

  ```
  GET https://{endpoint}/v1/resource-manager/domains/{domain_id}/all-resources?limit=100&ep_id=0
  ```

Example Responses

Status code: 200

Operation succeeded.


```
{
  "resources" : [ {
    "id" : "3ccd9191-6a5e-4939-a971-4652db18b370",
    "name" : "elb-265a",
    "provider" : "elb",
    "type" : "loadbalancers",
    "region_id" : "regionid1",
    "project_id" : "05498e12458025102ff5c0061a584a9f",
    "project_name" : "regionid1_region_service",
    "ep_id" : "0",
    "ep_name" : "default",
    "checksum" : "6e0271b107b764b19acb235f45c0d852f72104fe1d4b32970686e7eae8e87bf4",
    "created" : "2020-02-29T09:39:19Z",
    "updated" : "2020-02-29T09:39:19Z",
    "provisioning_state" : "Succeeded",
    "tags" : { },
    "properties" : {
      "tenant_id" : "05498e12458025102ff5c0061a584a9f",
      "listeners" : [ {
        "id" : "37de3be0-1803-43e2-9bb5-243b4b30b771"
      } ],
      "provisioning_status" : "ACTIVE",
      "description" : ""
    }
  }, {
    "id" : "a6e56d05501944d3b2507ba506a43744",
    "name" : "console",
    "provider" : "cdn",
    "type" : "domains",
    "region_id" : "global",
    "project_id" : "",
    "project_name" : "",
    "ep_id" : "0",
    "ep_name" : "default",
    "checksum" : "56afa8b76428f90e9abfbe5cbf33535d8816166114d32eeb119658d6c59eceda",
    "created" : "2020-01-04T13:42:37Z",
    "updated" : "2020-01-15T04:23:01Z",
    "provisioning_state" : "Succeeded",
    "tags" : { },
    "properties" : {
      "domain_name" : "console",
      "domain_status" : "offline",
      "business_type" : "WEB",
      "modify_time" : 1579062181463,
      "cname" : "console"
    }
  } ],
  "page_info" : {
    "current_count" : 2,
    "next_marker" : null
  }
}
```


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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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListAllResourcesSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAllResourcesRequest request = new ListAllResourcesRequest();
        try {
            ListAllResourcesResponse response = client.listAllResources(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListAllResourcesRequest()
        response = client.list_all_resources(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListAllResourcesRequest{}
    response, err := client.ListAllResources(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	Operation succeeded.
400	Invalid parameters.
403	User Authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.1.11 Querying a Resource Under an Account

Function

This API is used to query a resource under your account.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/all-resources/{resource_id}

Table 4-81 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
resource_id	Yes	String	Specifies the resource ID. Maximum: **512**

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Request Parameters

Table 4-82 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-83 Response body parameters

Parameter	Type	Description
id	String	Specifies the resource ID.
name	String	Specifies the resource name.
provider	String	Specifies the cloud service name.
type	String	Specifies the resource type.
region_id	String	Specifies the region ID.
project_id	String	Specifies the project ID in IaaS OpenStack.
project_name	String	Specifies the project name in IaaS OpenStack.
ep_id	String	Specifies the enterprise project ID.
ep_name	String	Specifies the name of an enterprise project.
checksum	String	Specifies the resource checksum.
created	String	Specifies the time when the resource was created.
updated	String	Specifies the time when the resource was updated.
provisioning_state	String	Specifies the status of a resource operation. Enumeration values include Succeeded, Failed, Canceled, and Processing.

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Parameter	Type	Description
tags	Map<String,String>	Specifies the resource tag.
properties	Map<String,Object>	Specifies the detailed properties of the resource.
state	String	Specifies the resource state. Possible values include Normal and Deleted.

Status code: 400

Table 4-84 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-85 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-86 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

```
GET https://{endpoint}/v1/resource-manager/domains/059b5c937100d3e40ff0c00a7675a0a0/all-resources/00337e93-82d1-40ca-911f-07cff94587cc
```

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Example Responses

Status code: 200

Operation succeeded.


```
{
  "id" : "00337e93-82d1-40ca-911f-07cff94587cc",
  "name" : "dev_machine",
  "provider" : "ecs",
  "type" : "cloudservers",
  "region_id" : "regionid4",
  "project_id" : "39c2af998c334ed6bcbb75b27318f7cc",
  "project_name" : "project_name",
  "ep_id" : "0",
  "ep_name" : "chloe",
  "checksum" : "3a0075409edb156a74e041b7479f0d5993be1d62b4ccd2af3a1dd01ec80c8b39",
  "created" : "2019-11-20T06:24:43Z",
  "updated" : "2020-07-17T08:30:52Z",
  "provisioning_state" : "Succeeded",
  "tags" : {
    "usage" : "Display"
  },
  "properties" : {
    "status" : "ACTIVE",
    "osextsrvattr" : {
      "host" : "regionid4a-pod01.regionid4",
      "instanceName" : "instance-0009cb50",
      "hostName" : "dev-machine",
      "hypervisorHostName" : "nova001@2",
      "kernelId" : "",
      "ramdiskId" : "",
      "reservationId" : "r-hhux9o7m",
      "rootDeviceName" : "/dev/vda",
      "launchIndex" : 0
    },
    "progress" : 0,
    "hostId" : "3c381dcfc3e628c1a504ad94ba8c4e8908130645527370133f32921",
    "hostName" : "dev-machine",
    "hostStatus" : "UP",
    "locked" : false,
    "userId" : "e311190745e94cc09d62d5779e55912d",
    "flavor" : {
      "disk" : "0",
      "name" : "Si2.large.2",
      "id" : "Si2.large.2",
      "vcpus" : "2",
      "ram" : "4096"
    },
    "securityGroup" : [ {
      "name" : "default",
      "id" : "5d55b397-ad9c-462d-af72-6599cb941c49"
    } ],
    "addresses" : [ {
      "OsExtIpsType" : "fixed",
      "OsExtIpsPortId" : "f2fa750a-e2ab-434f-b14a-bfe7c8cea0cc",
      "addr" : "192.168.1.212",
      "version" : 4,
      "OsExtIpsMacAddr" : "fa:16:3e:6e:cf:33"
    } ],
    "accessIpv4" : "",
    "accessIpv6" : "",
    "configDrive" : "",
    "metadata" : {
      "chargingMode" : "0",
      "meteringImageType" : "private",
      "imageName" : "resource-manager-devmachine-template",
      "meteringImageId" : "9bcaace4-b8da-4008-a352-3f72e1f25333",
      "meteringResourcesPerCode" : "si2.large.2.linux",
```


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```
    "vpcId" : "cf403ef5-90df-4e7e-829d-5d21b1cb7d1e",
    "osBit" : "64",
    "osType" : "Linux"
  },
  "OsExtStsVmState" : "active",
  "OsExtStsPowerState" : 1,
  "ExtVolumesAttached" : [ {
    "bootIndex" : "0",
    "id" : "010d940e-a73e-417b-85ae-51b76c0d2ba0",
    "device" : "/dev/vda"
  } ],
  "OsDcfDiskConfig" : "MANUAL",
  "OsSrvUsgLaunchedAt" : "2019-11-20T06:24:56.000000",
  "OsExtAz" : "regionid4a"
 }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowResourceDetailSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowResourceDetailRequest request = new ShowResourceDetailRequest();
        request.withResourceId("{resource_id}");
        try {
            ShowResourceDetailResponse response = client.showResourceDetail(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowResourceDetailRequest()
        request.resource_id = "{resource_id}"
        response = client.show_resource_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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
```

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```
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowResourceDetailRequest{}
    request.ResourceId = "{resource_id}"
    response, err := client.ShowResourceDetail(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.1.12 Querying Resource Tags

Function

This API is used to query all resource tags under your account.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/all-resources/tags

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Table 4-87 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-88 Query Parameters

Parameter	Mandatory	Type	Description
key	No	String	Specifies the name of the tag key. Maximum: **128**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
limit	No	Integer	Specifies the maximum number of resources to return. Minimum: **1** Maximum: **200** Default: **100**

Request Parameters

Table 4-89 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

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Table 4-90 Response body parameters

Parameter	Type	Description
tags	Array of **TagEntity** objects	Specifies tags.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-91 TagEntity

Parameter	Type	Description
key	String	Specifies the tag key.
value	Array of strings	Specifies tag values.

Table 4-92 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-93 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-94 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-95 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

```
GET https://{endpoint}/v1/resource-manager/domains/059b5c937100d3e40ff0c00a7675a0a0/all-resources/tags
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "tags" : [ {
    "key" : "chloe",
    "value" : [ "a", "b" ]
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;
```

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```
public class ListAllTagsSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAllTagsRequest request = new ListAllTagsRequest();
        try {
            ListAllTagsResponse response = client.listAllTags(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListAllTagsRequest()
        response = client.list_all_tags(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
```

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```
        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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListAllTagsRequest{}
    response, err := client.ListAllTags(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
500	Server error.

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Error Codes

See **Error Codes**.

4.1.13 Querying the Number of Resources

Function

This API is used to query the number of resources in an account.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/all-resources/count

Table 4-96 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-97 Query Parameters

Parameter	Mandatory	Type	Description
id	No	String	Specifies the resource ID. Maximum: **512**
name	No	String	Specifies the resource name. Maximum: **256**
type	No	Array of strings	Specifies resource types in the format of **provider.type**. Array Length: **1 - 100**
region_id	No	Array of strings	Specifies region IDs. Array Length: **1 - 10**
ep_id	No	Array of strings	Specifies enterprise project IDs. Array Length: **1 - 10**
project_id	No	Array of strings	Specifies the project ID. Array Length: **1 - 10**

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Parameter	Mandatory	Type	Description
tags	No	Array of strings	Specifies tags. The format is **key** or **key=value**. Array Length: **1 - 5**

Request Parameters

Table 4-98 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-99 Response body parameters

Parameter	Type	Description
total_count	Integer	Specifies the total number of resources.

Status code: 400

Table 4-100 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-101 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-102 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

```
GET https://{endpoint}/v1/resource-manager/domains/059b5c937100d3e40ff0c00a7675a0a0/all-resources/count
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "total_count" : 345
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class CountAllResourcesSolution {

    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");

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

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CountAllResourcesRequest request = new CountAllResourcesRequest();
        try {
            CountAllResourcesResponse response = client.countAllResources(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CountAllResourcesRequest()
        response = client.count_all_resources(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CountAllResourcesRequest{}
    response, err := client.CountAllResources(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

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4.1.14 Querying Resource Overview

Function

This API is used to query resource overview.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/all-resources/summary

Table 4-103 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-104 Query Parameters

Parameter	Mandatory	Type	Description
name	No	String	Specifies the resource name. Maximum: **256**
type	No	Array of strings	Specifies resource types in the format of **provider.type**. Array Length: **1 - 100**
region_id	No	Array of strings	Specifies region IDs. Array Length: **1 - 10**
ep_id	No	Array of strings	Specifies enterprise project IDs. Array Length: **1 - 10**
project_id	No	Array of strings	Specifies the project ID. Array Length: **1 - 10**
tags	No	Array of strings	Specifies tags. The format is **key** or **key=value**. Array Length: **1 - 5**

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Request Parameters

Table 4-105 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-106 Response body parameters

Parameter	Type	Description
[items]	Array of **ResourceSummaryResponseItem** objects	Specifies the list of resource summary information.

Table 4-107 ResourceSummaryResponseItem

Parameter	Type	Description
provider	String	Specifies the cloud service name.
types	Array of **types** objects	Specifies the resource type list.

Table 4-108 types

Parameter	Type	Description
type	String	Specifies the resource type.
regions	Array of **regions** objects	Specifies the regions.

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Table 4-109 regions

Parameter	Type	Description
region_id	String	Specifies the region ID.
count	Long	Specifies the number of resources of this type in the current region.

Status code: 400

Table 4-110 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-111 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-112 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

```
GET https://{endpoint}/v1/resource-manager/domains/059b5c937100d3e40ff0c00a7675a0a0/all-resources/summary
```

Example Responses

Status code: 200

Operation succeeded.

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```
[ {
  "provider" : "obs",
  "types" : [ {
    "type" : "buckets",
    "regions" : [ {
      "region_id" : "regionid1",
      "count" : 5
    } ]
  } ]
}, {
  "provider" : "ecs",
  "types" : [ {
    "type" : "cloudservers",
    "regions" : [ {
      "region_id" : "regionid2",
      "count" : 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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class CollectAllResourcesSummarySolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CollectAllResourcesSummaryRequest request = new CollectAllResourcesSummaryRequest();
        try {
            CollectAllResourcesSummaryResponse response = client.collectAllResourcesSummary(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

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CollectAllResourcesSummaryRequest()
        response = client.collect_all_resources_summary(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()
```

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```
    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CollectAllResourcesSummaryRequest{}
    response, err := client.CollectAllResourcesSummary(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.2 Resource Recorder

4.2.1 Querying the Resource Recorder

Function

This API is used to query details about the resource recorder.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/tracker-config

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Table 4-113 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Request Parameters

Table 4-114 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-115 Response body parameters

Parameter	Type	Description
channel	**ChannelConfigBody** object	Specifies configurations for the tracker.
selector	**SelectorConfigBody** object	Specifies the selector.
retention_period_in_days	Integer	Specifies the number of days for data storage.
agency_name	String	Specifies the IAM agency name.
domain_id	String	Account ID
frozen_status	**FrozenStatus** object	the tracker frozen status

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Table 4-116 ChannelConfigBody

Parameter	Type	Description
smn	**TrackerSMNChannelConfigBody** object	Specifies SMN related configurations. For details about how to grant other accounts the permissions for publishing messages to SMN topics, see **Cross-Account Authorization** (**Resource Recorder** > **Enabling, Configuring, or Modifying the Resource Recorder**) in the *User Guide*.
obs	**TrackerOBSChannelConfigBody** object	Specifies OBS related configurations. For details about how to grant other accounts the permissions for dumping files to OBS buckets, see Cross-Account Authorization (Resource Recorder > Enabling, Configuring, or Modifying the Resource Recorder) in the User Guide.

Table 4-117 TrackerSMNChannelConfigBody

Parameter	Type	Description
region_id	String	Specifies the region ID of the SMN topic.
project_id	String	Specifies the project ID of the user.
topic_urn	String	Specifies the SMN topic URN.

Table 4-118 TrackerOBSChannelConfigBody

Parameter	Type	Description
bucket_name	String	Specifies the OBS bucket name. Maximum: **63**
bucket_prefix	String	OBS bucket prefix Maximum: **256**
region_id	String	Specifies the region ID.

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Table 4-119 SelectorConfigBody

Parameter	Type	Description
all_supported	Boolean	Specifies whether to select all supported resources.
resource_types	Array of strings	Specifies the resource type list.

Table 4-120 FrozenStatus

Parameter	Type	Description
is_frozen	Boolean	is frozen
frozen_scene	Array of strings	frozen scene

Status code: 400

Table 4-121 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-122 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-123 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 500

Table 4-124 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "agency_name" : "rms_tracker_agency",
  "channel" : {
    "obs" : {
      "bucket_name" : "rmtest",
      "region_id" : "regionid1",
      "bucket_prefix" : "log_dir"
    },
    "smn" : {
      "project_id" : "059b5e0a2500d5552fa1c00adada8c06",
      "region_id" : "regionid1",
      "topic_urn" : "urn:smn:regionid1:059b5e0a2500d5552fa1c00adada8c06:agencytest"
    }
  },
  "selector" : {
    "all_supported" : true,
    "resource_types" : [ ]
  },
  "retention_period_in_days" : 2557,
  "domain_id" : "string",
  "frozen_status" : null
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;
```

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```
public class ShowTrackerConfigSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowTrackerConfigRequest request = new ShowTrackerConfigRequest();
        try {
            ShowTrackerConfigResponse response = client.showTrackerConfig(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowTrackerConfigRequest()
        response = client.show_tracker_config(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
```

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```
        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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowTrackerConfigRequest{}
    response, err := client.ShowTrackerConfig(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
404	No resource recorder found.
500	Server error.

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Error Codes

See **Error Codes**.

4.2.2 Deleting the Resource Recorder

Function

This API is used to delete the resource recorder.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1/resource-manager/domains/{domain_id}/tracker-config

Table 4-125 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Request Parameters

Table 4-126 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Operation succeeded.

Status code: 400

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Table 4-127 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-128 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-129 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-130 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class DeleteTrackerConfigSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteTrackerConfigRequest request = new DeleteTrackerConfigRequest();
        try {
            DeleteTrackerConfigResponse response = client.deleteTrackerConfig(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = DeleteTrackerConfigRequest()
        response = client.delete_tracker_config(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteTrackerConfigRequest{}
    response, err := client.DeleteTrackerConfig(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
404	No resource recorder found.
500	Server error.

Error Codes

See **Error Codes**.

4.2.3 Creating or Modifying the Resource Recorder

Function

This API is used to create or modify the resource recorder. Only one resource recorder can be configured.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1/resource-manager/domains/{domain_id}/tracker-config

Table 4-131 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Request Parameters

Table 4-132 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.

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Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-133 Request body parameters

Parameter	Mandatory	Type	Description
channel	Yes	**ChannelConfigBody** object	Specifies configurations for the tracker.
selector	Yes	**SelectorConfigBody** object	Specifies the selector.
retention_period_in_days	No	Integer	Specifies the number of days for data storage.
agency_name	Yes	String	Specifies the IAM agency name.

Table 4-134 ChannelConfigBody

Parameter	Mandatory	Type	Description
smn	No	**TrackerSMNChannelConfigBody** object	Specifies SMN related configurations. For details about how to grant other accounts the permissions for publishing messages to SMN topics, see **Cross-Account Authorization** (**Resource Recorder** > **Enabling, Configuring, or Modifying the Resource Recorder**) in the *User Guide*.

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Parameter	Mandatory	Type	Description
obs	No	**TrackerOBSChannelConfigBody** object	Specifies OBS related configurations. For details about how to grant other accounts the permissions for dumping files to OBS buckets, see Cross-Account Authorization (Resource Recorder > Enabling, Configuring, or Modifying the Resource Recorder) in the User Guide.

Table 4-135 TrackerSMNChannelConfigBody

Parameter	Mandatory	Type	Description
region_id	Yes	String	Specifies the region ID of the SMN topic.
project_id	Yes	String	Specifies the project ID of the user.
topic_urn	Yes	String	Specifies the SMN topic URN.

Table 4-136 TrackerOBSChannelConfigBody

Parameter	Mandatory	Type	Description
bucket_name	Yes	String	Specifies the OBS bucket name. Maximum: **63**
bucket_prefix	No	String	OBS bucket prefix Maximum: **256**
region_id	Yes	String	Specifies the region ID.

Table 4-137 SelectorConfigBody

Parameter	Mandatory	Type	Description
all_supported	Yes	Boolean	Specifies whether to select all supported resources.
resource_types	Yes	Array of strings	Specifies the resource type list.

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Response Parameters

Status code: 200

Operation succeeded.

Status code: 400

Table 4-138 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-139 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-140 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-141 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Creating the resource recorder and enabling message pushing and dumping

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```
PUT /v1/resource-manager/domains/{domain_id}/tracker-config

{
  "channel" : {
    "smn" : {
      "region_id" : "regionid1",
      "project_id" : "39c2af998c334ed6bcbb75b27318f7b5",
      "topic_urn" : "urn:smn:regionid1:39c2af998c334ed6bcbb75b27318f7b5:resource-manager-test"
    },
    "obs" : {
      "bucket_name" : "config-snapshot",
      "region_id" : "regionid1",
      "bucket_prefix" : "log_dir"
    }
  },
  "selector" : {
    "all_supported" : true,
    "resource_types" : [ ]
  },
  "agency_name" : "rms_tracker_agency",
  "retention_period_in_days" : 2557
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Creating the resource recorder and enabling message pushing and dumping

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class CreateTrackerConfigSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

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

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```
            .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateTrackerConfigRequest request = new CreateTrackerConfigRequest();
        TrackerConfigBody body = new TrackerConfigBody();
        SelectorConfigBody selectorbody = new SelectorConfigBody();
        selectorbody.withAllSupported(true);
        TrackerOBSChannelConfigBody obsChannel = new TrackerOBSChannelConfigBody();
        obsChannel.withBucketName("config-snapshot")
            .withBucketPrefix("log_dir")
            .withRegionId("regionid1");
        TrackerSMNChannelConfigBody smnChannel = new TrackerSMNChannelConfigBody();
        smnChannel.withRegionId("regionid1")
            .withProjectId("39c2af998c334ed6bcbb75b27318f7b5")
            .withTopicUrn("urn:smn:regionid1:39c2af998c334ed6bcbb75b27318f7b5:resource-manager-test");
        ChannelConfigBody channelbody = new ChannelConfigBody();
        channelbody.withSmn(smnChannel)
            .withObs(obsChannel);
        body.withAgencyName("rms_tracker_agency");
        body.withRetentionPeriodInDays(2557);
        body.withSelector(selectorbody);
        body.withChannel(channelbody);
        request.withBody(body);
        try {
            CreateTrackerConfigResponse response = client.createTrackerConfig(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

Creating the resource recorder and enabling message pushing and dumping

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CreateTrackerConfigRequest()
```

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```
        selectorbody = SelectorConfigBody(
            all_supported=True
        )
        obsChannel = TrackerOBSChannelConfigBody(
            bucket_name="config-snapshot",
            bucket_prefix="log_dir",
            region_id="regionid1"
        )
        smnChannel = TrackerSMNChannelConfigBody(
            region_id="regionid1",
            project_id="39c2af998c334ed6bcbb75b27318f7b5",
            topic_urn="urn:smn:regionid1:39c2af998c334ed6bcbb75b27318f7b5:resource-manager-test"
        )
        channelbody = ChannelConfigBody(
            smn=smnChannel,
            obs=obsChannel
        )
        request.body = TrackerConfigBody(
            agency_name="rms_tracker_agency",
            retention_period_in_days=2557,
            selector=selectorbody,
            channel=channelbody
        )
        response = client.create_tracker_config(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

Creating the resource recorder and enabling message pushing and dumping

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateTrackerConfigRequest{}
    selectorbody := &model.SelectorConfigBody{
        AllSupported: true,
    }
```

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```
    bucketPrefixObs:= "log_dir"
    obsChannel := &model.TrackerObsChannelConfigBody{
        BucketName: "config-snapshot",
        BucketPrefix: &bucketPrefixObs,
        RegionId: "regionid1",
    }
    smnChannel := &model.TrackerSmnChannelConfigBody{
        RegionId: "regionid1",
        ProjectId: "39c2af998c334ed6bcbb75b27318f7b5",
        TopicUrn: "urn:smn:regionid1:39c2af998c334ed6bcbb75b27318f7b5:resource-manager-test",
    }
    channelbody := &model.ChannelConfigBody{
        Smn: smnChannel,
        Obs: obsChannel,
    }
    retentionPeriodInDaysTrackerConfigBody:= int32(2557)
    request.Body = &model.TrackerConfigBody{
        AgencyName: "rms_tracker_agency",
        RetentionPeriodInDays: &retentionPeriodInDaysTrackerConfigBody,
        Selector: selectorbody,
        Channel: channelbody,
    }
    response, err := client.CreateTrackerConfig(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.3 Resource Relationships

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4.3.1 Querying Resource Relationships

Function

This API is used to query resource relationships. You can specify a resource by ID and set the direction to in or out. To query resource relationships, the resource recorder must be enabled.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/resources/{resource_id}/relations

Table 4-142 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
resource_id	Yes	String	Specifies the resource ID. Maximum: **512**

Table 4-143 Query Parameters

Parameter	Mandatory	Type	Description
direction	Yes	String	Specifies the resource relationship direction.
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **1000**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

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Request Parameters

Table 4-144 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-145 Response body parameters

Parameter	Type	Description
relations	Array of **ResourceRelation** objects	Specifies the list of the resource relationships.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-146 ResourceRelation

Parameter	Type	Description
relation_type	String	Specifies the relationship type.
from_resource_type	String	Specifies the type of the source resource.
to_resource_type	String	Specifies the type of the destination resource.
from_resource_id	String	Specifies the ID of the source resource.
to_resource_id	String	Specifies the ID of the destination resource.

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Table 4-147 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-148 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-149 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-150 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-151 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

```
GET https://{endpoint}/v1/resource-manager/domains/{domain_id}/resources/{resource_id}/relations?direction=out&limit=1000
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "relations" : [ {
    "relation_type" : "isAttachedTo",
    "from_resource_type" : "ecs.cloudservers",
    "to_resource_type" : "evs.volumes",
    "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
    "to_resource_id" : "0075ed19-59dd-49be-961d-117bb6fbfd3e"
  }, {
    "relation_type" : "contains",
    "from_resource_type" : "ecs.cloudservers",
    "to_resource_type" : "vpc.publicips",
    "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
    "to_resource_id" : "3813d6d3-ef88-47b1-b343-cdf6390c6dcb"
  }, {
    "relation_type" : "isAssociatedWith",
    "from_resource_type" : "ecs.cloudservers",
    "to_resource_type" : "vpc.securityGroups",
    "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
    "to_resource_id" : "8cca3002-00af-4812-a853-b7a6fbee06a4"
  }, {
    "relation_type" : "isAttachedTo",
    "from_resource_type" : "ecs.cloudservers",
    "to_resource_type" : "evs.volumes",
    "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
    "to_resource_id" : "f4a107eb-4c6d-4dc8-88d8-de337923956f"
  }, {
    "relation_type" : "isContainedIn",
    "from_resource_type" : "ecs.cloudservers",
    "to_resource_type" : "vpc.vpcs",
    "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
    "to_resource_id" : "ff13d70d-17e5-4ec8-945a-c874e0db99d3"
  } ],
  "page_info" : {
    "current_count" : 5,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowResourceRelationsSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowResourceRelationsRequest request = new ShowResourceRelationsRequest();
        request.withResourceId("{resource_id}");
        try {
            ShowResourceRelationsResponse response = client.showResourceRelations(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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 = GlobalCredentials(ak, sk)

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

    try:
        request = ShowResourceRelationsRequest()
        request.resource_id = "{resource_id}"
        response = client.show_resource_relations(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowResourceRelationsRequest{}
    request.ResourceId = "{resource_id}"
    response, err := client.ShowResourceRelations(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.3.2 Querying Details About Resource Relationships

Function

This API is used to query the relationship between a resource and other resources by the resource ID. The relationship direction can be **in** or **out**. An IAM user needs to have the **rms:resources:getRelation** permissions to call this API. Resource relationships depend on enabling resource recorder.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/all-resources/{resource_id}/relations

Table 4-152 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
resource_id	Yes	String	Specifies the resource ID. Maximum: **512**

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Table 4-153 Query Parameters

Parameter	Mandatory	Type	Description
direction	Yes	String	Specifies the direction of a resource relationship.
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **1000**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-154 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-155 Response body parameters

Parameter	Type	Description
relations	Array of **ResourceRelation** objects	Specifies the list of the resource relationships.
page_info	**PageInfo** object	Specifies the pagination object.

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Table 4-156 ResourceRelation

Parameter	Type	Description
relation_type	String	Specifies the relationship type.
from_resource_type	String	Specifies the type of the source resource.
to_resource_type	String	Specifies the type of the destination resource.
from_resource_id	String	Specifies the ID of the source resource.
to_resource_id	String	Specifies the ID of the destination resource.

Table 4-157 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-158 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-159 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.

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Parameter	Type	Description
error_msg	String	Specifies the error message.

Status code: 404

Table 4-160 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-161 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

```
GET https://{endpoint}/v1/resource-manager/domains/{domain_id}/all-resources/{resource_id}/relations?direction=out
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "relations" : [ {
    "relation_type" : "isAttachedTo",
    "from_resource_type" : "ecs.cloudservers",
    "to_resource_type" : "evs.volumes",
    "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
    "to_resource_id" : "0075ed19-59dd-49be-961d-117bb6fbfd3e"
  }, {
    "relation_type" : "contains",
    "from_resource_type" : "ecs.cloudservers",
    "to_resource_type" : "vpc.publicips",
    "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
    "to_resource_id" : "3813d6d3-ef88-47b1-b343-cdf6390c6dcb"
  }, {
    "relation_type" : "isAssociatedWith",
    "from_resource_type" : "ecs.cloudservers",
    "to_resource_type" : "vpc.securityGroups",
    "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
    "to_resource_id" : "8cca3002-00af-4812-a853-b7a6fbee06a4"
```

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```
 }, {
   "relation_type" : "isAttachedTo",
   "from_resource_type" : "ecs.cloudservers",
   "to_resource_type" : "evs.volumes",
   "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
   "to_resource_id" : "f4a107eb-4c6d-4dc8-88d8-de337923956f"
 }, {
   "relation_type" : "isContainedIn",
   "from_resource_type" : "ecs.cloudservers",
   "to_resource_type" : "vpc.vpcs",
   "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
   "to_resource_id" : "ff13d70d-17e5-4ec8-945a-c874e0db99d3"
 } ],
 "page_info" : {
   "current_count" : 5,
   "next_marker" : null
 }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowResourceRelationsDetailSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowResourceRelationsDetailRequest request = new ShowResourceRelationsDetailRequest();
        request.withResourceId("{resource_id}");
        try {
            ShowResourceRelationsDetailResponse response = client.showResourceRelationsDetail(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

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowResourceRelationsDetailRequest()
        request.resource_id = "{resource_id}"
        response = client.show_resource_relations_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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()
```

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```
    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowResourceRelationsDetailRequest{}
    request.ResourceId = "{resource_id}"
    response, err := client.ShowResourceRelationsDetail(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.4 Resource Change Records

4.4.1 Querying Change Records of a Resource

Function

This API is used to query change records of a resource and its relationships with other resources.

Calling Method

For details, see **Calling APIs**.

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URI

GET /v1/resource-manager/domains/{domain_id}/resources/{resource_id}/history

Table 4-162 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
resource_id	Yes	String	Specifies the resource ID. Maximum: **512**

Table 4-163 Query Parameters

Parameter	Mandatory	Type	Description
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
earlier_time	No	Long	Specifies the start time of the query. If this parameter is not set, the earliest time is used by default.
later_time	No	Long	Specifies the end time of the query. If this parameter is not set, the current time is used by default.
chronological_order	No	String	Specifies the time sequence of the data to be returned. The default value is **Reverse**.

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Request Parameters

Table 4-164 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-165 Response body parameters

Parameter	Type	Description
items	Array of **HistoryItem** objects	Specifies the list of resource history.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-166 HistoryItem

Parameter	Type	Description
domain_id	String	Specifies the user ID.
resource_id	String	Specifies the resource ID.
resource_type	String	Specifies the resource type.
capture_time	String	Specifies the time when the resource was captured.
status	String	Specifies the resource status.
relations	Array of **ResourceRelation** objects	Specifies the list of the resource relationships.
resource	**BaseResourceEntity** object	Specifies the resource object.

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Table 4-167 ResourceRelation

Parameter	Type	Description
relation_type	String	Specifies the relationship type.
from_resource_type	String	Specifies the type of the source resource.
to_resource_type	String	Specifies the type of the destination resource.
from_resource_id	String	Specifies the ID of the source resource.
to_resource_id	String	Specifies the ID of the destination resource.

Table 4-168 BaseResourceEntity

Parameter	Type	Description
id	String	Specifies the resource ID.
name	String	Specifies the resource name.
provider	String	Specifies the cloud service name.
type	String	Specifies the resource type.
region_id	String	Specifies the region ID.
project_id	String	Specifies the project ID in IaaS OpenStack.
project_name	String	Specifies the project name in IaaS OpenStack.
ep_id	String	Specifies the enterprise project ID.
ep_name	String	Specifies the name of an enterprise project.
checksum	String	Specifies the resource checksum.
created	String	Specifies the time when the resource was created.
updated	String	Specifies the time when the resource was updated.
provisioning_state	String	Specifies the status of a resource operation. Enumeration values include Succeeded, Failed, Canceled, and Processing.
tags	Map<String,String>	Specifies the resource tag.

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Parameter	Type	Description
properties	Map<String,Object>	Specifies the detailed properties of the resource.

Table 4-169 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-170 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-171 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-172 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

```
GET /v1/resource-manager/domains/{domain_id}/resources/{resource_id}/history?
earlier_time=1595865600000&later_time=1603875761000&limit=10
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "items" : [ {
    "domain_id" : "9548dff51b6849fab3d7353d631158ee",
    "resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
    "resource_type" : "ecs.cloudservers",
    "capture_time" : "2020-10-12T07:44:40.167Z",
    "status" : "ResourceChanged.UPDATE",
    "relations" : [ {
      "relation_type" : "contains",
      "from_resource_type" : "ecs.cloudservers",
      "to_resource_type" : "vpc.publicips",
      "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
      "to_resource_id" : "3813d6d3-ef88-47b1-b343-cdf6390c6dcb"
    }, {
      "relation_type" : "isAttachedTo",
      "from_resource_type" : "ecs.cloudservers",
      "to_resource_type" : "evs.volumes",
      "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
      "to_resource_id" : "0075ed19-59dd-49be-961d-117bb6fbfd3e"
    }, {
      "relation_type" : "isAssociatedWith",
      "from_resource_type" : "ecs.cloudservers",
      "to_resource_type" : "vpc.securityGroups",
      "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
      "to_resource_id" : "8cca3002-00af-4812-a853-b7a6fbee06a4"
    }, {
      "relation_type" : "isAttachedTo",
      "from_resource_type" : "ecs.cloudservers",
      "to_resource_type" : "evs.volumes",
      "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
      "to_resource_id" : "f4a107eb-4c6d-4dc8-88d8-de337923956f"
    }, {
      "relation_type" : "isContainedIn",
      "from_resource_type" : "ecs.cloudservers",
      "to_resource_type" : "vpc.vpcs",
      "from_resource_id" : "6af96128-d58d-426c-91e0-b38144c0f112",
      "to_resource_id" : "ff13d70d-17e5-4ec8-945a-c874e0db99d3"
    } ],
    "resource" : {
      "id" : "6af96128-d58d-426c-91e0-b38144c0f112",
      "name" : "david-test-cce-49831-bh9ax",
      "provider" : "ecs",
      "type" : "cloudservers",
      "region_id" : "regionid1",
      "project_id" : "15caceb7599f4ee3a770dbb70ad69b2b",
      "project_name" : "project_name",
```

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```
"ep_id" : "0",
"ep_name" : "default",
"checksum" : "30482e7e4f2fc6e9842689c5d498cd13862def3c7369e9216af87c2198557b28",
"created" : "2020-10-12T07:44:10Z",
"updated" : "2020-10-12T07:44:38Z",
"provisioning_state" : "Succeeded",
"tags" : {
  "CCE-Dynamic-Provisioning-Node" : "80fbd7d5-0c5e-11eb-bc0e-0255ac101e85"
},
"properties" : {
  "status" : "ACTIVE",
  "osextsrvattr" : {
    "host" : "regionid4a-pod01.regionid4",
    "instanceName" : "instance-0009cb50",
    "hostName" : "dev-machine",
    "hypervisorHostName" : "nova001@2",
    "kernelId" : "",
    "ramdiskId" : "",
    "reservationId" : "r-hhux9o7m",
    "rootDeviceName" : "/dev/vda",
    "launchIndex" : 0
  },
  "progress" : 0,
  "hostId" : "3c381dcfc3e628c1a504ad94ba8c4e8908130645527370133f32921",
  "hostName" : "dev-machine",
  "hostStatus" : "UP",
  "locked" : false,
  "userId" : "e311190745e94cc09d62d5779e55912d",
  "flavor" : {
    "disk" : "0",
    "name" : "Si2.large.2",
    "id" : "Si2.large.2",
    "vcpus" : "2",
    "ram" : "4096"
  },
  "securityGroup" : [ {
    "name" : "default",
    "id" : "5d55b397-ad9c-462d-af72-6599cb941c49"
  } ],
  "addresses" : [ {
    "OsExtIpsType" : "fixed",
    "OsExtIpsPortId" : "f2fa750a-e2ab-434f-b14a-bfe7c8cea0cc",
    "addr" : "192.168.1.212",
    "version" : 4,
    "OsExtIpsMacAddr" : "fa:16:3e:6e:cf:33"
  } ],
  "accessIpv4" : "",
  "accessIpv6" : "",
  "configDrive" : "",
  "metadata" : {
    "chargingMode" : "0",
    "meteringImageType" : "private",
    "imageName" : "resource-manager-devmachine-template",
    "meteringImageId" : "9bcaace4-b8da-4008-a352-3f72e1f25333",
    "meteringResourcesPerCode" : "si2.large.2.linux",
    "vpcId" : "cf403ef5-90df-4e7e-829d-5d21b1cb7d1e",
    "osBit" : "64",
    "osType" : "Linux"
  },
  "OsExtStsVmState" : "active",
  "OsExtStsPowerState" : 1,
  "ExtVolumesAttached" : [ {
    "bootIndex" : "0",
    "id" : "010d940e-a73e-417b-85ae-51b76c0d2ba0",
    "device" : "/dev/vda"
  } ],
  "OsDcfDiskConfig" : "MANUAL",
  "OsSrvUsgLaunchedAt" : "2019-11-20T06:24:56.000000",
  "OsExtAz" : "regionid4a"
```


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```
    }
   }
  } ],
  "page_info" : {
   "current_count" : 1,
   "next_marker" :
"CAESJjE2MDI0ODg2Nzc1NDYtNWY4NDA5NjU4YmI5MDUxZDBhMWEzMmJjGgQCXWaw"
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowResourceHistorySolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowResourceHistoryRequest request = new ShowResourceHistoryRequest();
        request.withResourceId("{resource_id}");
        try {
            ShowResourceHistoryResponse response = client.showResourceHistory(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowResourceHistoryRequest()
        request.resource_id = "{resource_id}"
        response = client.show_resource_history(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
    request := &model.ShowResourceHistoryRequest{}
    request.ResourceId = "{resource_id}"
    response, err := client.ShowResourceHistory(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.5 Compliance

4.5.1 Querying Built-in Policies

Function

This API is used to query all built-in policies.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/policy-definitions

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Table 4-173 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **500** Default: **500**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-174 Request header parameters

Parameter	Mandatory	Type	Description
X-Language	No	String	Specifies the language of the information to return. The default name is **zh-cn**, which can be **zh-cn** and **en-us**. Default: **zh-cn**
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

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Table 4-175 Response body parameters

Parameter	Type	Description
value	Array of **PolicyDefinition** objects	Specifies the policy definition list.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-176 PolicyDefinition

Parameter	Type	Description
id	String	Specifies the policy ID.
name	String	Specifies the policy name.
display_name	String	Specifies the policy display name.
policy_type	String	Specifies the policy type.
description	String	Specifies the description of the policy definition.
policy_rule_type	String	Specifies the syntax type of the policy.
policy_rule	Object	Specifies the policy rule.
trigger_type	String	Specifies the trigger type.
keywords	Array of strings	Specifies keywords.
default_resource_types	Array of **default_resource_types** objects	Specifies the list of default resource types.
parameters	Map<String,**PolicyParameterDefinition**>	Specifies the policy parameter.

Table 4-177 default_resource_types

Parameter	Type	Description
provider	String	Specifies the cloud service name.
type	String	Specifies the resource type.

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Table 4-178 PolicyParameterDefinition

Parameter	Type	Description
name	String	Specifies the name of the policy parameter.
description	String	Specifies the description of the policy parameter.
allowed_values	Array of objects	Specifies the allowed values of the policy parameter.
default_value	String	Specifies the default value of the policy parameter.
minimum	Float	Specifies the minimum value of the policy parameter. This parameter is valid for Interger or Float parameters.
maximum	Float	Specifies the maximum value of the policy parameter. This parameter is valid for Interger or Float parameters.
min_items	Integer	Specifies the minimum number of the policy parameter. This parameter is valid for Array parameters.
max_items	Integer	Specifies the maximum number of the policy parameter. This parameter is valid for Array parameters.
min_length	Integer	Specifies the minimum string length for policy parameters or for each item. This parameter is valid for String or Array parameters.
max_length	Integer	Specifies the maximum string length for policy parameters or for each item. This parameter is valid for String or Array parameters.
pattern	String	Specifies the pattern for policy parameters or for each item. This parameter is valid for String or Array parameters.
type	String	Specifies the type of the policy parameter.

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Table 4-179 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-180 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-181 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-182 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-183 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.


```
{
  "value" : [ {
    "id" : "5fa365476eed194ccb2c04d1",
    "name" : "volumes-encrypted-check",
    "display_name" : "Enable encryption for the attached EVS volumes.",
    "policy_type" : "builtin",
    "description" : "An EVS disk is non-compliant if it has been mounted but not encrypted.",
    "policy_rule_type" : "dsl",
    "policy_rule" : {
      "allOf" : [ {
        "value" : "${resource().provider}",
        "comparator" : "equals",
        "pattern" : "evs"
      }, {
        "value" : "${resource().type}",
        "comparator" : "equals",
        "pattern" : "volumes"
      }, {
        "value" : "${resource().properties.status}",
        "comparator" : "equals",
        "pattern" : "in-use"
      }, {
        "anyOf" : [ {
          "value" : "${resource().properties.metadata}",
          "comparator" : "notContainsKey",
          "pattern" : "systemEncrypted"
        }, {
          "value" : "${resource().properties.metadata.systemEncrypted}",
          "comparator" : "equals",
          "pattern" : "0"
        } ]
      } ]
    },
    "keywords" : [ "evs", "ecs" ],
    "parameters" : { }
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```


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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListBuiltInPolicyDefinitionsSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListBuiltInPolicyDefinitionsRequest request = new ListBuiltInPolicyDefinitionsRequest();
        try {
            ListBuiltInPolicyDefinitionsResponse response = client.listBuiltInPolicyDefinitions(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]
```

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```
    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListBuiltInPolicyDefinitionsRequest()
        response = client.list_built_in_policy_definitions(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListBuiltInPolicyDefinitionsRequest{}
    response, err := client.ListBuiltInPolicyDefinitions(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	Operation succeeded.
400	Invalid parameter.
403	Authentication failed or you do not have the operation permissions.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.5.2 Querying Specific Built-in Policy

Function

This API is used to query a built-in policy by ID.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/policy-definitions/{policy_definition_id}

Table 4-184 Path Parameters

Parameter	Mandatory	Type	Description
policy_definition_id	Yes	String	Specifies the policy ID. Maximum: **36**

Request Parameters

Table 4-185 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.

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Parameter	Mandatory	Type	Description
X-Language	No	String	Specifies the language of the information to return. The default name is **zh-cn**, which can be **zh-cn** and **en-us**. Default: **zh-cn**
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-186 Response body parameters

Parameter	Type	Description
id	String	Specifies the policy ID.
name	String	Specifies the policy name.
display_name	String	Specifies the policy display name.
policy_type	String	Specifies the policy type.
description	String	Specifies the description of the policy definition.
policy_rule_type	String	Specifies the syntax type of the policy.
policy_rule	Object	Specifies the policy rule.
trigger_type	String	Specifies the trigger type.
keywords	Array of strings	Specifies keywords.
default_resource_types	Array of **default_resource_types** objects	Specifies the list of default resource types.
parameters	Map<String,**PolicyParameterDefinition**>	Specifies the policy parameter.

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Table 4-187 default_resource_types

Parameter	Type	Description
provider	String	Specifies the cloud service name.
type	String	Specifies the resource type.

Table 4-188 PolicyParameterDefinition

Parameter	Type	Description
name	String	Specifies the name of the policy parameter.
description	String	Specifies the description of the policy parameter.
allowed_values	Array of objects	Specifies the allowed values of the policy parameter.
default_value	String	Specifies the default value of the policy parameter.
minimum	Float	Specifies the minimum value of the policy parameter. This parameter is valid for Interger or Float parameters.
maximum	Float	Specifies the maximum value of the policy parameter. This parameter is valid for Interger or Float parameters.
min_items	Integer	Specifies the minimum number of the policy parameter. This parameter is valid for Array parameters.
max_items	Integer	Specifies the maximum number of the policy parameter. This parameter is valid for Array parameters.
min_length	Integer	Specifies the minimum string length for policy parameters or for each item. This parameter is valid for String or Array parameters.
max_length	Integer	Specifies the maximum string length for policy parameters or for each item. This parameter is valid for String or Array parameters.
pattern	String	Specifies the pattern for policy parameters or for each item. This parameter is valid for String or Array parameters.

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Parameter	Type	Description
type	String	Specifies the type of the policy parameter.

Status code: 400

Table 4-189 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-190 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-191 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-192 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Example Requests

```
GET https://{endpoint}/v1/resource-manager/policy-definitions/5f8d5428ffeecc14f1fb5205
```

Example Responses

Status code: 200

Operation succeeded.


```
{
  "id" : "5f8d5428ffeecc14f1fb5205",
  "name" : "ecs-instance-no-public-ip",
  "display_name" : "Enable encryption for the attached EVS volumes.",
  "policy_type" : "builtin",
  "description" : "An ECS is non-compliant if it has an EIP.",
  "policy_rule_type" : "dsl",
  "policy_rule" : {
    "allOf" : [ {
      "value" : "${resource().provider}",
      "comparator" : "equals",
      "pattern" : "ecs"
    }, {
      "value" : "${resource().type}",
      "comparator" : "equals",
      "pattern" : "cloudservers"
    }, {
      "value" : "${length(filter(resource().properties.addresses, lambda x: equals(x.OsExtIpsType, 'floating')))}",
      "comparator" : "greater",
      "pattern" : 0
    } ]
  },
  "keywords" : [ "ecs" ],
  "parameters" : { }
}
```


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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowBuiltInPolicyDefinitionSolution {

    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 GlobalCredentials()
                .withAk(ak)
```

```
            .withSk(sk);

    ConfigClient client = ConfigClient.newBuilder()
            .withCredential(auth)
            .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
            .build();
    ShowBuiltInPolicyDefinitionRequest request = new ShowBuiltInPolicyDefinitionRequest();
    request.withPolicyDefinitionId("{policy_definition_id}");
    try {
        ShowBuiltInPolicyDefinitionResponse response = client.showBuiltInPolicyDefinition(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowBuiltInPolicyDefinitionRequest()
        request.policy_definition_id = "{policy_definition_id}"
        response = client.show_built_in_policy_definition(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/global"
```

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```
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowBuiltInPolicyDefinitionRequest{}
    request.PolicyDefinitionId = "{policy_definition_id}"
    response, err := client.ShowBuiltInPolicyDefinition(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
404	Policy not found.
500	Server error.

Error Codes

See **Error Codes**.

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4.5.3 Adding a Rule

Function

This API is used to add a rule.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1/resource-manager/domains/{domain_id}/policy-assignments

Table 4-193 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Request Parameters

Table 4-194 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-195 Request body parameters

Parameter	Mandatory	Type	Description
policy_assignment_type	No	String	Specifies the rule type, which can be **builtin** or **custom**. If this parameter is not specified, the default value, builtin, is used.
name	Yes	String	Specifies the rule name. Maximum: **64**

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Parameter	Mandatory	Type	Description
description	No	String	Specifies the rule description. Maximum: **512**
period	No	String	Specifies the trigger period.
policy_filter	No	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
policy_definition_id	No	String	Specifies the policy definition ID. Maximum: **36**
custom_policy	No	**CustomPolicy** object	Specifies the custom rule.
parameters	No	Map<String,**PolicyParameterValue**>	Specifies the rule parameters.
tags	No	Array of **ResourceTag** objects	Tags

Table 4-196 PolicyFilterDefinition

Parameter	Mandatory	Type	Description
region_id	No	String	Specifies the region ID. Maximum: **128**
resource_provider	No	String	Specifies the cloud service name. Maximum: **128**
resource_type	No	String	Specifies the resource type. Maximum: **128**
resource_id	No	String	Specifies the resource ID. Maximum: **512**
tag_key	No	String	Specifies the tag key. Maximum: **128**
tag_value	No	String	Specifies the tag value. Maximum: **256**

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Table 4-197 CustomPolicy

Parameter	Mandatory	Type	Description
function_urn	Yes	String	Specifies the URN of a custom function. Maximum: **1024**
auth_type	Yes	String	Specifies the method used by a custom rule to call a function.
auth_value	No	Map<String,Object>	Specifies the value of the method used by a custom rule to call a function.

Table 4-198 PolicyParameterValue

Parameter	Mandatory	Type	Description
value	No	Object	Specifies the value of the rule parameter.

Table 4-199 ResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	Yes	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Response Parameters

Status code: 200

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Table 4-200 Response body parameters

Parameter	Type	Description
policy_assignment_type	String	Specifies the rule type, which can be **builtin** or **custom**.
id	String	Specifies the rule ID.
name	String	Specifies the rule name.
description	String	Specifies the rule description.
policy_filter	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
policy_filter_v2	**PolicyFilterDefinitionV2** object	Specifies the policy filter of a rule.
period	String	Specifies how often the rule is triggered, which can be **One_Hour**, **Three_Hours**, **Six_Hours**, **Twelve_Hours**, or **TwentyFour_Hours**.
state	String	Specifies the rule status.
created	String	Specifies the time when the rule was added.
updated	String	Specifies the time when the rule was modified.
policy_definition_id	String	Specifies the ID of the policy associated with a rule.
custom_policy	**CustomPolicy** object	Specifies the custom rule.
parameters	Map<String,**PolicyParameterValue**>	Specifies rule parameters.
tags	Array of **ResourceTag** objects	Tags
created_by	String	Specifies the rule creator.
target_type	String	Execution method of remediation.
target_id	String	The ID of a remediation object.

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Table 4-201 PolicyFilterDefinition

Parameter	Type	Description
region_id	String	Specifies the region ID. Maximum: **128**
resource_provider	String	Specifies the cloud service name. Maximum: **128**
resource_type	String	Specifies the resource type. Maximum: **128**
resource_id	String	Specifies the resource ID. Maximum: **512**
tag_key	String	Specifies the tag key. Maximum: **128**
tag_value	String	Specifies the tag value. Maximum: **256**

Table 4-202 PolicyFilterDefinitionV2

Parameter	Type	Description
region_ids	Array of strings	Specifies the region IDs.
resource_types	Array of strings	Specifies the cloud services.
resource_ids	Array of strings	Specifies the resource list.
tag_key_logic	String	The logical relationship when parameter tags takes multiple values, for example: When the tags is "tags.1.key":"a", "tags.1.values":"a", "tags.2.key":"b", "tags.2.values":"b", if this parameter is set to AND, it means that the rule only applies to resources bound with both tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
tags	Array of **FilterTagDetail** objects	Tags.

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Parameter	Type	Description
exclude_tag_key_logic	String	The logical relationship when parameter exclude_tags takes multiple values, for example: When the exclude_tags is "exclude_tags.1.key":"a", "exclude_tags.1.values":"a", "exclude_tags.2.key":"b", "exclude_tags.2.values":"b", if this parameter is set to AND, it means that the rule excludes resources that are bound with the tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
exclude_tags	Array of **FilterTagDetail** objects	Exclude Tags.

Table 4-203 FilterTagDetail

Parameter	Type	Description
key	String	Specifies the tag key.
values	Array of strings	Specifies tag values.

Table 4-204 CustomPolicy

Parameter	Type	Description
function_urn	String	Specifies the URN of a custom function. Maximum: **1024**
auth_type	String	Specifies the method used by a custom rule to call a function.
auth_value	Map<String,Object>	Specifies the value of the method used by a custom rule to call a function.

Table 4-205 PolicyParameterValue

Parameter	Type	Description
value	Object	Specifies the value of the rule parameter.

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Table 4-206 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Status code: 400

Table 4-207 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-208 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-209 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Example Requests

Create a rule named "allowed-images-by-id".

```
PUT https://{endpoint}/v1/resource-manager/domains/{domain_id}/policy-assignments

{
  "name" : "allowed-images-by-id",
  "description" : "The ECS resource is non-compliant if the image it used is not in the allowed list",
  "parameters" : {
    "listOfAllowedImages" : {
      "value" : [ "ea0d6e0e-99c3-406d-a873-3bb45462b624" ]
    }
  },
  "policy_filter" : {
    "resource_provider" : "ecs",
    "resource_type" : "cloudservers"
  },
  "policy_definition_id" : "5f3c8b9a9811a13739a32ed9",
  "tags" : [ {
    "key" : "tagkey",
    "value" : "tagValue"
  } ]
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "policy_assignment_type" : "builtin",
  "id" : "5fb76a240f2daf0b9662a04d",
  "name" : "volume-inuse-check",
  "description" : "An EVS disk is non-compliant if it is not mounted to a cloud server.",
  "policy_filter" : {
    "region_id" : null,
    "resource_provider" : "evs",
    "resource_type" : "volumes",
    "resource_id" : null,
    "tag_key" : null,
    "tag_value" : null
  },
  "period" : null,
  "custom_policy" : null,
  "state" : "Enabled",
  "created" : "2020-11-20T07:03:00",
  "updated" : "2020-11-20T07:03:00",
  "policy_definition_id" : "5fa36558aa1e6afc05a3d0a7",
  "parameters" : { },
  "tags" : [ {
    "key" : "tagkey",
    "value" : "tagValue"
  } ],
  "created_by" : "custom",
  "target_type" : null,
  "target_id" : null
}
```

SDK Sample Code

The SDK sample code is as follows.

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Java

Create a rule named "allowed-images-by-id".

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

import java.util.List;
import java.util.ArrayList;
import java.util.Map;
import java.util.HashMap;

public class CreatePolicyAssignmentsSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CreatePolicyAssignmentsRequest request = new CreatePolicyAssignmentsRequest();
        PolicyAssignmentRequestBody body = new PolicyAssignmentRequestBody();
        List<ResourceTag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new ResourceTag()
                .withKey("tagkey")
                .withValue("tagValue")
        );
        PolicyParameterValue parametersParameters = new PolicyParameterValue();
        parametersParameters.withValue("[ea0d6e0e-99c3-406d-a873-3bb45462b624]");
        Map<String, PolicyParameterValue> listbodyParameters = new HashMap<>();
        listbodyParameters.put("listOfAllowedImages", parametersParameters);
        PolicyFilterDefinition policyFilterbody = new PolicyFilterDefinition();
        policyFilterbody.withResourceProvider("ecs")
            .withResourceType("cloudservers");
        body.withTags(listbodyTags);
        body.withParameters(listbodyParameters);
        body.withPolicyDefinitionId("5f3c8b9a9811a13739a32ed9");
        body.withPolicyFilter(policyFilterbody);
        body.withDescription("The ECS resource is non-compliant if the image it used is not in the allowed list");
        body.withName("allowed-images-by-id");
        request.withBody(body);
        try {
            CreatePolicyAssignmentsResponse response = client.createPolicyAssignments(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
```

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```
        } 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 rule named "allowed-images-by-id".

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CreatePolicyAssignmentsRequest()
        listTagsbody = [
            ResourceTag(
                key="tagkey",
                value="tagValue"
            )
        ]
        parametersParameters = PolicyParameterValue(
            value="[ea0d6e0e-99c3-406d-a873-3bb45462b624]"
        )
        listParametersbody = {
            "listOfAllowedImages": parametersParameters
        }
        policyFilterbody = PolicyFilterDefinition(
            resource_provider="ecs",
            resource_type="cloudservers"
        )
        request.body = PolicyAssignmentRequestBody(
            tags=listTagsbody,
            parameters=listParametersbody,
            policy_definition_id="5f3c8b9a9811a13739a32ed9",
            policy_filter=policyFilterbody,
            description="The ECS resource is non-compliant if the image it used is not in the allowed list",
            name="allowed-images-by-id"
        )
        response = client.create_policy_assignments(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

Create a rule named "allowed-images-by-id".

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreatePolicyAssignmentsRequest{}
    var listTagsbody = []model.ResourceTag{
        {
            Key: "tagkey",
            Value: "tagValue",
        },
    }
    var valueParameters interface{} = "[ea0d6e0e-99c3-406d-a873-3bb45462b624]"
    parametersParameters := model.PolicyParameterValue{
        Value: &valueParameters,
    }
    var listParametersbody = Map<String, PolicyParameterValue>{
        "listOfAllowedImages": parametersParameters,
    }
    resourceProviderPolicyFilter:= "ecs"
    resourceTypePolicyFilter:= "cloudservers"
    policyFilterbody := &model.PolicyFilterDefinition{
        ResourceProvider: &resourceProviderPolicyFilter,
        ResourceType: &resourceTypePolicyFilter,
    }
    policyDefinitionIdPolicyAssignmentRequestBody:= "5f3c8b9a9811a13739a32ed9"
    descriptionPolicyAssignmentRequestBody:= "The ECS resource is non-compliant if the image it used is not in the allowed list"
    request.Body = &model.PolicyAssignmentRequestBody{
        Tags: &listTagsbody,
        Parameters: listParametersbody,
        PolicyDefinitionId: &policyDefinitionIdPolicyAssignmentRequestBody,
        PolicyFilter: policyFilterbody,
        Description: &descriptionPolicyAssignmentRequestBody,
        Name: "allowed-images-by-id",
    }
    response, err := client.CreatePolicyAssignments(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.5.4 Querying Rules

Function

This API is used to query all rules in an account.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/policy-assignments

Table 4-210 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Table 4-211 Query Parameters

Parameter	Mandatory	Type	Description
policy_assignment_name	No	String	Specifies the assignment name. Maximum: **64**
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **500** Default: **500**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-212 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-213 Response body parameters

Parameter	Type	Description
value	Array of **PolicyAssignment** objects	Specifies rules.
page_info	**PageInfo** object	Specifies the pagination object.

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Table 4-214 PolicyAssignment

Parameter	Type	Description
policy_assignment_type	String	Specifies the rule type, which can be **builtin** or **custom**.
id	String	Specifies the rule ID.
name	String	Specifies the rule name.
description	String	Specifies the rule description.
policy_filter	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
policy_filter_v2	**PolicyFilterDefinitionV2** object	Specifies the policy filter of a rule.
period	String	Specifies how often the rule is triggered, which can be **One_Hour**, **Three_Hours**, **Six_Hours**, **Twelve_Hours**, or **TwentyFour_Hours**.
state	String	Specifies the rule status.
created	String	Specifies the time when the rule was added.
updated	String	Specifies the time when the rule was modified.
policy_definition_id	String	Specifies the ID of the policy associated with a rule.
custom_policy	**CustomPolicy** object	Specifies the custom rule.
parameters	Map<String,**PolicyParameterValue**>	Specifies rule parameters.
tags	Array of **ResourceTag** objects	Tags
created_by	String	Specifies the rule creator.
target_type	String	Execution method of remediation.
target_id	String	The ID of a remediation object.

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Table 4-215 PolicyFilterDefinition

Parameter	Type	Description
region_id	String	Specifies the region ID. Maximum: **128**
resource_provider	String	Specifies the cloud service name. Maximum: **128**
resource_type	String	Specifies the resource type. Maximum: **128**
resource_id	String	Specifies the resource ID. Maximum: **512**
tag_key	String	Specifies the tag key. Maximum: **128**
tag_value	String	Specifies the tag value. Maximum: **256**

Table 4-216 PolicyFilterDefinitionV2

Parameter	Type	Description
region_ids	Array of strings	Specifies the region IDs.
resource_types	Array of strings	Specifies the cloud services.
resource_ids	Array of strings	Specifies the resource list.
tag_key_logic	String	The logical relationship when parameter tags takes multiple values, for example: When the tags is "tags.1.key":"a", "tags.1.values":"a", "tags.2.key":"b", "tags.2.values":"b", if this parameter is set to AND, it means that the rule only applies to resources bound with both tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
tags	Array of **FilterTagDetail** objects	Tags.

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Parameter	Type	Description
exclude_tag_key_logic	String	The logical relationship when parameter exclude_tags takes multiple values, for example: When the exclude_tags is "exclude_tags.1.key":"a", "exclude_tags.1.values":"a", "exclude_tags.2.key":"b", "exclude_tags.2.values":"b", if this parameter is set to AND, it means that the rule excludes resources that are bound with the tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
exclude_tags	Array of **FilterTagDetail** objects	Exclude Tags.

Table 4-217 FilterTagDetail

Parameter	Type	Description
key	String	Specifies the tag key.
values	Array of strings	Specifies tag values.

Table 4-218 CustomPolicy

Parameter	Type	Description
function_urn	String	Specifies the URN of a custom function. Maximum: **1024**
auth_type	String	Specifies the method used by a custom rule to call a function.
auth_value	Map<String,Object>	Specifies the value of the method used by a custom rule to call a function.

Table 4-219 PolicyParameterValue

Parameter	Type	Description
value	Object	Specifies the value of the rule parameter.

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Table 4-220 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Table 4-221 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-222 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-223 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-224 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.


```
{
  "value" : [ {
    "policy_assignment_type" : "builtin",
    "id" : "5fb76a240f2daf0b9662a04d",
    "name" : "volume-inuse-check",
    "description" : "An EVS disk is non-compliant if it is not mounted to a cloud server.",
    "policy_filter" : {
      "region_id" : null,
      "resource_provider" : "evs",
      "resource_type" : "volumes",
      "resource_id" : null,
      "tag_key" : null,
      "tag_value" : null
    },
    "state" : "Enabled",
    "period" : null,
    "custom_policy" : null,
    "created" : "2020-11-20T07:03:00",
    "updated" : "2020-11-20T07:03:00",
    "policy_definition_id" : "5fa36558aa1e6afc05a3d0a7",
    "parameters" : { },
    "tags" : [ {
      "key" : "tagkey",
      "value" : "tagValue"
    } ],
    "created_by" : "custom",
    "target_type" : null,
    "target_id" : null
  } ],
  "page_info" : {
    "current_count" : 1,
```

```
  "next_marker" : null
 }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListPolicyAssignmentsSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListPolicyAssignmentsRequest request = new ListPolicyAssignmentsRequest();
        try {
            ListPolicyAssignmentsResponse response = client.listPolicyAssignments(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
```

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```
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListPolicyAssignmentsRequest()
        response = client.list_policy_assignments(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListPolicyAssignmentsRequest{}
    response, err := client.ListPolicyAssignments(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.5.5 Modifying a Rule

Function

This API is used to modify a rule.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}

Table 4-225 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

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Request Parameters

Table 4-226 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-227 Request body parameters

Parameter	Mandatory	Type	Description
policy_assignment_type	No	String	Specifies the rule type, which can be **builtin** or **custom**. If this parameter is not specified, the default value, builtin, is used.
name	Yes	String	Specifies the rule name. Maximum: **64**
description	No	String	Specifies the rule description. Maximum: **512**
period	No	String	Specifies the trigger period.
policy_filter	No	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
policy_definition_id	No	String	Specifies the policy definition ID. Maximum: **36**
custom_policy	No	**CustomPolicy** object	Specifies the custom rule.
parameters	No	Map<String,**PolicyParameterValue**>	Specifies the rule parameters.
tags	No	Array of **ResourceTag** objects	Tags

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Table 4-228 PolicyFilterDefinition

Parameter	Mandatory	Type	Description
region_id	No	String	Specifies the region ID. Maximum: **128**
resource_provider	No	String	Specifies the cloud service name. Maximum: **128**
resource_type	No	String	Specifies the resource type. Maximum: **128**
resource_id	No	String	Specifies the resource ID. Maximum: **512**
tag_key	No	String	Specifies the tag key. Maximum: **128**
tag_value	No	String	Specifies the tag value. Maximum: **256**

Table 4-229 CustomPolicy

Parameter	Mandatory	Type	Description
function_urn	Yes	String	Specifies the URN of a custom function. Maximum: **1024**
auth_type	Yes	String	Specifies the method used by a custom rule to call a function.
auth_value	No	Map<String,Object>	Specifies the value of the method used by a custom rule to call a function.

Table 4-230 PolicyParameterValue

Parameter	Mandatory	Type	Description
value	No	Object	Specifies the value of the rule parameter.

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Table 4-231 ResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	Yes	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Response Parameters

Status code: 200

Table 4-232 Response body parameters

Parameter	Type	Description
policy_assignment_type	String	Specifies the rule type, which can be **builtin** or **custom**.
id	String	Specifies the rule ID.
name	String	Specifies the rule name.
description	String	Specifies the rule description.
policy_filter	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
policy_filter_v2	**PolicyFilterDefinitionV2** object	Specifies the policy filter of a rule.
period	String	Specifies how often the rule is triggered, which can be **One_Hour**, **Three_Hours**, **Six_Hours**, **Twelve_Hours**, or **TwentyFour_Hours**.
state	String	Specifies the rule status.
created	String	Specifies the time when the rule was added.

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Parameter	Type	Description
updated	String	Specifies the time when the rule was modified.
policy_definition_id	String	Specifies the ID of the policy associated with a rule.
custom_policy	**CustomPolicy** object	Specifies the custom rule.
parameters	Map<String,**PolicyParameterValue**>	Specifies rule parameters.
tags	Array of **ResourceTag** objects	Tags
created_by	String	Specifies the rule creator.
target_type	String	Execution method of remediation.
target_id	String	The ID of a remediation object.

Table 4-233 PolicyFilterDefinition

Parameter	Type	Description
region_id	String	Specifies the region ID. Maximum: **128**
resource_provider	String	Specifies the cloud service name. Maximum: **128**
resource_type	String	Specifies the resource type. Maximum: **128**
resource_id	String	Specifies the resource ID. Maximum: **512**
tag_key	String	Specifies the tag key. Maximum: **128**
tag_value	String	Specifies the tag value. Maximum: **256**

Table 4-234 PolicyFilterDefinitionV2

Parameter	Type	Description
region_ids	Array of strings	Specifies the region IDs.

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Parameter	Type	Description
resource_types	Array of strings	Specifies the cloud services.
resource_ids	Array of strings	Specifies the resource list.
tag_key_logic	String	The logical relationship when parameter tags takes multiple values, for example: When the tags is "tags.1.key":"a", "tags.1.values":"a", "tags.2.key":"b", "tags.2.values":"b", if this parameter is set to AND, it means that the rule only applies to resources bound with both tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
tags	Array of **FilterTagDetail** objects	Tags.
exclude_tag_key_logic	String	The logical relationship when parameter exclude_tags takes multiple values, for example: When the exclude_tags is "exclude_tags.1.key":"a", "exclude_tags.1.values":"a", "exclude_tags.2.key":"b", "exclude_tags.2.values":"b", if this parameter is set to AND, it means that the rule excludes resources that are bound with the tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
exclude_tags	Array of **FilterTagDetail** objects	Exclude Tags.

Table 4-235 FilterTagDetail

Parameter	Type	Description
key	String	Specifies the tag key.
values	Array of strings	Specifies tag values.

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Table 4-236 CustomPolicy

Parameter	Type	Description
function_urn	String	Specifies the URN of a custom function. Maximum: **1024**
auth_type	String	Specifies the method used by a custom rule to call a function.
auth_value	Map<String,Object>	Specifies the value of the method used by a custom rule to call a function.

Table 4-237 PolicyParameterValue

Parameter	Type	Description
value	Object	Specifies the value of the rule parameter.

Table 4-238 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Status code: 400

Table 4-239 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 403

Table 4-240 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-241 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-242 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

```
PUT https://{endpoint}/v1/resource-manager/domains/{domain_id}/policy-assignments/
{policy_assignment_id}

{
  "name" : "allowed-images-by-id",
  "description" : "The ECS resource is non-compliant if the image it used is not in the allowed list",
  "parameters" : {
    "listOfAllowedImages" : {
      "value" : [ "ea0d6e0e-99c3-406d-a873-3bb45462b624" ]
    }
  },
  "policy_filter" : {
    "resource_provider" : "ecs",
    "resource_type" : "cloudservers"
  },
  "policy_definition_id" : "5f3c8b9a9811a13739a32ed9",
  "tags" : [ {
    "key" : "tagkey",
    "value" : "tagValue"
```

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```
  } ]
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "policy_assignment_type" : "builtin",
  "id" : "5fb76a240f2daf0b9662a04d",
  "name" : "volume-inuse-check",
  "description" : "An EVS disk is non-compliant if it is not mounted to a cloud server.",
  "policy_filter" : {
    "region_id" : null,
    "resource_provider" : "evs",
    "resource_type" : "volumes",
    "resource_id" : null,
    "tag_key" : null,
    "tag_value" : null
  },
  "state" : "Enabled",
  "period" : null,
  "custom_policy" : null,
  "created" : "2020-11-20T07:03:00",
  "updated" : "2020-11-20T07:03:00",
  "policy_definition_id" : "5fa36558aa1e6afc05a3d0a7",
  "parameters" : { },
  "tags" : [ {
    "key" : "tagkey",
    "value" : "tagValue"
  } ],
  "created_by" : "custom",
  "target_type" : null,
  "target_id" : null
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

import java.util.List;
import java.util.ArrayList;
import java.util.Map;
import java.util.HashMap;

public class UpdatePolicyAssignmentSolution {

    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");

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

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdatePolicyAssignmentRequest request = new UpdatePolicyAssignmentRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        PolicyAssignmentRequestBody body = new PolicyAssignmentRequestBody();
        List<ResourceTag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new ResourceTag()
                .withKey("tagkey")
                .withValue("tagValue")
        );
        PolicyParameterValue parametersParameters = new PolicyParameterValue();
        parametersParameters.withValue("[ea0d6e0e-99c3-406d-a873-3bb45462b624]");
        Map<String, PolicyParameterValue> listbodyParameters = new HashMap<>();
        listbodyParameters.put("listOfAllowedImages", parametersParameters);
        PolicyFilterDefinition policyFilterbody = new PolicyFilterDefinition();
        policyFilterbody.withResourceProvider("ecs")
            .withResourceType("cloudservers");
        body.withTags(listbodyTags);
        body.withParameters(listbodyParameters);
        body.withPolicyDefinitionId("5f3c8b9a9811a13739a32ed9");
        body.withPolicyFilter(policyFilterbody);
        body.withDescription("The ECS resource is non-compliant if the image it used is not in the allowed
list");
        body.withName("allowed-images-by-id");
        request.withBody(body);
        try {
            UpdatePolicyAssignmentResponse response = client.updatePolicyAssignment(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = UpdatePolicyAssignmentRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        listTagsbody = [
            ResourceTag(
                key="tagkey",
                value="tagValue"
            )
        ]
        parametersParameters = PolicyParameterValue(
            value="[ea0d6e0e-99c3-406d-a873-3bb45462b624]"
        )
        listParametersbody = {
            "listOfAllowedImages": parametersParameters
        }
        policyFilterbody = PolicyFilterDefinition(
            resource_provider="ecs",
            resource_type="cloudservers"
        )
        request.body = PolicyAssignmentRequestBody(
            tags=listTagsbody,
            parameters=listParametersbody,
            policy_definition_id="5f3c8b9a9811a13739a32ed9",
            policy_filter=policyFilterbody,
            description="The ECS resource is non-compliant if the image it used is not in the allowed list",
            name="allowed-images-by-id"
        )
        response = client.update_policy_assignment(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
```

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```
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdatePolicyAssignmentRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    var listTagsbody = []model.ResourceTag{
        {
            Key: "tagkey",
            Value: "tagValue",
        },
    }
    var valueParameters interface{} = "[ea0d6e0e-99c3-406d-a873-3bb45462b624]"
    parametersParameters := model.PolicyParameterValue{
        Value: &valueParameters,
    }
    var listParametersbody = map[string](model.PolicyParameterValue){
        "listOfAllowedImages": parametersParameters,
    }
    resourceProviderPolicyFilter:= "ecs"
    resourceTypePolicyFilter:= "cloudservers"
    policyFilterbody := &model.PolicyFilterDefinition{
        ResourceProvider: &resourceProviderPolicyFilter,
        ResourceType: &resourceTypePolicyFilter,
    }
    policyDefinitionIdPolicyAssignmentRequestBody:= "5f3c8b9a9811a13739a32ed9"
    descriptionPolicyAssignmentRequestBody:= "The ECS resource is non-compliant if the image it used is
not in the allowed list"
    request.Body = &model.PolicyAssignmentRequestBody{
        Tags: &listTagsbody,
        Parameters: listParametersbody,
        PolicyDefinitionId: &policyDefinitionIdPolicyAssignmentRequestBody,
        PolicyFilter: policyFilterbody,
        Description: &descriptionPolicyAssignmentRequestBody,
        Name: "allowed-images-by-id",
    }
    response, err := client.UpdatePolicyAssignment(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
404	No rules found.

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Status Code	Description
500	Server error.

Error Codes

See **Error Codes**.

4.5.6 Querying a Specific Rule

Function

This API is used to query a rule by ID.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}

Table 4-243 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Request Parameters

Table 4-244 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

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Response Parameters

Status code: 200

Table 4-245 Response body parameters

Parameter	Type	Description
policy_assignment_type	String	Specifies the rule type, which can be **builtin** or **custom**.
id	String	Specifies the rule ID.
name	String	Specifies the rule name.
description	String	Specifies the rule description.
policy_filter	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
policy_filter_v2	**PolicyFilterDefinitionV2** object	Specifies the policy filter of a rule.
period	String	Specifies how often the rule is triggered, which can be **One_Hour**, **Three_Hours**, **Six_Hours**, **Twelve_Hours**, or **TwentyFour_Hours**.
state	String	Specifies the rule status.
created	String	Specifies the time when the rule was added.
updated	String	Specifies the time when the rule was modified.
policy_definition_id	String	Specifies the ID of the policy associated with a rule.
custom_policy	**CustomPolicy** object	Specifies the custom rule.
parameters	Map<String,**PolicyParameterValue**>	Specifies rule parameters.
tags	Array of **ResourceTag** objects	Tags
created_by	String	Specifies the rule creator.
target_type	String	Execution method of remediation.
target_id	String	The ID of a remediation object.

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Table 4-246 PolicyFilterDefinition

Parameter	Type	Description
region_id	String	Specifies the region ID. Maximum: **128**
resource_provider	String	Specifies the cloud service name. Maximum: **128**
resource_type	String	Specifies the resource type. Maximum: **128**
resource_id	String	Specifies the resource ID. Maximum: **512**
tag_key	String	Specifies the tag key. Maximum: **128**
tag_value	String	Specifies the tag value. Maximum: **256**

Table 4-247 PolicyFilterDefinitionV2

Parameter	Type	Description
region_ids	Array of strings	Specifies the region IDs.
resource_types	Array of strings	Specifies the cloud services.
resource_ids	Array of strings	Specifies the resource list.
tag_key_logic	String	The logical relationship when parameter tags takes multiple values, for example: When the tags is "tags.1.key":"a", "tags.1.values":"a", "tags.2.key":"b", "tags.2.values":"b", if this parameter is set to AND, it means that the rule only applies to resources bound with both tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
tags	Array of **FilterTagDetail** objects	Tags.

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Parameter	Type	Description
exclude_tag_key_logic	String	The logical relationship when parameter exclude_tags takes multiple values, for example: When the exclude_tags is "exclude_tags.1.key":"a", "exclude_tags.1.values":"a", "exclude_tags.2.key":"b", "exclude_tags.2.values":"b", if this parameter is set to AND, it means that the rule excludes resources that are bound with the tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
exclude_tags	Array of **FilterTagDetail** objects	Exclude Tags.

Table 4-248 FilterTagDetail

Parameter	Type	Description
key	String	Specifies the tag key.
values	Array of strings	Specifies tag values.

Table 4-249 CustomPolicy

Parameter	Type	Description
function_urn	String	Specifies the URN of a custom function. Maximum: **1024**
auth_type	String	Specifies the method used by a custom rule to call a function.
auth_value	Map<String,Object>	Specifies the value of the method used by a custom rule to call a function.

Table 4-250 PolicyParameterValue

Parameter	Type	Description
value	Object	Specifies the value of the rule parameter.

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Table 4-251 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Status code: 400

Table 4-252 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-253 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-254 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 500

Table 4-255 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "policy_assignment_type" : "builtin",
  "id" : "5fb76a240f2daf0b9662a04d",
  "name" : "volume-inuse-check",
  "description" : "An EVS disk is non-compliant if it is not mounted to a cloud server.",
  "policy_filter" : {
    "region_id" : null,
    "resource_provider" : "evs",
    "resource_type" : "volumes",
    "resource_id" : null,
    "tag_key" : null,
    "tag_value" : null
  },
  "state" : "Enabled",
  "period" : null,
  "custom_policy" : null,
  "created" : "2020-11-20T07:03:00",
  "updated" : "2020-11-20T07:03:00",
  "policy_definition_id" : "5fa36558aa1e6afc05a3d0a7",
  "parameters" : { },
  "tags" : [ {
    "key" : "tagkey",
    "value" : "tagValue"
  } ],
  "created_by" : "custom",
  "target_type" : null,
  "target_id" : null
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowPolicyAssignmentSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowPolicyAssignmentRequest request = new ShowPolicyAssignmentRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        try {
            ShowPolicyAssignmentResponse response = client.showPolicyAssignment(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

    client = ConfigClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(ConfigRegion.value_of("<YOUR REGION>")) \
        .build()
```

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```
    try:
        request = ShowPolicyAssignmentRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        response = client.show_policy_assignment(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowPolicyAssignmentRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    response, err := client.ShowPolicyAssignment(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	Operation succeeded.

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Status Code	Description
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
404	No rules found.
500	Server error.

Error Codes

See **Error Codes**.

4.5.7 Deleting a Rule

Function

This API is used to delete a rule based on the rule ID.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}

Table 4-256 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Request Parameters

Table 4-257 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.

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Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Operation succeeded.

Status code: 400

Table 4-258 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-259 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-260 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-261 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class DeletePolicyAssignmentSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        DeletePolicyAssignmentRequest request = new DeletePolicyAssignmentRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        try {
            DeletePolicyAssignmentResponse response = client.deletePolicyAssignment(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
```

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```
        } 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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = DeletePolicyAssignmentRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        response = client.delete_policy_assignment(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
```

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```
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeletePolicyAssignmentRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    response, err := client.DeletePolicyAssignment(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
404	No rules found.
500	Server error.

Error Codes

See **Error Codes**.

4.5.8 Enabling a Rule

Function

This API is used to enable a rule based on the rule ID.

Calling Method

For details, see **Calling APIs**.

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URI

POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/enable

Table 4-262 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Request Parameters

Table 4-263 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 202

Operation accepted.

Status code: 400

Table 4-264 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-265 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-266 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-267 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;
```

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```
public class EnablePolicyAssignmentSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        EnablePolicyAssignmentRequest request = new EnablePolicyAssignmentRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        try {
            EnablePolicyAssignmentResponse response = client.enablePolicyAssignment(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = EnablePolicyAssignmentRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
```

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```
        response = client.enable_policy_assignment(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.EnablePolicyAssignmentRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    response, err := client.EnablePolicyAssignment(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
202	Operation accepted.
400	Invalid parameters.

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Status Code	Description
403	Authentication failed or you do not have the operation permissions.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.5.9 Disabling a Rule

Function

This API is used to disable a rule based on the rule ID.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/disable

Table 4-268 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Request Parameters

Table 4-269 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.

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Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 202

Operation accepted.

Status code: 400

Table 4-270 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-271 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-272 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-273 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class DisablePolicyAssignmentSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        DisablePolicyAssignmentRequest request = new DisablePolicyAssignmentRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        try {
            DisablePolicyAssignmentResponse response = client.disablePolicyAssignment(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
```

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```
        } 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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = DisablePolicyAssignmentRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        response = client.disable_policy_assignment(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
```

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```
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DisablePolicyAssignmentRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    response, err := client.DisablePolicyAssignment(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
202	Operation accepted.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
404	No rules found.
500	Server error.

Error Codes

See **Error Codes**.

4.5.10 Running a Resource Compliance Evaluation

Function

This API is used to trigger a rule manually by rule ID to evaluate resources.

Calling Method

For details, see **Calling APIs**.

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URI

POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/policy-states/run-evaluation

Table 4-274 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Request Parameters

Table 4-275 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 202

Operation accepted.

Status code: 400

Table 4-276 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-277 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-278 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-279 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;
```

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```
public class RunEvaluationByPolicyAssignmentIdSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        RunEvaluationByPolicyAssignmentIdRequest request = new RunEvaluationByPolicyAssignmentIdRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        try {
            RunEvaluationByPolicyAssignmentIdResponse response = client.runEvaluationByPolicyAssignmentId(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
```

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```
        request = RunEvaluationByPolicyAssignmentIdRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        response = client.run_evaluation_by_policy_assignment_id(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.RunEvaluationByPolicyAssignmentIdRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    response, err := client.RunEvaluationByPolicyAssignmentId(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
202	Operation accepted.
400	Invalid parameters.

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Status Code	Description
403	Authentication failed or you do not have the operation permissions.
404	No rules found.
500	Server error.

Error Codes

See **Error Codes**.

4.5.11 Querying the Evaluation Status of a Rule

Function

This API is used to query the evaluation status of a rule by rule ID.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/policy-states/evaluation-state

Table 4-280 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Request Parameters

Table 4-281 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.

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Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-282 Response body parameters

Parameter	Type	Description
policy_assignment_id	String	Specifies the rule ID.
state	String	Specifies the evaluation status.
start_time	String	Specifies the evaluation start time.
end_time	String	Specifies the evaluation end time.
error_message	String	Specifies the error message for the evaluation failure.

Status code: 400

Table 4-283 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-284 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 404

Table 4-285 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-286 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "state" : "Succeeded",
  "policy_assignment_id" : "5fb6292765ee7f5e92a7ca4b",
  "start_time" : "2020-11-19T08:13:27.441Z",
  "end_time" : "2020-11-19T08:13:27.485Z",
  "error_message" : null
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;
```

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```
public class ShowEvaluationStateByAssignmentIdSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowEvaluationStateByAssignmentIdRequest request = new ShowEvaluationStateByAssignmentIdRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        try {
            ShowEvaluationStateByAssignmentIdResponse response = client.showEvaluationStateByAssignmentId(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowEvaluationStateByAssignmentIdRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
```

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```
        response = client.show_evaluation_state_by_assignment_id(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowEvaluationStateByAssignmentIdRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    response, err := client.ShowEvaluationStateByAssignmentId(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	Operation succeeded.
400	Invalid parameters.

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Status Code	Description
403	Authentication failed or you do not have the operation permissions.
404	No rules found.
500	Server error.

Error Codes

See **Error Codes**.

4.5.12 Querying Resource Compliance Summary

Function

This API is used to query resource compliance summary.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/resources/policy-states/summary

Table 4-287 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-288 Query Parameters

Parameter	Mandatory	Type	Description
resource_id	No	String	Specifies the resource ID. Maximum: **512**
resource_name	No	String	Specifies the resource name. Maximum: **256**

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Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

None

Response Parameters

Status code: 200

Table 4-289 Response body parameters

Parameter	Type	Description
value	Array of **PolicyResourceComplianceSummary** objects	Specifies the return value of querying the compliance result.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-290 PolicyResourceComplianceSummary

Parameter	Type	Description
compliance_state	String	Specifies the rule status.
resource	**PolicyResource** object	Specifies the resource.
results	**PolicyComplianceSummaryResults** object	Specifies the results of compliance summaries.

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Table 4-291 PolicyResource

Parameter	Type	Description
resource_id	String	Specifies the resource ID.
resource_name	String	Specifies the resource name.
resource_provider	String	Specifies the cloud service name.
resource_type	String	Specifies the resource type.
region_id	String	Specifies the region ID.
domain_id	String	Specifies the ID of the user to which the resource belongs.

Table 4-292 PolicyComplianceSummaryResults

Parameter	Type	Description
resource_details	**ResourceComplianceSummaryUnit** object	Resource compliance summary details.
assignment_details	**PolicyComplianceSummaryUnit** object	Specifies the compliance summary details.

Table 4-293 ResourceComplianceSummaryUnit

Parameter	Type	Description
compliant_count	Integer	Specifies the number of compliant resources.
non_compliant_count	Integer	Specifies the number of non-compliant resources.

Table 4-294 PolicyComplianceSummaryUnit

Parameter	Type	Description
compliant_count	Integer	Specifies the number of compliant resources.
non_compliant_count	Integer	Specifies the number of non-compliant resources.

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Table 4-295 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-296 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-297 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-298 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-299 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation successful.

```
{
  "value" : [ {
    "compliance_state" : "NonCompliant",
    "resource" : {
      "resource_id" : "011414082b134059b1c5eafe0697cd15",
      "resource_name" : "ServiceLinkedAgencyForSecMaster",
      "resource_provider" : "iam",
      "resource_type" : "agencies",
      "region_id" : "global",
      "domain_id" : "e74e043fab784a45ad88f5ef6a4bcffc"
    },
    "results" : {
      "resource_details" : null,
      "assignment_details" : {
        "compliant_count" : null,
        "non_compliant_count" : 1
      }
    }
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class CollectResourcesPolicyStatesSummarySolution {
```

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```
    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CollectResourcesPolicyStatesSummaryRequest request = new CollectResourcesPolicyStatesSummaryRequest();
        try {
            CollectResourcesPolicyStatesSummaryResponse response = client.collectResourcesPolicyStatesSummary(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CollectResourcesPolicyStatesSummaryRequest()
        response = client.collect_resources_policy_states_summary(request)
        print(response)
    except exceptions.ClientRequestException as e:
```

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```
        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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CollectResourcesPolicyStatesSummaryRequest{}
    response, err := client.CollectResourcesPolicyStatesSummary(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	Operation successful.
400	Invalid parameters.
403	Authentication failed or insufficient permissions.
404	Resource not found.

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Status Code	Description
500	Internal server error.

Error Codes

See **Error Codes**.

4.5.13 Querying the Compliance of a Resource

Function

This API is used to query all compliance results of a resource evaluated by rules. The resource is searched by resource ID.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/resources/{resource_id}/policy-states

Table 4-300 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
resource_id	Yes	String	Specifies the resource ID. Maximum: **512**

Table 4-301 Query Parameters

Parameter	Mandatory	Type	Description
compliance_state	No	String	Specifies the compliance status. Maximum: **16**

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Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-302 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-303 Response body parameters

Parameter	Type	Description
value	Array of **PolicyState** objects	Specifies the return value of querying the compliance result.
page_info	**PageInfo** object	Specifies the pagination object.

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Table 4-304 PolicyState

Parameter	Type	Description
domain_id	String	Specifies the user ID.
region_id	String	Specifies the ID of the region the resource belongs to.
resource_id	String	Specifies the resource ID.
resource_name	String	Specifies the resource name.
resource_provider	String	Specifies the cloud service name.
resource_type	String	Specifies the resource type.
trigger_type	String	Specifies the trigger type. The value can be **resource** or **period**.
compliance_state	String	Specifies the compliance status.
policy_assignment_id	String	Specifies the rule ID.
policy_assignment_name	String	Specifies the rule name.
policy_definition_id	String	Specifies the policy ID.
evaluation_time	String	Specifies the evaluation time of compliance status.

Table 4-305 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

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Table 4-306 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-307 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-308 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-309 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "value" : [ {
```

```
    "domain_id" : "059b5c937100d3e40ff0c00a7675a0a0",
    "region_id" : "regionid1",
    "resource_id" : "010d95bd-87cd-4f22-ac00-db7fba7d927e",
    "resource_name" : "ecs-cc-image-test1",
    "resource_provider" : "ecs",
    "resource_type" : "cloudservers",
    "trigger_type" : "resource",
    "compliance_state" : "NonCompliant",
    "policy_assignment_id" : "5fb618a726a24c53767fa049",
    "policy_assignment_name" : "policy-assignment-test1",
    "policy_definition_id" : "5fa265c0aa1e6afc05a0ff07",
    "evaluation_time" : 1605776482523
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListPolicyStatesByResourceIdSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListPolicyStatesByResourceIdRequest request = new ListPolicyStatesByResourceIdRequest();
        request.withResourceId("{resource_id}");
        try {
            ListPolicyStatesByResourceIdResponse response = client.listPolicyStatesByResourceId(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

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListPolicyStatesByResourceIdRequest()
        request.resource_id = "{resource_id}"
        response = client.list_policy_states_by_resource_id(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()
```

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```
    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListPolicyStatesByResourceIdRequest{}
    request.ResourceId = "{resource_id}"
    response, err := client.ListPolicyStatesByResourceId(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.5.14 Querying the Compliance of a Rule

Function

This API is used to query all compliance results of resources evaluated by a rule. The rule is searched by rule ID.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/policy-states

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Table 4-310 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Table 4-311 Query Parameters

Parameter	Mandatory	Type	Description
compliance_state	No	String	Specifies the compliance status. Maximum: **16**
resource_id	No	String	Specifies the resource ID. Maximum: **512**
resource_name	No	String	Specifies the resource name. Maximum: **256**
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-312 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.

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Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-313 Response body parameters

Parameter	Type	Description
value	Array of **PolicyState** objects	Specifies the return value of querying the compliance result.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-314 PolicyState

Parameter	Type	Description
domain_id	String	Specifies the user ID.
region_id	String	Specifies the ID of the region the resource belongs to.
resource_id	String	Specifies the resource ID.
resource_name	String	Specifies the resource name.
resource_provider	String	Specifies the cloud service name.
resource_type	String	Specifies the resource type.
trigger_type	String	Specifies the trigger type. The value can be **resource** or **period**.
compliance_state	String	Specifies the compliance status.
policy_assignment_id	String	Specifies the rule ID.
policy_assignment_name	String	Specifies the rule name.
policy_definition_id	String	Specifies the policy ID.

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Parameter	Type	Description
evaluation_time	String	Specifies the evaluation time of compliance status.

Table 4-315 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-316 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-317 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

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Table 4-318 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-319 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "value" : [ {
    "domain_id" : "059b5c937100d3e40ff0c00a7675a0a0",
    "region_id" : "regionid1",
    "resource_id" : "010d95bd-87cd-4f22-ac00-db7fba7d927e",
    "resource_name" : "ecs-cc-image-test1",
    "resource_provider" : "ecs",
    "resource_type" : "cloudservers",
    "trigger_type" : "resource",
    "compliance_state" : "NonCompliant",
    "policy_assignment_id" : "5fb618a726a24c53767fa049",
    "policy_assignment_name" : "policy-assignment-test1",
    "policy_definition_id" : "5fa265c0aa1e6afc05a0ff07",
    "evaluation_time" : 1605776482523
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListPolicyStatesByAssignmentIdSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListPolicyStatesByAssignmentIdRequest request = new ListPolicyStatesByAssignmentIdRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        try {
            ListPolicyStatesByAssignmentIdResponse response = client.listPolicyStatesByAssignmentId(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)
```

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```
    client = ConfigClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(ConfigRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListPolicyStatesByAssignmentIdRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        response = client.list_policy_states_by_assignment_id(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListPolicyStatesByAssignmentIdRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    response, err := client.ListPolicyStatesByAssignmentId(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
404	No rules found.
500	Server error.

Error Codes

See **Error Codes**.

4.5.15 Querying Compliance Summary by Rule

Function

This API is used to query compliance summary by rule ID.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/policy-states/summary

Table 4-320 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Table 4-321 Query Parameters

Parameter	Mandatory	Type	Description
resource_name	No	String	Specifies the resource name. Maximum: **256**

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Request Parameters

None

Response Parameters

Status code: 200

Table 4-322 Response body parameters

Parameter	Type	Description
compliance_state	String	Specifies the rule status.
policy_assignment	**PolicyAssignment** object	Specifies the rule.
results	**PolicyComplianceSummaryResults** object	Specifies the results of compliance summaries.

Table 4-323 PolicyAssignment

Parameter	Type	Description
policy_assignment_type	String	Specifies the rule type, which can be **builtin** or **custom**.
id	String	Specifies the rule ID.
name	String	Specifies the rule name.
description	String	Specifies the rule description.
policy_filter	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
policy_filter_v2	**PolicyFilterDefinitionV2** object	Specifies the policy filter of a rule.
period	String	Specifies how often the rule is triggered, which can be **One_Hour**, **Three_Hours**, **Six_Hours**, **Twelve_Hours**, or **TwentyFour_Hours**.
state	String	Specifies the rule status.
created	String	Specifies the time when the rule was added.
updated	String	Specifies the time when the rule was modified.

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Parameter	Type	Description
policy_definition_id	String	Specifies the ID of the policy associated with a rule.
custom_policy	**CustomPolicy** object	Specifies the custom rule.
parameters	Map<String,**PolicyParameterValue**>	Specifies rule parameters.
tags	Array of **ResourceTag** objects	Tags
created_by	String	Specifies the rule creator.
target_type	String	Execution method of remediation.
target_id	String	The ID of a remediation object.

Table 4-324 PolicyFilterDefinition

Parameter	Type	Description
region_id	String	Specifies the region ID. Maximum: **128**
resource_provider	String	Specifies the cloud service name. Maximum: **128**
resource_type	String	Specifies the resource type. Maximum: **128**
resource_id	String	Specifies the resource ID. Maximum: **512**
tag_key	String	Specifies the tag key. Maximum: **128**
tag_value	String	Specifies the tag value. Maximum: **256**

Table 4-325 PolicyFilterDefinitionV2

Parameter	Type	Description
region_ids	Array of strings	Specifies the region IDs.
resource_types	Array of strings	Specifies the cloud services.

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Parameter	Type	Description
resource_ids	Array of strings	Specifies the resource list.
tag_key_logic	String	The logical relationship when parameter tags takes multiple values, for example: When the tags is "tags.1.key":"a", "tags.1.values":"a", "tags.2.key":"b", "tags.2.values":"b", if this parameter is set to AND, it means that the rule only applies to resources bound with both tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
tags	Array of **FilterTagDetail** objects	Tags.
exclude_tag_key_logic	String	The logical relationship when parameter exclude_tags takes multiple values, for example: When the exclude_tags is "exclude_tags.1.key":"a", "exclude_tags.1.values":"a", "exclude_tags.2.key":"b", "exclude_tags.2.values":"b", if this parameter is set to AND, it means that the rule excludes resources that are bound with the tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
exclude_tags	Array of **FilterTagDetail** objects	Exclude Tags.

Table 4-326 FilterTagDetail

Parameter	Type	Description
key	String	Specifies the tag key.
values	Array of strings	Specifies tag values.

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Table 4-327 CustomPolicy

Parameter	Type	Description
function_urn	String	Specifies the URN of a custom function. Maximum: **1024**
auth_type	String	Specifies the method used by a custom rule to call a function.
auth_value	Map<String,Object>	Specifies the value of the method used by a custom rule to call a function.

Table 4-328 PolicyParameterValue

Parameter	Type	Description
value	Object	Specifies the value of the rule parameter.

Table 4-329 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Table 4-330 PolicyComplianceSummaryResults

Parameter	Type	Description
resource_details	**ResourceComplianceSummaryUnit** object	Resource compliance summary details.

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Parameter	Type	Description
assignment_details	PolicyComplianceSummaryUnit object	Specifies the compliance summary details.

Table 4-331 ResourceComplianceSummaryUnit

Parameter	Type	Description
compliant_count	Integer	Specifies the number of compliant resources.
non_compliant_count	Integer	Specifies the number of non-compliant resources.

Table 4-332 PolicyComplianceSummaryUnit

Parameter	Type	Description
compliant_count	Integer	Specifies the number of compliant resources.
non_compliant_count	Integer	Specifies the number of non-compliant resources.

Status code: 400

Table 4-333 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-334 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 404

Table 4-335 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-336 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation successful.


```
{
  "compliance_state" : "NonCompliant",
  "policy_assignment" : {
    "policy_assignment_type" : "builtin",
    "id" : "68511e12374e70675172b9c1",
    "name" : "cts-obs-bucket-track2-Q2E4Mw",
    "description" : "The evaluation based on this rule is triggered upon configuration changes. Evaluation
result: non-compliant; All CTS trackers in the account failed to track the specified OBS buckets.",
    "policy_filter" : {
      "region_id" : null,
      "resource_provider" : null,
      "resource_type" : null,
      "resource_id" : null,
      "tag_key" : null,
      "tag_value" : null
    },
    "policy_filter_v2" : null,
    "period" : "TwentyFour_Hours",
    "state" : "Enabled",
    "created" : "2025-06-17T07:49:38.717Z",
    "updated" : "2025-06-17T07:49:38.717Z",
    "policy_definition_id" : "77982d0e4e8954e37d0f6919",
    "custom_policy" : null,
    "parameters" : {
      "trackBucket" : {
        "value" : "rms"
      }
    },
```


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```
    "tags" : [ {
      "key" : "AAA",
      "value" : "AAA"
    } ],
    "created_by" : "ServiceLinkedAgencyForRMSConforms",
    "target_type" : null,
    "target_id" : null
  },
  "results" : {
    "resource_details" : {
      "compliant_count" : 0,
      "non_compliant_count" : 1
    },
    "assignment_details" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class CollectPolicyAssignmentsStatesSummarySolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CollectPolicyAssignmentsStatesSummaryRequest request = new CollectPolicyAssignmentsStatesSummaryRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        try {
            CollectPolicyAssignmentsStatesSummaryResponse response = client.collectPolicyAssignmentsStatesSummary(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

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CollectPolicyAssignmentsStatesSummaryRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        response = client.collect_policy_assignments_states_summary(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()
```

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```
    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CollectPolicyAssignmentsStatesSummaryRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    response, err := client.CollectPolicyAssignmentsStatesSummary(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	Operation successful.
400	Invalid parameters.
403	Authentication failed or insufficient permissions.
404	Resource not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.5.16 Querying Compliance of an Account

Function

This API is used to query all compliance results of resources under a user.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/policy-states

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Table 4-337 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-338 Query Parameters

Parameter	Mandatory	Type	Description
compliance_state	No	String	Specifies the compliance status. Maximum: **16**
resource_id	No	String	Specifies the resource ID. Maximum: **512**
resource_name	No	String	Specifies the resource name. Maximum: **256**
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-339 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

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Response Parameters

Status code: 200

Table 4-340 Response body parameters

Parameter	Type	Description
value	Array of **PolicyState** objects	Specifies the return value of querying the compliance result.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-341 PolicyState

Parameter	Type	Description
domain_id	String	Specifies the user ID.
region_id	String	Specifies the ID of the region the resource belongs to.
resource_id	String	Specifies the resource ID.
resource_name	String	Specifies the resource name.
resource_provider	String	Specifies the cloud service name.
resource_type	String	Specifies the resource type.
trigger_type	String	Specifies the trigger type. The value can be **resource** or **period**.
compliance_state	String	Specifies the compliance status.
policy_assignment_id	String	Specifies the rule ID.
policy_assignment_name	String	Specifies the rule name.
policy_definition_id	String	Specifies the policy ID.
evaluation_time	String	Specifies the evaluation time of compliance status.

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Table 4-342 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-343 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-344 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-345 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-346 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "value" : [ {
    "domain_id" : "059b5c937100d3e40ff0c00a7675a0a0",
    "region_id" : "regionid1",
    "resource_id" : "010d95bd-87cd-4f22-ac00-db7fba7d927e",
    "resource_name" : "ecs-cc-image-test1",
    "resource_provider" : "ecs",
    "resource_type" : "cloudservers",
    "trigger_type" : "resource",
    "compliance_state" : "NonCompliant",
    "policy_assignment_id" : "5fb618a726a24c53767fa049",
    "policy_assignment_name" : "policy-assignment-test1",
    "policy_definition_id" : "5fa265c0aa1e6afc05a0ff07",
    "evaluation_time" : 1605776482523
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListPolicyStatesByDomainIdSolution {

    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");

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

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListPolicyStatesByDomainIdRequest request = new ListPolicyStatesByDomainIdRequest();
        try {
            ListPolicyStatesByDomainIdResponse response = client.listPolicyStatesByDomainId(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListPolicyStatesByDomainIdRequest()
        response = client.list_policy_states_by_domain_id(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListPolicyStatesByDomainIdRequest{}
    response, err := client.ListPolicyStatesByDomainId(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
404	Resources not found.
500	Server error.

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Error Codes

See **Error Codes**.

4.5.17 Updating the Compliance Result

Function

This API is used to update the compliance result of a custom rule.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1/resource-manager/domains/{domain_id}/policy-states

Table 4-347 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Request Parameters

Table 4-348 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-349 Request body parameters

Parameter	Mandatory	Type	Description
policy_resource	Yes	**PolicyResource** object	Specifies the resource.
trigger_type	Yes	String	Specifies the trigger type.

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Parameter	Mandatory	Type	Description
compliance_state	Yes	String	Specifies the compliance status.
policy_assignment_id	Yes	String	Specifies the policy rule id.
policy_assignment_name	No	String	Specifies the policy rule name.
evaluation_time	Yes	String	Specifies when a rule is used to evaluate the resource compliance.
evaluation_hash	Yes	String	Specifies the evaluation verification code.

Table 4-350 PolicyResource

Parameter	Mandatory	Type	Description
resource_id	No	String	Specifies the resource ID.
resource_name	No	String	Specifies the resource name.
resource_provider	No	String	Specifies the cloud service name.
resource_type	No	String	Specifies the resource type.
region_id	No	String	Specifies the region ID.
domain_id	No	String	Specifies the ID of the user to which the resource belongs.

Response Parameters

Status code: 200

Table 4-351 Response body parameters

Parameter	Type	Description
domain_id	String	Specifies the user ID.
region_id	String	Specifies the ID of the region the resource belongs to.
resource_id	String	Specifies the resource ID.
resource_name	String	Specifies the resource name.

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Parameter	Type	Description
resource_provider	String	Specifies the cloud service name.
resource_type	String	Specifies the resource type.
trigger_type	String	Specifies the trigger type. The value can be **resource** or **period**.
compliance_state	String	Specifies the compliance status.
policy_assignment_id	String	Specifies the rule ID.
policy_assignment_name	String	Specifies the rule name.
policy_definition_id	String	Specifies the policy ID.
evaluation_time	String	Specifies the evaluation time of compliance status.

Status code: 400

Table 4-352 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-353 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-354 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.

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Parameter	Type	Description
error_msg	String	Specifies the error message.

Example Requests

The reported compliance result by functionGraph is **NonCompliant**.

```
PUT https://{endpoint}/v1/resource-manager/domains/{domain_id}/policy-states

{
  "policy_resource" : {
    "domain_id" : "d0123456789",
    "region_id" : "global",
    "resource_id" : "abc0123456789",
    "resource_name" : "test_user",
    "resource_provider" : "iam",
    "resource_type" : "users"
  },
  "trigger_type" : "resource",
  "compliance_state" : "NonCompliant",
  "policy_assignment_id" : "abc0123456789abc",
  "policy_assignment_name" : "custom_policy",
  "evaluation_time" : 1667374060248,
  "evaluation_hash" : "89342b8f338165651991afb8bd471396"
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "domain_id" : "d0123456789",
  "region_id" : "global",
  "resource_id" : "abc0123456789",
  "resource_name" : "test_user",
  "resource_provider" : "iam",
  "resource_type" : "users",
  "trigger_type" : "resource",
  "compliance_state" : "NonCompliant",
  "policy_assignment_id" : "abc0123456789abc",
  "policy_assignment_name" : "custom_policy",
  "policy_definition_id" : null,
  "evaluation_time" : 1667374060248
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

The reported compliance result by functionGraph is **NonCompliant**.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class UpdatePolicyStateSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdatePolicyStateRequest request = new UpdatePolicyStateRequest();
        PolicyStateRequestBody body = new PolicyStateRequestBody();
        PolicyResource policyResourcebody = new PolicyResource();
        policyResourcebody.withResourceId("abc0123456789")
            .withResourceName("test_user")
            .withResourceProvider("iam")
            .withResourceType("users")
            .withRegionId("global")
            .withDomainId("d0123456789");
        body.withEvaluationHash("89342b8f338165651991afb8bd471396");
        body.withEvaluationTime("1667374060248");
        body.withPolicyAssignmentName("custom_policy");
        body.withPolicyAssignmentId("abc0123456789abc");

body.withComplianceState(PolicyStateRequestBody.ComplianceStateEnum.fromValue("NonCompliant"));
        body.withTriggerType(PolicyStateRequestBody.TriggerTypeEnum.fromValue("resource"));
        body.withPolicyResource(policyResourcebody);
        request.withBody(body);
        try {
            UpdatePolicyStateResponse response = client.updatePolicyState(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 reported compliance result by functionGraph is **NonCompliant**.

```
# coding: utf-8

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

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```
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = UpdatePolicyStateRequest()
        policyResourcebody = PolicyResource(
            resource_id="abc0123456789",
            resource_name="test_user",
            resource_provider="iam",
            resource_type="users",
            region_id="global",
            domain_id="d0123456789"
        )
        request.body = PolicyStateRequestBody(
            evaluation_hash="89342b8f338165651991afb8bd471396",
            evaluation_time="1667374060248",
            policy_assignment_name="custom_policy",
            policy_assignment_id="abc0123456789abc",
            compliance_state="NonCompliant",
            trigger_type="resource",
            policy_resource=policyResourcebody
        )
        response = client.update_policy_state(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 reported compliance result by functionGraph is **NonCompliant**.

```
package main

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

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdatePolicyStateRequest{}
    resourceIdPolicyResource:= "abc0123456789"
    resourceNamePolicyResource:= "test_user"
    resourceProviderPolicyResource:= "iam"
    resourceTypePolicyResource:= "users"
    regionIdPolicyResource:= "global"
    domainIdPolicyResource:= "d0123456789"
    policyResourcebody := &model.PolicyResource{
        ResourceId: &resourceIdPolicyResource,
        ResourceName: &resourceNamePolicyResource,
        ResourceProvider: &resourceProviderPolicyResource,
        ResourceType: &resourceTypePolicyResource,
        RegionId: &regionIdPolicyResource,
        DomainId: &domainIdPolicyResource,
    }
    policyAssignmentNamePolicyStateRequestBody:= "custom_policy"
    request.Body = &model.PolicyStateRequestBody{
        EvaluationHash: "89342b8f338165651991afb8bd471396",
        EvaluationTime: "1667374060248",
        PolicyAssignmentName: &policyAssignmentNamePolicyStateRequestBody,
        PolicyAssignmentId: "abc0123456789abc",
        ComplianceState: model.GetPolicyStateRequestBodyComplianceStateEnum().NON_COMPLIANT,
        TriggerType: model.GetPolicyStateRequestBodyTriggerTypeEnum().RESOURCE,
        PolicyResource: policyResourcebody,
    }
    response, err := client.UpdatePolicyState(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

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Error Codes

See **Error Codes**.

4.5.18 Querying Compliance Summary by User

Function

This API is used to query compliance summary by user.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/policy-states/summary

Table 4-355 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-356 Query Parameters

Parameter	Mandatory	Type	Description
tags	No	Array of strings	Tag list. Array Length: **1 - 5**

Request Parameters

None

Response Parameters

Status code: 200

Table 4-357 Response body parameters

Parameter	Type	Description
results	**PolicyComplianceSummaryResults** object	Specifies the results of compliance summaries.

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Parameter	Type	Description
policy_assignments	Array of **PolicyAssignmentComplianceSummary** objects	Specifies the compliance summaries based on rules.

Table 4-358 PolicyAssignmentComplianceSummary

Parameter	Type	Description
compliance_state	String	Specifies the rule status.
policy_assignment	**PolicyAssignment** object	Specifies the rule.
results	**PolicyComplianceSummaryResults** object	Specifies the results of compliance summaries.

Table 4-359 PolicyAssignment

Parameter	Type	Description
policy_assignment_type	String	Specifies the rule type, which can be **builtin** or **custom**.
id	String	Specifies the rule ID.
name	String	Specifies the rule name.
description	String	Specifies the rule description.
policy_filter	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
policy_filter_v2	**PolicyFilterDefinitionV2** object	Specifies the policy filter of a rule.
period	String	Specifies how often the rule is triggered, which can be **One_Hour**, **Three_Hours**, **Six_Hours**, **Twelve_Hours**, or **TwentyFour_Hours**.
state	String	Specifies the rule status.
created	String	Specifies the time when the rule was added.
updated	String	Specifies the time when the rule was modified.

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Parameter	Type	Description
policy_definition_id	String	Specifies the ID of the policy associated with a rule.
custom_policy	**CustomPolicy** object	Specifies the custom rule.
parameters	Map<String,**PolicyParameterValue**>	Specifies rule parameters.
tags	Array of **ResourceTag** objects	Tags
created_by	String	Specifies the rule creator.
target_type	String	Execution method of remediation.
target_id	String	The ID of a remediation object.

Table 4-360 PolicyFilterDefinition

Parameter	Type	Description
region_id	String	Specifies the region ID. Maximum: **128**
resource_provider	String	Specifies the cloud service name. Maximum: **128**
resource_type	String	Specifies the resource type. Maximum: **128**
resource_id	String	Specifies the resource ID. Maximum: **512**
tag_key	String	Specifies the tag key. Maximum: **128**
tag_value	String	Specifies the tag value. Maximum: **256**

Table 4-361 PolicyFilterDefinitionV2

Parameter	Type	Description
region_ids	Array of strings	Specifies the region IDs.
resource_types	Array of strings	Specifies the cloud services.

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Parameter	Type	Description
resource_ids	Array of strings	Specifies the resource list.
tag_key_logic	String	The logical relationship when parameter tags takes multiple values, for example: When the tags is "tags.1.key":"a", "tags.1.values":"a", "tags.2.key":"b", "tags.2.values":"b", if this parameter is set to AND, it means that the rule only applies to resources bound with both tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
tags	Array of **FilterTagDetail** objects	Tags.
exclude_tag_key_logic	String	The logical relationship when parameter exclude_tags takes multiple values, for example: When the exclude_tags is "exclude_tags.1.key":"a", "exclude_tags.1.values":"a", "exclude_tags.2.key":"b", "exclude_tags.2.values":"b", if this parameter is set to AND, it means that the rule excludes resources that are bound with the tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
exclude_tags	Array of **FilterTagDetail** objects	Exclude Tags.

Table 4-362 FilterTagDetail

Parameter	Type	Description
key	String	Specifies the tag key.
values	Array of strings	Specifies tag values.

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Table 4-363 CustomPolicy

Parameter	Type	Description
function_urn	String	Specifies the URN of a custom function. Maximum: **1024**
auth_type	String	Specifies the method used by a custom rule to call a function.
auth_value	Map<String,Object>	Specifies the value of the method used by a custom rule to call a function.

Table 4-364 PolicyParameterValue

Parameter	Type	Description
value	Object	Specifies the value of the rule parameter.

Table 4-365 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Table 4-366 PolicyComplianceSummaryResults

Parameter	Type	Description
resource_details	**ResourceComplianceSummaryUnit** object	Resource compliance summary details.

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Parameter	Type	Description
assignment_details	PolicyComplianceSummaryUnit object	Specifies the compliance summary details.

Table 4-367 ResourceComplianceSummaryUnit

Parameter	Type	Description
compliant_count	Integer	Specifies the number of compliant resources.
non_compliant_count	Integer	Specifies the number of non-compliant resources.

Table 4-368 PolicyComplianceSummaryUnit

Parameter	Type	Description
compliant_count	Integer	Specifies the number of compliant resources.
non_compliant_count	Integer	Specifies the number of non-compliant resources.

Status code: 400

Table 4-369 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-370 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 404

Table 4-371 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-372 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Query results


```
{
  "results" : {
    "resource_details" : {
      "compliant_count" : 503,
      "non_compliant_count" : 527
    },
    "assignment_details" : {
      "compliant_count" : 1,
      "non_compliant_count" : 1
    }
  },
  "policy_assignments" : [ {
    "compliance_state" : "NonCompliant",
    "policy_assignment" : {
      "policy_assignment_type" : "builtin",
      "id" : "68511e12374e70675172b9c1",
      "name" : "cts-obs-bucket-track2-Q2E4Mw",
      "description" : "The evaluation based on this rule is triggered upon configuration changes. Evaluation result: non-compliant; All CTS trackers in the account failed to track the specified OBS buckets.",
      "policy_filter" : {
        "region_id" : null,
        "resource_provider" : null,
        "resource_type" : null,
        "resource_id" : null,
        "tag_key" : null,
        "tag_value" : null
      },
      "policy_filter_v2" : null,
```


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```
    "period" : "TwentyFour_Hours",
    "state" : "Enabled",
    "created" : "2025-06-17T07:49:38.717Z",
    "updated" : "2025-06-17T07:49:38.717Z",
    "policy_definition_id" : "77982d0e4e8954e37d0f6919",
    "custom_policy" : null,
    "parameters" : {
      "trackBucket" : {
        "value" : "rms"
      }
    },
    "tags" : [ {
      "key" : "AAA",
      "value" : "AAA"
    } ],
    "created_by" : "ServiceLinkedAgencyForRMSConforms",
    "target_type" : null,
    "target_id" : null
  },
  "results" : {
    "resource_details" : {
      "compliant_count" : 0,
      "non_compliant_count" : 1
    },
    "assignment_details" : null
  }
 } ]
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class CollectPolicyStatesSummarySolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CollectPolicyStatesSummaryRequest request = new CollectPolicyStatesSummaryRequest();
        try {
```

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```
            CollectPolicyStatesSummaryResponse response = client.collectPolicyStatesSummary(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CollectPolicyStatesSummaryRequest()
        response = client.collect_policy_states_summary(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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
```

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CollectPolicyStatesSummaryRequest{}
    response, err := client.CollectPolicyStatesSummary(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	Query results
400	Invalid parameters.
403	Authentication failed or insufficient permissions.
404	Resource not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.5.19 Creating an Organization Rule

Function

This API is used to create an organization rule.

Calling Method

For details, see **Calling APIs**.

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URI

PUT /v1/resource-manager/organizations/{organization_id}/policy-assignments

Table 4-373 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**

Request Parameters

Table 4-374 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-375 Request body parameters

Parameter	Mandatory	Type	Description
excluded_accounts	No	Array of strings	Specifies the accounts to be excluded from the rule. Maximum: **32**
organization_policy_assignment_name	Yes	String	Specifies the organization rule name. Maximum: **60**
managed_policy_assignment_metadata	No	**ManagedPolicyAssignmentMetadata** object	Specifies the metadata of a managed rule.

Table 4-376 ManagedPolicyAssignmentMetadata

Parameter	Mandatory	Type	Description
description	No	String	Specifies the rule description. Maximum: **512**

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Parameter	Mandatory	Type	Description
period	No	String	Specifies the trigger period.
parameters	No	Map<String,PolicyParameterValue>	Specifies the input parameter.
policy_filter	No	PolicyFilterDefinition object	Specifies the policy filter of a rule.
policy_definition_id	Yes	String	Specifies the identifier of a predefined policy. Maximum: **36**

Table 4-377 PolicyParameterValue

Parameter	Mandatory	Type	Description
value	No	Object	Specifies the value of the rule parameter.

Table 4-378 PolicyFilterDefinition

Parameter	Mandatory	Type	Description
region_id	No	String	Specifies the region ID. Maximum: **128**
resource_provider	No	String	Specifies the cloud service name. Maximum: **128**
resource_type	No	String	Specifies the resource type. Maximum: **128**
resource_id	No	String	Specifies the resource ID. Maximum: **512**
tag_key	No	String	Specifies the tag key. Maximum: **128**
tag_value	No	String	Specifies the tag value. Maximum: **256**

Response Parameters

Status code: 200

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Table 4-379 Response body parameters

Parameter	Type	Description
owner_id	String	Specifies the organization rule creator.
organization_id	String	Specifies the organization ID.
organization_policy_assignment_urn	String	Specifies the unique ID of the organization rule.
organization_policy_assignment_id	String	Specifies the organization rule ID.
organization_policy_assignment_name	String	Specifies the organization rule name.
description	String	Specifies the description information.
period	String	Specifies the trigger period.
policy_filter	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
parameters	Map<String,**PolicyParameterValue**>	Specifies the rule parameters.
policy_definition_id	String	Specifies the policy ID.
created_at	String	Specifies the creation time.
updated_at	String	Specifies the update time.

Table 4-380 PolicyFilterDefinition

Parameter	Type	Description
region_id	String	Specifies the region ID. Maximum: **128**
resource_provider	String	Specifies the cloud service name. Maximum: **128**
resource_type	String	Specifies the resource type. Maximum: **128**
resource_id	String	Specifies the resource ID. Maximum: **512**
tag_key	String	Specifies the tag key. Maximum: **128**

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Parameter	Type	Description
tag_value	String	Specifies the tag value. Maximum: **256**

Table 4-381 PolicyParameterValue

Parameter	Type	Description
value	Object	Specifies the value of the rule parameter.

Status code: 400

Table 4-382 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-383 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-384 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Creating or modifying an organization rule.

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```
PUT https://{endpoint}/v1/resource-manager/organizations/{organization_id}/policy-assignments

{
  "organization_policy_assignment_name" : "allowed-images-by-id",
  "managed_policy_assignment_metadata" : {
    "description" : "The ECS resource is non-compliant if the image it used is not in the allowed list.",
    "parameters" : {
      "listOfAllowedImages" : {
        "value" : [ "ea0d6e0e-99c3-406d-a873-3bb45462b624" ]
      }
    },
    "policy_filter" : {
      "resource_provider" : "ecs",
      "resource_type" : "cloudservers"
    },
    "policy_definition_id" : "5fa265c0aa1e6afc05a0ff07"
  }
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "owner_id" : "e74e043fab784a45ad88f5ef6a4bcffc",
  "organization_id" : "o-doxbpkzqsdd51ti1k27w2y8fitakrknp",
  "organization_policy_assignment_urn" :
"rms::e74e043fab784a45ad88f5ef6a4bcffc:organizationPolicyAssignment:o-
doxbpkzqsdd51ti1k27w2y8fitakrknp/d02b7fa9d5a74e638c1402d0868f71fd",
  "organization_policy_assignment_id" : "d02b7fa9d5a74e638c1402d0868f71fd",
  "organization_policy_assignment_name" : "allowed-images-by-id",
  "description" : "The ECS resource is non-compliant if the image it used is not in the allowed list.",
  "period" : null,
  "policy_filter" : {
    "region_id" : null,
    "resource_provider" : "evs",
    "resource_type" : "volumes",
    "resource_id" : null,
    "tag_key" : null,
    "tag_value" : null
  },
  "policy_definition_id" : "5fa265c0aa1e6afc05a0ff07",
  "parameters" : { },
  "created_at" : "2022-01-18T06:37:54.432Z",
  "updated_at" : "2022-01-18T06:37:54.432Z"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Creating or modifying an organization rule.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
```

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

import java.util.Map;
import java.util.HashMap;

public class CreateOrganizationPolicyAssignmentSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateOrganizationPolicyAssignmentRequest request = new CreateOrganizationPolicyAssignmentRequest();
        request.withOrganizationId("{organization_id}");
        OrganizationPolicyAssignmentRequest body = new OrganizationPolicyAssignmentRequest();
        PolicyFilterDefinition policyFilterManagedPolicyAssignmentMetadata = new PolicyFilterDefinition();
        policyFilterManagedPolicyAssignmentMetadata.withResourceProvider("ecs")
            .withResourceType("cloudservers");
        PolicyParameterValue parametersParameters = new PolicyParameterValue();
        parametersParameters.withValue("[ea0d6e0e-99c3-406d-a873-3bb45462b624]");
        Map<String, PolicyParameterValue> listManagedPolicyAssignmentMetadataParameters = new HashMap<>();
        listManagedPolicyAssignmentMetadataParameters.put("listOfAllowedImages", parametersParameters);
        ManagedPolicyAssignmentMetadata managedPolicyAssignmentMetadatabody = new ManagedPolicyAssignmentMetadata();
        managedPolicyAssignmentMetadatabody.withDescription("The ECS resource is non-compliant if the image it used is not in the allowed list.")
            .withParameters(listManagedPolicyAssignmentMetadataParameters)
            .withPolicyFilter(policyFilterManagedPolicyAssignmentMetadata)
            .withPolicyDefinitionId("5fa265c0aa1e6afc05a0ff07");
        body.withManagedPolicyAssignmentMetadata(managedPolicyAssignmentMetadatabody);
        body.withOrganizationPolicyAssignmentName("allowed-images-by-id");
        request.withBody(body);
        try {
            CreateOrganizationPolicyAssignmentResponse response = client.createOrganizationPolicyAssignment(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

Creating or modifying an organization rule.

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```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CreateOrganizationPolicyAssignmentRequest()
        request.organization_id = "{organization_id}"
        policyFilterManagedPolicyAssignmentMetadata = PolicyFilterDefinition(
            resource_provider="ecs",
            resource_type="cloudservers"
        )
        parametersParameters = PolicyParameterValue(
            value="[ea0d6e0e-99c3-406d-a873-3bb45462b624]"
        )
        listParametersManagedPolicyAssignmentMetadata = {
            "listOfAllowedImages": parametersParameters
        }
        managedPolicyAssignmentMetadatabody = ManagedPolicyAssignmentMetadata(
            description="The ECS resource is non-compliant if the image it used is not in the allowed list.",
            parameters=listParametersManagedPolicyAssignmentMetadata,
            policy_filter=policyFilterManagedPolicyAssignmentMetadata,
            policy_definition_id="5fa265c0aa1e6afc05a0ff07"
        )
        request.body = OrganizationPolicyAssignmentRequest(
            managed_policy_assignment_metadata=managedPolicyAssignmentMetadatabody,
            organization_policy_assignment_name="allowed-images-by-id"
        )
        response = client.create_organization_policy_assignment(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

Creating or modifying an organization rule.

```
package main

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

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateOrganizationPolicyAssignmentRequest{}
    request.OrganizationId = "{organization_id}"
    resourceProviderPolicyFilter:= "ecs"
    resourceTypePolicyFilter:= "cloudservers"
    policyFilterManagedPolicyAssignmentMetadata := &model.PolicyFilterDefinition{
        ResourceProvider: &resourceProviderPolicyFilter,
        ResourceType: &resourceTypePolicyFilter,
    }
    var valueParameters interface{} = "[ea0d6e0e-99c3-406d-a873-3bb45462b624]"
    parametersParameters := model.PolicyParameterValue{
        Value: &valueParameters,
    }
    var listParametersManagedPolicyAssignmentMetadata = map[string](model.PolicyParameterValue){
        "listOfAllowedImages": parametersParameters,
    }
    descriptionManagedPolicyAssignmentMetadata:= "The ECS resource is non-compliant if the image it used is not in the allowed list."
    managedPolicyAssignmentMetadatabody := &model.ManagedPolicyAssignmentMetadata{
        Description: &descriptionManagedPolicyAssignmentMetadata,
        Parameters: listParametersManagedPolicyAssignmentMetadata,
        PolicyFilter: policyFilterManagedPolicyAssignmentMetadata,
        PolicyDefinitionId: "5fa265c0aa1e6afc05a0ff07",
    }
    request.Body = &model.OrganizationPolicyAssignmentRequest{
        ManagedPolicyAssignmentMetadata: managedPolicyAssignmentMetadatabody,
        OrganizationPolicyAssignmentName: "allowed-images-by-id",
    }
    response, err := client.CreateOrganizationPolicyAssignment(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.5.20 Querying Organization Rules

Function

This API is used to query organization rules.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/organizations/{organization_id}/policy-assignments

Table 4-385 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**

Table 4-386 Query Parameters

Parameter	Mandatory	Type	Description
organization_policy_assignment_id	No	String	Specifies the organization assignment id Maximum: **32**
organization_policy_assignment_name	No	String	Specifies the organization rule name. Maximum: **60**

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Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-387 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-388 Response body parameters

Parameter	Type	Description
organization_policy_assignments	Array of **OrganizationPolicyAssignmentResponse** objects	Specifies organization rules.
page_info	**PageInfo** object	Specifies the pagination object.

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Table 4-389 OrganizationPolicyAssignmentResponse

Parameter	Type	Description
owner_id	String	Specifies the organization rule creator.
organization_id	String	Specifies the organization ID.
organization_policy_assignment_urn	String	Specifies the unique ID of the organization rule.
organization_policy_assignment_id	String	Specifies the organization rule ID.
organization_policy_assignment_name	String	Specifies the organization rule name.
description	String	Specifies the description information.
period	String	Specifies the trigger period.
policy_filter	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
parameters	Map<String,**PolicyParameterValue**>	Specifies the rule parameters.
policy_definition_id	String	Specifies the policy ID.
created_at	String	Specifies the creation time.
updated_at	String	Specifies the update time.

Table 4-390 PolicyFilterDefinition

Parameter	Type	Description
region_id	String	Specifies the region ID. Maximum: **128**
resource_provider	String	Specifies the cloud service name. Maximum: **128**
resource_type	String	Specifies the resource type. Maximum: **128**
resource_id	String	Specifies the resource ID. Maximum: **512**
tag_key	String	Specifies the tag key. Maximum: **128**

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Parameter	Type	Description
tag_value	String	Specifies the tag value. Maximum: **256**

Table 4-391 PolicyParameterValue

Parameter	Type	Description
value	Object	Specifies the value of the rule parameter.

Table 4-392 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-393 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-394 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 500

Table 4-395 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "organization_policy_assignments" : [ {
    "owner_id" : "e74e043fab784a45ad88f5ef6a4bcffc",
    "organization_id" : "o-doxbpkzqsdd51ti1k27w2y8fitakrknp",
    "organization_policy_assignment_urn" :
"rms::e74e043fab784a45ad88f5ef6a4bcffc:organizationPolicyAssignment:o-
doxbpkzqsdd51ti1k27w2y8fitakrknp/d02b7fa9d5a74e638c1402d0868f71fd",
    "organization_policy_assignment_id" : "d02b7fa9d5a74e638c1402d0868f71fd",
    "organization_policy_assignment_name" : "allowed-images-by-id",
    "description" : "The ECS resource is non-compliant if the image it used is not in the allowed list",
    "period" : null,
    "policy_filter" : {
      "region_id" : null,
      "resource_provider" : "evs",
      "resource_type" : "volumes",
      "resource_id" : null,
      "tag_key" : null,
      "tag_value" : null
    },
    "policy_definition_id" : "5fa265c0aa1e6afc05a0ff07",
    "parameters" : { },
    "created_at" : "2022-01-18T06:37:54.432Z",
    "updated_at" : "2022-01-18T06:37:54.432Z"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : "CAESIGQwMmI3ZmE5ZDVhNzRlNjM4YzE0MDJkMDg2OGY3MWZkGgTnpS5u"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListOrganizationPolicyAssignmentsSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListOrganizationPolicyAssignmentsRequest request = new ListOrganizationPolicyAssignmentsRequest();
        request.withOrganizationId("{organization_id}");
        try {
            ListOrganizationPolicyAssignmentsResponse response = client.listOrganizationPolicyAssignments(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)
```

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```
    client = ConfigClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(ConfigRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListOrganizationPolicyAssignmentsRequest()
        request.organization_id = "{organization_id}"
        response = client.list_organization_policy_assignments(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListOrganizationPolicyAssignmentsRequest{}
    request.OrganizationId = "{organization_id}"
    response, err := client.ListOrganizationPolicyAssignments(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.5.21 Querying a Specific Organization Rule

Function

This API is used to query a specific organization rule.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/organizations/{organization_id}/policy-assignments/{organization_policy_assignment_id}

Table 4-396 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**
organization_policy_assignment_id	Yes	String	Specifies the organization rule ID. Maximum: **32**

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Request Parameters

Table 4-397 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-398 Response body parameters

Parameter	Type	Description
owner_id	String	Specifies the organization rule creator.
organization_id	String	Specifies the organization ID.
organization_policy_assignment_urn	String	Specifies the unique ID of the organization rule.
organization_policy_assignment_id	String	Specifies the organization rule ID.
organization_policy_assignment_name	String	Specifies the organization rule name.
excluded_accounts	Array of strings	Specifies the accounts excluded from the rule.
description	String	Specifies the description information.
period	String	Specifies the trigger period.
policy_filter	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
parameters	Map<String,**PolicyParameterValue**>	Specifies the rule parameters.
policy_definition_id	String	Specifies the policy ID.
created_at	String	Specifies the creation time.
updated_at	String	Specifies the update time.

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Table 4-399 PolicyFilterDefinition

Parameter	Type	Description
region_id	String	Specifies the region ID. Maximum: **128**
resource_provider	String	Specifies the cloud service name. Maximum: **128**
resource_type	String	Specifies the resource type. Maximum: **128**
resource_id	String	Specifies the resource ID. Maximum: **512**
tag_key	String	Specifies the tag key. Maximum: **128**
tag_value	String	Specifies the tag value. Maximum: **256**

Table 4-400 PolicyParameterValue

Parameter	Type	Description
value	Object	Specifies the value of the rule parameter.

Status code: 400

Table 4-401 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-402 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 500

Table 4-403 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "owner_id" : "e74e043fab784a45ad88f5ef6a4bcffc",
  "organization_id" : "o-doxbpkzqsdd51ti1k27w2y8fitakrknp",
  "organization_policy_assignment_urn" :
"rms::e74e043fab784a45ad88f5ef6a4bcffc:organizationPolicyAssignment:o-
doxbpkzqsdd51ti1k27w2y8fitakrknp/d02b7fa9d5a74e638c1402d0868f71fd",
  "organization_policy_assignment_id" : "d02b7fa9d5a74e638c1402d0868f71fd",
  "organization_policy_assignment_name" : "allowed-images-by-id",
  "description" : "The ECS resource is non-compliant if the image it used is not in the allowed list.",
  "period" : null,
  "policy_filter" : {
    "region_id" : null,
    "resource_provider" : "evs",
    "resource_type" : "volumes",
    "resource_id" : null,
    "tag_key" : null,
    "tag_value" : null
  },
  "policy_definition_id" : "5fa265c0aa1e6afc05a0ff07",
  "parameters" : { },
  "created_at" : "2022-01-18T06:37:54.432Z",
  "updated_at" : "2022-01-18T06:37:54.432Z"
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;
```

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```
public class ShowOrganizationPolicyAssignmentSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowOrganizationPolicyAssignmentRequest request = new ShowOrganizationPolicyAssignmentRequest();
        request.withOrganizationId("{organization_id}");
        request.withOrganizationPolicyAssignmentId("{organization_policy_assignment_id}");
        try {
            ShowOrganizationPolicyAssignmentResponse response = client.showOrganizationPolicyAssignment(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
```

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```
        request = ShowOrganizationPolicyAssignmentRequest()
        request.organization_id = "{organization_id}"
        request.organization_policy_assignment_id = "{organization_policy_assignment_id}"
        response = client.show_organization_policy_assignment(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowOrganizationPolicyAssignmentRequest{}
    request.OrganizationId = "{organization_id}"
    request.OrganizationPolicyAssignmentId = "{organization_policy_assignment_id}"
    response, err := client.ShowOrganizationPolicyAssignment(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	Operation succeeded.

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Status Code	Description
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.5.22 Deleting an Organization Rule

Function

This API is used to delete an organization rule.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1/resource-manager/organizations/{organization_id}/policy-assignments/{organization_policy_assignment_id}

Table 4-404 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**
organization_policy_assignment_id	Yes	String	Specifies the organization rule ID. Maximum: **32**

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Request Parameters

Table 4-405 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 204

Operation succeeded.

Status code: 400

Table 4-406 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-407 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-408 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class DeleteOrganizationPolicyAssignmentSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteOrganizationPolicyAssignmentRequest request = new DeleteOrganizationPolicyAssignmentRequest();
        request.withOrganizationId("{organization_id}");
        request.withOrganizationPolicyAssignmentId("{organization_policy_assignment_id}");
        try {
            DeleteOrganizationPolicyAssignmentResponse response = client.deleteOrganizationPolicyAssignment(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = DeleteOrganizationPolicyAssignmentRequest()
        request.organization_id = "{organization_id}"
        request.organization_policy_assignment_id = "{organization_policy_assignment_id}"
        response = client.delete_organization_policy_assignment(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
    request := &model.DeleteOrganizationPolicyAssignmentRequest{}
    request.OrganizationId = "{organization_id}"
    request.OrganizationPolicyAssignmentId = "{organization_policy_assignment_id}"
    response, err := client.DeleteOrganizationPolicyAssignment(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.5.23 Updating an Organization Rule

Function

Updating an Organization Rule

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1/resource-manager/organizations/{organization_id}/policy-assignments/{organization_policy_assignment_id}

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Table 4-409 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**
organization_policy_assignment_id	Yes	String	Specifies the organization rule ID. Maximum: **32**

Request Parameters

Table 4-410 Request body parameters

Parameter	Mandatory	Type	Description
excluded_accounts	No	Array of strings	Specifies the accounts to be excluded from the rule. Maximum: **32**
organization_policy_assignment_name	Yes	String	Specifies the organization rule name. Maximum: **60**
managed_policy_assignment_metadata	No	**ManagedPolicyAssignmentMetadata** object	Specifies the metadata of a managed rule.

Table 4-411 ManagedPolicyAssignmentMetadata

Parameter	Mandatory	Type	Description
description	No	String	Specifies the rule description. Maximum: **512**
period	No	String	Specifies the trigger period.
parameters	No	Map<String,**PolicyParameterValue**>	Specifies the input parameter.
policy_filter	No	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
policy_definition_id	Yes	String	Specifies the identifier of a predefined policy. Maximum: **36**

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Table 4-412 PolicyParameterValue

Parameter	Mandatory	Type	Description
value	No	Object	Specifies the value of the rule parameter.

Table 4-413 PolicyFilterDefinition

Parameter	Mandatory	Type	Description
region_id	No	String	Specifies the region ID. Maximum: **128**
resource_provider	No	String	Specifies the cloud service name. Maximum: **128**
resource_type	No	String	Specifies the resource type. Maximum: **128**
resource_id	No	String	Specifies the resource ID. Maximum: **512**
tag_key	No	String	Specifies the tag key. Maximum: **128**
tag_value	No	String	Specifies the tag value. Maximum: **256**

Response Parameters

Status code: 200

Table 4-414 Response body parameters

Parameter	Type	Description
owner_id	String	Specifies the organization rule creator.
organization_id	String	Specifies the organization ID.
organization_policy_assignment_urn	String	Specifies the unique ID of the organization rule.
organization_policy_assignment_id	String	Specifies the organization rule ID.

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Parameter	Type	Description
organization_policy_assignment_name	String	Specifies the organization rule name.
description	String	Specifies the description information.
period	String	Specifies the trigger period.
policy_filter	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
parameters	Map<String,**PolicyParameterValue**>	Specifies the rule parameters.
policy_definition_id	String	Specifies the policy ID.
created_at	String	Specifies the creation time.
updated_at	String	Specifies the update time.

Table 4-415 PolicyFilterDefinition

Parameter	Type	Description
region_id	String	Specifies the region ID. Maximum: **128**
resource_provider	String	Specifies the cloud service name. Maximum: **128**
resource_type	String	Specifies the resource type. Maximum: **128**
resource_id	String	Specifies the resource ID. Maximum: **512**
tag_key	String	Specifies the tag key. Maximum: **128**
tag_value	String	Specifies the tag value. Maximum: **256**

Table 4-416 PolicyParameterValue

Parameter	Type	Description
value	Object	Specifies the value of the rule parameter.

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Status code: 400

Table 4-417 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-418 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-419 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Updating an Organization Rule

```
PUT https://{endpoint}/v1/resource-manager/organizations/{organization_id}/policy-assignments/
{organization_policy_assignment_id}

{
  "organization_policy_assignment_name" : "allowed-images-by-id",
  "managed_policy_assignment_metadata" : {
    "description" : "The ECS resource is non-compliant if the image it used is not in the allowed list.",
    "parameters" : {
      "listOfAllowedImages" : {
        "value" : [ "ea0d6e0e-99c3-406d-a873-3bb45462b624" ]
      }
    },
    "policy_filter" : {
      "resource_provider" : "ecs",
      "resource_type" : "cloudservers"
    },
    "policy_definition_id" : "5fa265c0aa1e6afc05a0ff07"
  }
}
```

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Example Responses

Status code: 200

Operation succeeded.


```
{
  "owner_id" : "e74e043fab784a45ad88f5ef6a4bcffc",
  "organization_id" : "o-doxbpkzqsdd51ti1k27w2y8fitakrknp",
  "organization_policy_assignment_urn" :
"rms::e74e043fab784a45ad88f5ef6a4bcffc:organizationPolicyAssignment:o-
doxbpkzqsdd51ti1k27w2y8fitakrknp/d02b7fa9d5a74e638c1402d0868f71fd",
  "organization_policy_assignment_id" : "d02b7fa9d5a74e638c1402d0868f71fd",
  "organization_policy_assignment_name" : "allowed-images-by-id",
  "description" : "The ECS resource is non-compliant if the image it used is not in the allowed list.",
  "period" : null,
  "policy_filter" : {
    "region_id" : null,
    "resource_provider" : "evs",
    "resource_type" : "volumes",
    "resource_id" : null,
    "tag_key" : null,
    "tag_value" : null
  },
  "policy_definition_id" : "5fa265c0aa1e6afc05a0ff07",
  "parameters" : { },
  "created_at" : "2022-01-18T06:37:54.432Z",
  "updated_at" : "2022-01-18T06:37:54.432Z"
}
```


SDK Sample Code

The SDK sample code is as follows.

Java

Updating an Organization Rule

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

import java.util.Map;
import java.util.HashMap;

public class UpdateOrganizationPolicyAssignmentSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);
```

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```
        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateOrganizationPolicyAssignmentRequest request = new
UpdateOrganizationPolicyAssignmentRequest();
        request.withOrganizationId("{organization_id}");
        request.withOrganizationPolicyAssignmentId("{organization_policy_assignment_id}");
        OrganizationPolicyAssignmentRequest body = new OrganizationPolicyAssignmentRequest();
        PolicyFilterDefinition policyFilterManagedPolicyAssignmentMetadata = new PolicyFilterDefinition();
        policyFilterManagedPolicyAssignmentMetadata.withResourceProvider("ecs")
            .withResourceType("cloudservers");
        PolicyParameterValue parametersParameters = new PolicyParameterValue();
        parametersParameters.withValue("[ea0d6e0e-99c3-406d-a873-3bb45462b624]");
        Map<String, PolicyParameterValue> listManagedPolicyAssignmentMetadataParameters = new
HashMap<>();
        listManagedPolicyAssignmentMetadataParameters.put("listOfAllowedImages", parametersParameters);
        ManagedPolicyAssignmentMetadata managedPolicyAssignmentMetadatabody = new
ManagedPolicyAssignmentMetadata();
        managedPolicyAssignmentMetadatabody.withDescription("The ECS resource is non-compliant if the
image it used is not in the allowed list.")
            .withParameters(listManagedPolicyAssignmentMetadataParameters)
            .withPolicyFilter(policyFilterManagedPolicyAssignmentMetadata)
            .withPolicyDefinitionId("5fa265c0aa1e6afc05a0ff07");
        body.withManagedPolicyAssignmentMetadata(managedPolicyAssignmentMetadatabody);
        body.withOrganizationPolicyAssignmentName("allowed-images-by-id");
        request.withBody(body);
        try {
            UpdateOrganizationPolicyAssignmentResponse response =
client.updateOrganizationPolicyAssignment(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

Updating an Organization Rule

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

    client = ConfigClient.new_builder() \
```

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```
        .with_credentials(credentials) \
        .with_region(ConfigRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateOrganizationPolicyAssignmentRequest()
        request.organization_id = "{organization_id}"
        request.organization_policy_assignment_id = "{organization_policy_assignment_id}"
        policyFilterManagedPolicyAssignmentMetadata = PolicyFilterDefinition(
            resource_provider="ecs",
            resource_type="cloudservers"
        )
        parametersParameters = PolicyParameterValue(
            value="[ea0d6e0e-99c3-406d-a873-3bb45462b624]"
        )
        listParametersManagedPolicyAssignmentMetadata = {
            "listOfAllowedImages": parametersParameters
        }
        managedPolicyAssignmentMetadatabody = ManagedPolicyAssignmentMetadata(
            description="The ECS resource is non-compliant if the image it used is not in the allowed list.",
            parameters=listParametersManagedPolicyAssignmentMetadata,
            policy_filter=policyFilterManagedPolicyAssignmentMetadata,
            policy_definition_id="5fa265c0aa1e6afc05a0ff07"
        )
        request.body = OrganizationPolicyAssignmentRequest(
            managed_policy_assignment_metadata=managedPolicyAssignmentMetadatabody,
            organization_policy_assignment_name="allowed-images-by-id"
        )
        response = client.update_organization_policy_assignment(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

Updating an Organization Rule

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
    request := &model.UpdateOrganizationPolicyAssignmentRequest{}
    request.OrganizationId = "{organization_id}"
    request.OrganizationPolicyAssignmentId = "{organization_policy_assignment_id}"
    resourceProviderPolicyFilter:= "ecs"
    resourceTypePolicyFilter:= "cloudservers"
    policyFilterManagedPolicyAssignmentMetadata := &model.PolicyFilterDefinition{
        ResourceProvider: &resourceProviderPolicyFilter,
        ResourceType: &resourceTypePolicyFilter,
    }
    var valueParameters interface{} = "[ea0d6e0e-99c3-406d-a873-3bb45462b624]"
    parametersParameters := model.PolicyParameterValue{
        Value: &valueParameters,
    }
    var listParametersManagedPolicyAssignmentMetadata = map[string](model.PolicyParameterValue){
        "listOfAllowedImages": parametersParameters,
    }
    descriptionManagedPolicyAssignmentMetadata:= "The ECS resource is non-compliant if the image it
used is not in the allowed list."
    managedPolicyAssignmentMetadatabody := &model.ManagedPolicyAssignmentMetadata{
        Description: &descriptionManagedPolicyAssignmentMetadata,
        Parameters: listParametersManagedPolicyAssignmentMetadata,
        PolicyFilter: policyFilterManagedPolicyAssignmentMetadata,
        PolicyDefinitionId: "5fa265c0aa1e6afc05a0ff07",
    }
    request.Body = &model.OrganizationPolicyAssignmentRequest{
        ManagedPolicyAssignmentMetadata: managedPolicyAssignmentMetadatabody,
        OrganizationPolicyAssignmentName: "allowed-images-by-id",
    }
    response, err := client.UpdateOrganizationPolicyAssignment(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

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4.5.24 Querying the Deployment Status of an Organization Rule

Function

This API is used to querying statuses of organization rules.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/organizations/{organization_id}/policy-assignment-statuses

Table 4-420 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**

Table 4-421 Query Parameters

Parameter	Mandatory	Type	Description
organization_policy_assignment_id	No	String	Specifies the organization assignment id Maximum: **32**
organization_policy_assignment_name	No	String	Specifies the organization rule name. Maximum: **60**
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

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Request Parameters

Table 4-422 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-423 Response body parameters

Parameter	Type	Description
value	Array of **OrganizationPolicyAssignmentStatusResponse** objects	Specifies the statuses of organization rules.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-424 OrganizationPolicyAssignmentStatusResponse

Parameter	Type	Description
organization_policy_assignment_id	String	Specifies the organization rule ID.
organization_policy_assignment_name	String	Specifies the organization rule name.
organization_policy_assignment_status	String	Specifies the status of the organization rule.
error_code	String	Specifies the error code returned when an organization rule fails to be created or updated.
error_message	String	Specifies the error message displayed when an organization rule fails to be created or updated.

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Parameter	Type	Description
created_at	String	Specifies the creation time.
updated_at	String	Specifies the update time.

Table 4-425 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-426 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-427 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-428 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "value" : [ {
    "organization_policy_assignment_id" : "9642977cef864971b3b00ad56621a15f",
    "organization_policy_assignment_name" : "allowed-images-by-id",
    "organization_policy_assignment_status" : "CREATE_SUCCESSFUL",
    "error_code" : "null,",
    "error_message" : "null,",
    "created_at" : "2023-01-17T09:38:26.165Z",
    "updated_at" : "2023-01-17T09:38:26.165Z"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : "CAESIGQwMmI3ZmE5ZDVhNzRlNjM4YzE0MDJkMDg2OGY3MWZkGgTnpS5u"
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowOrganizationPolicyAssignmentStatusesSolution {

    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");
```

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

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowOrganizationPolicyAssignmentStatusesRequest request = new
ShowOrganizationPolicyAssignmentStatusesRequest();
        request.withOrganizationId("{organization_id}");
        try {
            ShowOrganizationPolicyAssignmentStatusesResponse response =
client.showOrganizationPolicyAssignmentStatuses(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowOrganizationPolicyAssignmentStatusesRequest()
        request.organization_id = "{organization_id}"
        response = client.show_organization_policy_assignment_statuses(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowOrganizationPolicyAssignmentStatusesRequest{}
    request.OrganizationId = "{organization_id}"
    response, err := client.ShowOrganizationPolicyAssignmentStatuses(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

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Error Codes

See **Error Codes**.

4.5.25 Querying Statuses of Organization Rule Deployment to Member Accounts

Function

This API is used to querying details about the rule statuses of each member account in an organization.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/organizations/{organization_id}/policy-assignment-detailed-status

Table 4-429 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**

Table 4-430 Query Parameters

Parameter	Mandatory	Type	Description
organization_policy_assignment_name	No	String	Specifies the organization rule name. Maximum: **60**
organization_policy_assignment_id	No	String	Specifies the organization assignment id Maximum: **32**
domain_id	No	String	Specifies the account ID. Maximum: **36**
status	No	String	Specifies the rule status of the member account. The value is case sensitive. Maximum: **20**

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Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-431 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-432 Response body parameters

Parameter	Type	Description
value	Array of **OrganizationPolicyAssignmentDetailedStatusResponse** objects	Specifies the status details about organization rules.
page_info	**PageInfo** object	Specifies the pagination object.

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Table 4-433 OrganizationPolicyAssignmentDetailedStatusResponse

Parameter	Type	Description
domain_id	String	Specifies the account ID.
policy_assignment_id	String	Specifies the rule ID.
policy_assignment_name	String	Specifies the rule name.
member_account_policy_assignment_status	String	Specifies the status of the rule in a member account in an organization.
error_code	String	Specifies the error code returned when a rule fails to be created or updated.
error_message	String	Specifies the error message returned when a rule fails to be created or updated.
created_at	String	Specifies the creation time.
updated_at	String	Specifies the update time.

Table 4-434 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-435 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 403

Table 4-436 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-437 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "value" : [ {
    "domain_id" : "3fd23817bd85480e8dc4f520075de348",
    "policy_assignment_id" : "63c79416e34d812e56d3e2fc",
    "policy_assignment_name" : "allowed-images-by-id",
    "member_account_policy_assignment_status" : "CREATE_SUCCESSFUL",
    "error_code" : "null,",
    "error_message" : "null,",
    "created_at" : "2023-01-17T09:38:26.165Z",
    "updated_at" : "2023-01-17T09:38:26.165Z"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : "CAESIGQwMmI3ZmE5ZDVhNzRlNjM4YzE0MDJkMDg2OGY3MWZkGgTnpS5u"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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

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```
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowOrganizationPolicyAssignmentDetailedStatusSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowOrganizationPolicyAssignmentDetailedStatusRequest request = new ShowOrganizationPolicyAssignmentDetailedStatusRequest();
        request.withOrganizationId("{organization_id}");
        try {
            ShowOrganizationPolicyAssignmentDetailedStatusResponse response = client.showOrganizationPolicyAssignmentDetailedStatus(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)
```

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```
    client = ConfigClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(ConfigRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowOrganizationPolicyAssignmentDetailedStatusRequest()
        request.organization_id = "{organization_id}"
        response = client.show_organization_policy_assignment_detailed_status(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowOrganizationPolicyAssignmentDetailedStatusRequest{}
    request.OrganizationId = "{organization_id}"
    response, err := client.ShowOrganizationPolicyAssignmentDetailedStatus(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.5.26 Setting up or Updating Remediation Configurations

Function

This API is used to set up or update remediation configurations.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-configuration

Table 4-438 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

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Request Parameters

Table 4-439 Request body parameters

Parameter	Mandatory	Type	Description
automatic	No	Boolean	Whether remediation is automatic. Default: **false**
target_type	Yes	String	Execution method of remediation.
target_id	Yes	String	The ID of a remediation object. If the execution method is fgs, the value is a function URN. If the execution method is rfs, the value is the name and version ID that separated by a slash (/). If the version is not specified, V1 is used by default. Maximum: **512**
target_region_id	No	String	Region ID. If an RFS template is used, and this parameter is left blank, the region ID of CN North-Beijing4 (for regions within the Chinese mainland) or CN-Hong Kong (for regions outside of the Chinese mainland) is used by default. If a FunctionGraph function is used, and this parameter is left blank, the region ID is automatically set based on the function instance URN. Minimum: **1** Maximum: **36**

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Parameter	Mandatory	Type	Description
target_project_id	No	String	Project ID. If an RFS template is used, and this parameter is left blank, the ID of the default project in CN North-Beijing4 (for regions within the Chinese mainland) or CN-Hong Kong (for regions outside of the Chinese mainland) is used. If a FunctionGraph function is used, and this parameter is left blank, the project ID is automatically set based on the function instance URN. This field is mandatory if target_region_id is specified. Minimum: **1** Maximum: **36**
static_parameter	No	Array of **RemediationStaticParameter** objects	Static parameter of remediation. Array Length: **0 - 50**
resource_parameter	Yes	**RemediationResourceParameter** object	Dynamic parameter of remediation.
maximum_attempts	No	Integer	Maximum number of retries allowed within a specified period. Minimum: **1** Maximum: **25** Default: **5**
retry_attempt_seconds	No	Integer	Used to avoid an infinite loop. If remediation retries exceed the limit, corresponding resources will be classified as exceptions of remediation. Minimum: **60** Maximum: **43200** Default: **3600**
auth_type	No	String	Authorization type for remediation configurations.

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Parameter	Mandatory	Type	Description
auth_value	No	String	Execution method of remediation. Maximum: **512**

Table 4-440 RemediationStaticParameter

Parameter	Mandatory	Type	Description
var_key	No	String	Parameter name. Minimum: **1** Maximum: **64**
var_value	No	Object	Parameter value.

Table 4-441 RemediationResourceParameter

Parameter	Mandatory	Type	Description
resource_id	Yes	String	The parameter name for passing the resource ID. Minimum: **1** Maximum: **64**

Response Parameters

Status code: 200

Table 4-442 Response body parameters

Parameter	Type	Description
automatic	Boolean	Whether remediation is automatic.
target_type	String	Execution method of remediation.
target_id	String	The ID of a remediation object. If the execution method is fgs, the value is a function URN. If the execution method is rfs, the value is the name and version ID that separated by a slash (/). If the version is not specified, V1 is used by default. Maximum: **512**

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Parameter	Type	Description
target_region_id	String	Region ID. If an RFS template is used, and this parameter is left blank, the region ID of CN North-Beijing4 (for regions within the Chinese mainland) or CN-Hong Kong (for regions outside of the Chinese mainland) is used by default. If a FunctionGraph function is used, and this parameter is left blank, the region ID is automatically set based on the function instance URN. This field is mandatory if target_project_id is specified.
target_project_id	String	Project ID. If an RFS template is used, and this parameter is left blank, the ID of the default project in CN North-Beijing4 (for regions within the Chinese mainland) or CN-Hong Kong (for regions outside of the Chinese mainland) is used. If a FunctionGraph function is used, and this parameter is left blank, the project ID is automatically set based on the function instance URN. This field is mandatory if target_region_id is specified.
static_parameter	Array of **RemediationStaticParameter** objects	Parameters for remediation execution. Array Length: **0 - 50**
resource_parameter	**RemediationResourceParameter** object	Dynamic parameter of remediation.
maximum_attempts	Integer	Maximum number of retries allowed within a specified period. Minimum: **1** Maximum: **25** Default: **5**
retry_attempt_seconds	Integer	Used to avoid an infinite loop. If remediation retries exceed the limit, corresponding resources will be classified as exceptions of remediation. Minimum: **60** Maximum: **3600** Default: **60**

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Parameter	Type	Description
auth_type	String	Authorization type for remediation configurations.
auth_value	String	Information of dependent service authorization. Maximum: **512**
created_at	String	The time when remediation configurations are set up.
updated_at	String	The time when remediation configurations are updated.
created_by	String	Creator of remediation.

Table 4-443 RemediationStaticParameter

Parameter	Type	Description
var_key	String	Parameter name. Minimum: **1** Maximum: **64**
var_value	Object	Parameter value.

Table 4-444 RemediationResourceParameter

Parameter	Type	Description
resource_id	String	The parameter name for passing the resource ID. Minimum: **1** Maximum: **64**

Status code: 400

Table 4-445 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-446 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-447 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-448 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

This API is used to set up or update remediation configurations.

```
PUT https://{endpoint}/v1/resource-manager/domains/{domain_id}/policy-assignments/
{policy_assignment_id}/remediation-configuration

{
  "automatic" : false,
  "target_type" : "fgs",
  "target_id" : "urn:fss:region_id:project_id:function:default:function_name:latest",
  "static_parameter" : [ {
    "var_key" : "kms_id",
    "var_value" : "kms12345678"
  } ],
  "resource_parameter" : [ {
    "resource_id" : "file_prefix"
  } ],
  "maximum_attempts" : 5,
  "retry_attempt_seconds" : 60,
  "auth_type" : "agency",
  "auth_value" : "agency_for_remediation"
}
```

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Example Responses

Status code: 200

Operation succeeded.


```
{
  "automatic" : false,
  "target_type" : "fgs",
  "target_id" : "urn:fss:region_id:project_id:function:default:function_name:latest",
  "static_parameter" : [ {
    "var_key" : "kms_id",
    "var_value" : "kms12345678"
  } ],
  "resource_parameter" : [ {
    "resource_id" : "file_prefix"
  } ],
  "maximum_attempts" : 5,
  "retry_attempt_seconds" : 60,
  "auth_type" : "agency",
  "auth_value" : "agency_for_remediation",
  "created_at" : "2024-01-17T09:39:19Z",
  "updated_at" : "2024-01-17T09:39:19Z",
  "created_by" : "custom"
}
```


SDK Sample Code

The SDK sample code is as follows.

Java

This API is used to set up or update remediation configurations.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class CreateOrUpdateRemediationConfigurationSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
```

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```
        CreateOrUpdateRemediationConfigurationRequest request = new
CreateOrUpdateRemediationConfigurationRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        RemediationConfigurationRequestBody body = new RemediationConfigurationRequestBody();
        [](model.RemediationStaticParameter) listbodyStaticParameter = new ArrayList<>();
        listbodyStaticParameter.add(
            new RemediationStaticParameter()
                .withVarKey("kms_id")
                .withVarValue("kms12345678")
        );
        body.withAuthValue("agency_for_remediation");
        body.withAuthType(RemediationConfigurationRequestBody.AuthTypeEnum.fromValue("agency"));
        body.withRetryAttemptSeconds(60);
        body.withMaximumAttempts(5);
        body.withResourceParameter("[{\"resource_id\":\"file_prefix\"}]");
        body.withStaticParameter(listbodyStaticParameter);
        body.withTargetId("urn:fss:region_id:project_id:function:default:function_name:latest");
        body.withTargetType(RemediationConfigurationRequestBody.TargetTypeEnum.fromValue("fgs"));
        body.withAutomatic(false);
        request.withBody(body);
        try {
            CreateOrUpdateRemediationConfigurationResponse response =
client.createOrUpdateRemediationConfiguration(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

This API is used to set up or update remediation configurations.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CreateOrUpdateRemediationConfigurationRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
```

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```
        listStaticParameterbody = [
            RemediationStaticParameter(
                var_key="kms_id",
                var_value="kms12345678"
            )
        ]
        request.body = RemediationConfigurationRequestBody(
            auth_value="agency_for_remediation",
            auth_type="agency",
            retry_attempt_seconds=60,
            maximum_attempts=5,
            resource_parameter="[{\"resource_id\":\"file_prefix\"}]",
            static_parameter=listStaticParameterbody,
            target_id="urn:fss:region_id:project_id:function:default:function_name:latest",
            target_type="fgs",
            automatic=False
        )
        response = client.create_or_update_remediation_configuration(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

This API is used to set up or update remediation configurations.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateOrUpdateRemediationConfigurationRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    varKeyStaticParameter:= "kms_id"
    varValueStaticParameter:= "kms12345678"
    var varValueStaticParameterInterface interface{} = varValueStaticParameter
    var listStaticParameterbody = []model.RemediationStaticParameter{
        {
            VarKey: &varKeyStaticParameter,
            VarValue: &varValueStaticParameterInterface,
        },
```

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```
    }
    authValueRemediationConfigurationRequestBody:= "agency_for_remediation"
    authTypeRemediationConfigurationRequestBody:=
model.GetRemediationConfigurationRequestBodyAuthTypeEnum().AGENCY
    retryAttemptSecondsRemediationConfigurationRequestBody:= int32(60)
    maximumAttemptsRemediationConfigurationRequestBody:= int32(5)
    var resourceParameterResourceParameter interface{} = "[{\"resource_id\":\"file_prefix\"}]"
    automaticRemediationConfigurationRequestBody:= false
    request.Body = &model.RemediationConfigurationRequestBody{
        AuthValue: &authValueRemediationConfigurationRequestBody,
        AuthType: &authTypeRemediationConfigurationRequestBody,
        RetryAttemptSeconds: &retryAttemptSecondsRemediationConfigurationRequestBody,
        MaximumAttempts: &maximumAttemptsRemediationConfigurationRequestBody,
        ResourceParameter: &resourceParameterResourceParameter,
        StaticParameter: &listStaticParameterbody,
        TargetId: "urn:fss:region_id:project_id:function:default:function_name:latest",
        TargetType: model.GetRemediationConfigurationRequestBodyTargetTypeEnum().FGS,
        Automatic: &automaticRemediationConfigurationRequestBody,
    }
    response, err := client.CreateOrUpdateRemediationConfiguration(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.5.27 Querying Remediation Configurations

Function

This API is used to query remediation configurations.

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Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-configuration

Table 4-449 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Request Parameters

None

Response Parameters

Status code: 200

Table 4-450 Response body parameters

Parameter	Type	Description
automatic	Boolean	Whether remediation is automatic.
target_type	String	Execution method of remediation.
target_id	String	The ID of a remediation object. If the execution method is fgs, the value is a function URN. If the execution method is rfs, the value is the name and version ID that separated by a slash (/). If the version is not specified, V1 is used by default. Maximum: **512**

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Parameter	Type	Description
target_region_id	String	Region ID. If an RFS template is used, and this parameter is left blank, the region ID of CN North-Beijing4 (for regions within the Chinese mainland) or CN-Hong Kong (for regions outside of the Chinese mainland) is used by default. If a FunctionGraph function is used, and this parameter is left blank, the region ID is automatically set based on the function instance URN. This field is mandatory if target_project_id is specified.
target_project_id	String	Project ID. If an RFS template is used, and this parameter is left blank, the ID of the default project in CN North-Beijing4 (for regions within the Chinese mainland) or CN-Hong Kong (for regions outside of the Chinese mainland) is used. If a FunctionGraph function is used, and this parameter is left blank, the project ID is automatically set based on the function instance URN. This field is mandatory if target_region_id is specified.
static_parameter	Array of **RemediationStaticParameter** objects	Parameters for remediation execution. Array Length: **0 - 50**
resource_parameter	**RemediationResourceParameter** object	Dynamic parameter of remediation.
maximum_attempts	Integer	Maximum number of retries allowed within a specified period. Minimum: **1** Maximum: **25** Default: **5**
retry_attempt_seconds	Integer	Used to avoid an infinite loop. If remediation retries exceed the limit, corresponding resources will be classified as exceptions of remediation. Minimum: **60** Maximum: **3600** Default: **60**

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Parameter	Type	Description
auth_type	String	Authorization type for remediation configurations.
auth_value	String	Information of dependent service authorization. Maximum: **512**
created_at	String	The time when remediation configurations are set up.
updated_at	String	The time when remediation configurations are updated.
created_by	String	Creator of remediation.

Table 4-451 RemediationStaticParameter

Parameter	Type	Description
var_key	String	Parameter name. Minimum: **1** Maximum: **64**
var_value	Object	Parameter value.

Table 4-452 RemediationResourceParameter

Parameter	Type	Description
resource_id	String	The parameter name for passing the resource ID. Minimum: **1** Maximum: **64**

Status code: 400

Table 4-453 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-454 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-455 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-456 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.


```
{
  "automatic" : false,
  "target_type" : "fgs",
  "target_id" : "urn:fss:region_id:project_id:function:default:function_name:latest",
  "static_parameter" : [ {
    "var_key" : "kms_id",
    "var_value" : "kms12345678"
  } ],
  "resource_parameter" : [ {
    "resource_id" : "file_prefix"
  } ],
  "maximum_attempts" : 5,
  "retry_attempt_seconds" : 60,
  "auth_type" : "agency",
  "auth_value" : "agency_for_remediation",
  "created_at" : "2024-01-17T09:39:19Z",
```


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```
  "updated_at" : "2024-01-17T09:39:19Z",
  "created_by" : "custom"
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowRemediationConfigurationSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowRemediationConfigurationRequest request = new ShowRemediationConfigurationRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        try {
            ShowRemediationConfigurationResponse response = client.showRemediationConfiguration(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
```

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```
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowRemediationConfigurationRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        response = client.show_remediation_configuration(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowRemediationConfigurationRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    response, err := client.ShowRemediationConfiguration(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.5.28 Deleting Remediation Configurations

Function

This API is used to delete remediation configurations.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-configuration

Table 4-457 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

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Request Parameters

None

Response Parameters

Status code: 202

Operation succeeded.

Status code: 400

Table 4-458 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-459 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-460 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-461 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class DeleteRemediationConfigurationSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteRemediationConfigurationRequest request = new DeleteRemediationConfigurationRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        try {
            DeleteRemediationConfigurationResponse response = client.deleteRemediationConfiguration(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = DeleteRemediationConfigurationRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        response = client.delete_remediation_configuration(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
    request := &model.DeleteRemediationConfigurationRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    response, err := client.DeleteRemediationConfiguration(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
202	Operation succeeded.
400	Invalid parameters.
403	Authentication failed.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.5.29 Batch Creating Remediation Exceptions

Function

Batch Creating Remediation Exceptions

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-exception/create

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Table 4-462 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Request Parameters

Table 4-463 Request body parameters

Parameter	Mandatory	Type	Description
exceptions	Yes	Array of **RemediationExceptionRequest** objects	Details of batch created remediation exceptions. Array Length: **1 - 50**

Table 4-464 RemediationExceptionRequest

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Resource ID. Minimum: **1** Maximum: **512**
message	No	String	The reason for adding an exception. Minimum: **0** Maximum: **512**

Response Parameters

Status code: 200

Operation accepted.

Status code: 400

Table 4-465 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.

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Parameter	Type	Description
error_msg	String	Specifies the error message.

Status code: 403

Table 4-466 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-467 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-468 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

This API is used to batch create remediation exceptions.

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/policy-assignments/
{policy_assignment_id}/remediation-exception

{
  "exceptions" : [ {
    "resource_id" : "id-001",
    "message" : "No handling required."
  }, {
    "resource_id" : "id-002",
    "message" : "Exceptions added."
  } ]
}
```

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Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

This API is used to batch create remediation exceptions.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class BatchCreateRemediationExceptionsSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        BatchCreateRemediationExceptionsRequest request = new BatchCreateRemediationExceptionsRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        BatchCreateRemediationExceptionsRequestBody body = new BatchCreateRemediationExceptionsRequestBody();
        List<RemediationExceptionRequest> listbodyExceptions = new ArrayList<>();
        listbodyExceptions.add(
            new RemediationExceptionRequest()
                .withResourceId("id-001")
                .withMessage("No handling required.")
        );
        listbodyExceptions.add(
            new RemediationExceptionRequest()
                .withResourceId("id-002")
                .withMessage("Exceptions added.")
        );
        body.withExceptions(listbodyExceptions);
        request.withBody(body);
        try {
            BatchCreateRemediationExceptionsResponse response = client.batchCreateRemediationExceptions(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

This API is used to batch create remediation exceptions.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = BatchCreateRemediationExceptionsRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        listExceptionsbody = [
            RemediationExceptionRequest(
                resource_id="id-001",
                message="No handling required."
            ),
            RemediationExceptionRequest(
                resource_id="id-002",
                message="Exceptions added."
            )
        ]
        request.body = BatchCreateRemediationExceptionsRequestBody(
            exceptions=listExceptionsbody
        )
        response = client.batch_create_remediation_exceptions(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

This API is used to batch create remediation exceptions.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchCreateRemediationExceptionsRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    messageExceptions:= "No handling required."
    messageExceptions1:= "Exceptions added."
    var listExceptionsbody = []model.RemediationExceptionRequest{
        {
            ResourceId: "id-001",
            Message: &messageExceptions,
        },
        {
            ResourceId: "id-002",
            Message: &messageExceptions1,
        },
    }
    request.Body = &model.BatchCreateRemediationExceptionsRequestBody{
        Exceptions: listExceptionsbody,
    }
    response, err := client.BatchCreateRemediationExceptions(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	Operation accepted.
400	Invalid parameters.
403	Authentication failed.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.5.30 Batch Deleting Remediation Exceptions

Function

This API is used to batch delete remediation exceptions.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-exception/delete

Table 4-469 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

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Request Parameters

Table 4-470 Request body parameters

Parameter	Mandatory	Type	Description
exceptions	Yes	Array of **RemediationExceptionRequest** objects	Details of batch deleted remediation exceptions. Array Length: **1 - 50**

Table 4-471 RemediationExceptionRequest

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Resource ID. Minimum: **1** Maximum: **512**
message	No	String	The reason for adding an exception. Minimum: **0** Maximum: **512**

Response Parameters

Status code: 202

Operation accepted.

Status code: 400

Table 4-472 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-473 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.

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Parameter	Type	Description
error_msg	String	Specifies the error message.

Status code: 404

Table 4-474 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-475 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

The following is an example of batch deleting remediation exceptions.

```
DELETE https://{endpoint}/v1/resource-manager/domains/{domain_id}/policy-assignments/
{policy_assignment_id}/remediation-exception

{
  "exceptions" : [ {
    "resource_id" : "id-001"
  }, {
    "resource_id" : "id-002"
  } ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

The following is an example of batch deleting remediation exceptions.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class BatchDeleteRemediationExceptionsSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        BatchDeleteRemediationExceptionsRequest request = new BatchDeleteRemediationExceptionsRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        BatchDeleteRemediationExceptionsRequestBody body = new BatchDeleteRemediationExceptionsRequestBody();
        List<RemediationExceptionRequest> listbodyExceptions = new ArrayList<>();
        listbodyExceptions.add(
            new RemediationExceptionRequest()
                .withResourceId("id-001")
        );
        listbodyExceptions.add(
            new RemediationExceptionRequest()
                .withResourceId("id-002")
        );
        body.withExceptions(listbodyExceptions);
        request.withBody(body);
        try {
            BatchDeleteRemediationExceptionsResponse response = client.batchDeleteRemediationExceptions(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

The following is an example of batch deleting remediation exceptions.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = BatchDeleteRemediationExceptionsRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        listExceptionsbody = [
            RemediationExceptionRequest(
                resource_id="id-001"
            ),
            RemediationExceptionRequest(
                resource_id="id-002"
            )
        ]
        request.body = BatchDeleteRemediationExceptionsRequestBody(
            exceptions=listExceptionsbody
        )
        response = client.batch_delete_remediation_exceptions(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 following is an example of batch deleting remediation exceptions.

```
package main

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

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchDeleteRemediationExceptionsRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    var listExceptionsbody = []model.RemediationExceptionRequest{
        {
            ResourceId: "id-001",
        },
        {
            ResourceId: "id-002",
        },
    }
    request.Body = &model.BatchDeleteRemediationExceptionsRequestBody{
        Exceptions: listExceptionsbody,
    }
    response, err := client.BatchDeleteRemediationExceptions(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
202	Operation accepted.
400	Invalid parameters.
403	Authentication failed.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

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4.5.31 Querying Remediation Exceptions

Function

This API is used to query remediation exceptions.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-exception

Table 4-476 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Table 4-477 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
resource_id	No	String	Specifies the resource ID. Maximum: **512**

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Request Parameters

None

Response Parameters

Status code: 200

Table 4-478 Response body parameters

Parameter	Type	Description
value	Array of **RemediationException** objects	Details of a remediation exception. Array Length: **0 - 50**
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-479 RemediationException

Parameter	Type	Description
resource_id	String	Resource ID. Minimum: **1** Maximum: **512**
message	String	The reason for adding an exception.
joined_at	String	The time when a remediation exception is added.
created_by	String	The creator of a remediation exception.

Table 4-480 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

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Status code: 400

Table 4-481 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-482 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-483 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-484 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

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Operation succeeded.

```
{
  "value" : [ {
    "resource_id" : "id-001",
    "message" : "No handling required.",
    "joined_at" : "2024-01-17T09:39:19Z",
    "created_by" : "ConfigRemediation"
  }, {
    "resource_id" : "id-002",
    "message" : "Exceptions added.",
    "joined_at" : "2024-01-17T09:39:19Z",
    "created_by" : "ConfigRemediation"
  } ],
  "page_info" : {
    "current_count" : 2,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListRemediationExceptionsSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListRemediationExceptionsRequest request = new ListRemediationExceptionsRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        try {
            ListRemediationExceptionsResponse response = client.listRemediationExceptions(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
```

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```
            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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListRemediationExceptionsRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        response = client.list_remediation_exceptions(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
```

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```
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListRemediationExceptionsRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    response, err := client.ListRemediationExceptions(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.5.32 Starting Remediation

Function

This API is used to manually start a remediation.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-execution

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Table 4-485 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Request Parameters

Table 4-486 Request body parameters

Parameter	Mandatory	Type	Description
all_supported	Yes	Boolean	Whether to perform remediation for all non-compliant resources. Default: **false**
resource_ids	No	Array of strings	Minimum: **1** Maximum: **512** Array Length: **0 - 100**

Response Parameters

Status code: 202

Operation accepted.

Status code: 400

Table 4-487 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-488 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-489 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-490 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

This API is used to manually start remediation for specific resources.

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/policy-assignments/
{policy_assignment_id}/remediation-execution

{
  "all_supported" : false,
  "resource_ids" : [ "iam-001", "iam-002" ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

This API is used to manually start remediation for specific resources.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class RunRemediationExecutionSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        RunRemediationExecutionRequest request = new RunRemediationExecutionRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        RemediationRunRequestBody body = new RemediationRunRequestBody();
        List<String> listbodyResourceIds = new ArrayList<>();
        listbodyResourceIds.add("iam-001");
        listbodyResourceIds.add("iam-002");
        body.withResourceIds(listbodyResourceIds);
        body.withAllSupported(false);
        request.withBody(body);
        try {
            RunRemediationExecutionResponse response = client.runRemediationExecution(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

This API is used to manually start remediation for specific resources.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
```

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```
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = RunRemediationExecutionRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        listResourceIdsbody = [
            "iam-001",
            "iam-002"
        ]
        request.body = RemediationRunRequestBody(
            resource_ids=listResourceIdsbody,
            all_supported=False
        )
        response = client.run_remediation_execution(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

This API is used to manually start remediation for specific resources.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
```

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```
        Build())

    request := &model.RunRemediationExecutionRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    var listResourceIdsbody = []string{
        "iam-001",
        "iam-002",
    }
    request.Body = &model.RemediationRunRequestBody{
        ResourceIds: &listResourceIdsbody,
        AllSupported: false,
    }
    response, err := client.RunRemediationExecution(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
202	Operation accepted.
400	Invalid parameters.
403	Authentication failed.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.5.33 Querying Remediation Results

Function

This API is used to query remediation results.

Calling Method

For details, see **Calling APIs**.

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URI

GET /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-execution-statuses

Table 4-491 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Table 4-492 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
resource_id	No	String	Specifies the resource ID. Maximum: **512**
resource_name	No	String	Specifies the resource name. Maximum: **256**

Request Parameters

None

Response Parameters

Status code: 200

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Table 4-493 Response body parameters

Parameter	Type	Description
value	Array of **RemediationExecution** objects	Execution results of remediation executions.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-494 RemediationExecution

Parameter	Type	Description
automatic	Boolean	Whether remediation is automatic.
resource_id	String	Resource ID. Minimum: **1** Maximum: **512**
resource_name	String	Resource name. Minimum: **1** Maximum: **512**
resource_provider	String	Cloud service name. Maximum: **128**
resource_type	String	Resource type. Maximum: **128**
invocation_time	String	The start time of remediation.
state	String	Execution result of remediation.
message	String	Information of remediation execution.

Table 4-495 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

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Status code: 400

Table 4-496 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-497 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-498 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-499 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

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Operation succeeded.

```
{
  "value" : [ {
    "automatic" : false,
    "resource_id" : "id-001",
    "resource_provider" : "iam",
    "resource_type" : "users",
    "invocation_time" : "2024-01-17T09:39:19Z",
    "state" : "FAILED",
    "message" : "You do not have the permission to invoke functionGraph."
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListRemediationExecutionStatusesSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListRemediationExecutionStatusesRequest request = new ListRemediationExecutionStatusesRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        try {
            ListRemediationExecutionStatusesResponse response = client.listRemediationExecutionStatuses(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

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListRemediationExecutionStatusesRequest()
        request.policy_assignment_id = "{policy_assignment_id}"
        response = client.list_remediation_execution_statuses(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()
```

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```
    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListRemediationExecutionStatusesRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    response, err := client.ListRemediationExecutionStatuses(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.5.34 Collect Remediation Results

Function

This API is used to collect remediation results.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-execution-statuses/summary

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Table 4-500 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Table 4-501 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-502 Request body parameters

Parameter	Mandatory	Type	Description
resource_keys	Yes	Array of **RemediationResourceKey** objects	A list of query criteria required to collect remediation results. Array Length: **0 - 100**

Table 4-503 RemediationResourceKey

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Resource ID. Minimum: **1** Maximum: **512**

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Parameter	Mandatory	Type	Description
resource_provider	Yes	String	Cloud service name, to be compatible with some policyState where the cloud service name is empty in the compliance result, the value can be an empty string. Minimum: **0** Maximum: **128**
resource_type	Yes	String	Resource type, to be compatible with some policyState where the resource type is empty in the compliance result, the value can be an empty string. Minimum: **0** Maximum: **128**

Response Parameters

Status code: 200

Table 4-504 Response body parameters

Parameter	Type	Description
value	Array of **RemediationExecutionStatus** objects	Detailed correction result list.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-505 RemediationExecutionStatus

Parameter	Type	Description
resource_key	**RemediationResourceKey** object	Details about the query criteria for remediation results.
invocation_time	String	The start time of remediation.
state	String	Execution result of remediation.
message	String	Information of remediation execution.

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Table 4-506 RemediationResourceKey

Parameter	Type	Description
resource_id	String	Resource ID. Minimum: **1** Maximum: **512**
resource_provider	String	Cloud service name, to be compatible with some policyState where the cloud service name is empty in the compliance result, the value can be an empty string. Minimum: **0** Maximum: **128**
resource_type	String	Resource type, to be compatible with some policyState where the resource type is empty in the compliance result, the value can be an empty string. Minimum: **0** Maximum: **128**

Table 4-507 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-508 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 403

Table 4-509 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-510 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-511 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Collects remediation results for the specified resource.

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/policy-assignments/
{policy_assignment_id}/remediation-execution-statuses/summary

{
  "resource_keys" : [ {
    "resource_id" : "resource_id_1",
    "resource_provider" : "resource_provider_1",
    "resource_type" : "resource_type_1"
  }, {
    "resource_id" : "resource_id_2",
    "resource_provider" : "resource_provider_2",
    "resource_type" : "resource_type_2"
  } ]
}
```

Example Responses

Status code: 200

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Operation succeeded.

```
{
  "value" : [ {
    "resource_key" : {
      "resource_id" : "resource_id1",
      "resource_provider" : "resource_provider1",
      "resource_type" : "resource_type1"
    },
    "invocation_time" : "2024-01-17T09:39:19Z",
    "state" : "SUCCEEDED",
    "message" : "Execution success."
  }, {
    "resource_key" : {
      "resource_id" : "resource_id1",
      "resource_provider" : "resource_provider2",
      "resource_type" : "resource_type2"
    },
    "invocation_time" : "2024-01-17T09:41:20Z",
    "state" : "FAILED",
    "message" : "You do not have the permission to invoke functionGraph."
  } ],
  "page_info" : {
    "current_count" : 2,
    "next_marker" : null
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Collects remediation results for the specified resource.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class CollectRemediationExecutionStatusesSummarySolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

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

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```
            .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
            .build();
        CollectRemediationExecutionStatusesSummaryRequest request = new
CollectRemediationExecutionStatusesSummaryRequest();
        request.withPolicyAssignmentId("{policy_assignment_id}");
        RemediationExecutionStatusesSummaryRequestBody body = new
RemediationExecutionStatusesSummaryRequestBody();
        List<RemediationResourceKey> listbodyResourceKeys = new ArrayList<>();
        listbodyResourceKeys.add(
            new RemediationResourceKey()
                .withResourceId("resource_id_1")
                .withResourceProvider("resource_provider_1")
                .withResourceType("resource_type_1")
        );
        listbodyResourceKeys.add(
            new RemediationResourceKey()
                .withResourceId("resource_id_2")
                .withResourceProvider("resource_provider_2")
                .withResourceType("resource_type_2")
        );
        body.withResourceKeys(listbodyResourceKeys);
        request.withBody(body);
        try {
            CollectRemediationExecutionStatusesSummaryResponse response =
client.collectRemediationExecutionStatusesSummary(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

Collects remediation results for the specified resource.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
```

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```
    request = CollectRemediationExecutionStatusesSummaryRequest()
    request.policy_assignment_id = "{policy_assignment_id}"
    listResourceKeysbody = [
        RemediationResourceKey(
            resource_id="resource_id_1",
            resource_provider="resource_provider_1",
            resource_type="resource_type_1"
        ),
        RemediationResourceKey(
            resource_id="resource_id_2",
            resource_provider="resource_provider_2",
            resource_type="resource_type_2"
        )
    ]
    request.body = RemediationExecutionStatusesSummaryRequestBody(
        resource_keys=listResourceKeysbody
    )
    response = client.collect_remediation_execution_statuses_summary(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

Collects remediation results for the specified resource.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CollectRemediationExecutionStatusesSummaryRequest{}
    request.PolicyAssignmentId = "{policy_assignment_id}"
    var listResourceKeysbody = []model.RemediationResourceKey{
        {
            ResourceId: "resource_id_1",
            ResourceProvider: "resource_provider_1",
            ResourceType: "resource_type_1",
        },
        {
            ResourceId: "resource_id_2",
```

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```
            ResourceProvider: "resource_provider_2",
            ResourceType: "resource_type_2",
        },
    }
    request.Body = &model.RemediationExecutionStatusesSummaryRequestBody{
        ResourceKeys: listResourceKeysbody,
    }
    response, err := client.CollectRemediationExecutionStatusesSummary(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	Operation succeeded.
400	Invalid parameters.
403	Forbidden
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.6 Region Management

4.6.1 Querying Available Regions

Function

This API is used to query regions visible to you.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/regions

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Table 4-512 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-513 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-514 Request header parameters

Parameter	Mandatory	Type	Description
X-Language	No	String	Specifies the language of the information to return. The default name is **zh-cn**, which can be **zh-cn** and **en-us**. Default: **zh-cn**
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

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Response Parameters

Status code: 200

Table 4-515 Response body parameters

Parameter	Type	Description
value	Array of **Region** objects	Specifies the list of region information.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-516 Region

Parameter	Type	Description
region_id	String	Specifies the region ID.
display_name	String	Specifies the display name.

Table 4-517 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-518 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-519 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-520 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-521 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "value" : [ {
    "region_id" : "regionid1",
    "display_name" : "region1"
  }, {
    "region_id" : "regionid2",
    "display_name" : "region2"
  } ],
  "page_info" : {
    "current_count" : 2,
    "next_marker" : null
  }
}
```

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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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListRegionsSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListRegionsRequest request = new ListRegionsRequest();
        try {
            ListRegionsResponse response = client.listRegions(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListRegionsRequest()
        response = client.list_regions(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListRegionsRequest{}
    response, err := client.ListRegions(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
404	User not found.
500	Server error.

Error Codes

See **Error Codes**.

4.7 Advanced Queries

4.7.1 Running Advanced Queries

Function

This API is used to run advanced queries.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/run-query

Table 4-522 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Request Parameters

Table 4-523 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-524 Request body parameters

Parameter	Mandatory	Type	Description
expression	Yes	String	Specifies the ResourceQL expression. Minimum: **1** Maximum: **4096**

Response Parameters

Status code: 200

Table 4-525 Response body parameters

Parameter	Type	Description
query_info	**QueryInfo** object	Specifies the ResourceQL query field.
results	Array of objects	Specifies the ResourceQL query result.

Table 4-526 QueryInfo

Parameter	Type	Description
select_fields	Array of strings	Specifies the ResourceQL query field.

Status code: 400

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Table 4-527 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-528 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 429

Table 4-529 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-530 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

- Querying IDs of all VMs under your account

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/run-query

{
  "expression" : "select id from resources where provider = 'ecs' and type = 'cloudservers'"
}
```

- Querying EVS disks with a capacity of 100 GB in the current account.

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/run-query
```

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```
{
  "expression" : "select * from resources where provider = 'evs' and type = 'volumes' and properties.size
= 100"
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "query_info" : {
    "select_fields" : [ "id" ]
  },
  "results" : [ {
    "id" : "91252cc9-bfd9-0709-0912-56b397e0ba3f"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

- Querying IDs of all VMs under your account

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class RunQuerySolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        RunQueryRequest request = new RunQueryRequest();
        QueryRunRequestBody body = new QueryRunRequestBody();
        body.withExpression("select id from resources where provider = 'ecs' and type = 'cloudservers'");
        request.withBody(body);
        try {
            RunQueryResponse response = client.runQuery(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());
        }
    }
}
```

- Querying EVS disks with a capacity of 100 GB in the current account.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class RunQuerySolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        RunQueryRequest request = new RunQueryRequest();
        QueryRunRequestBody body = new QueryRunRequestBody();
        body.withExpression("select * from resources where provider = 'evs' and type = 'volumes' and properties.size = 100");
        request.withBody(body);
        try {
            RunQueryResponse response = client.runQuery(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

- Querying IDs of all VMs under your account

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = RunQueryRequest()
        request.body = QueryRunRequestBody(
            expression="select id from resources where provider = 'ecs' and type = 'cloudservers'"
        )
        response = client.run_query(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- Querying EVS disks with a capacity of 100 GB in the current account.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = RunQueryRequest()
```

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```
        request.body = QueryRunRequestBody(
            expression="select * from resources where provider = 'evs' and type = 'volumes' and
properties.size = 100"
        )
        response = client.run_query(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

- Querying IDs of all VMs under your account

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.RunQueryRequest{}
    request.Body = &model.QueryRunRequestBody{
        Expression: "select id from resources where provider = 'ecs' and type = 'cloudservers'",
    }
    response, err := client.RunQuery(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Querying EVS disks with a capacity of 100 GB in the current account.

```
package main

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

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.RunQueryRequest{}
    request.Body = &model.QueryRunRequestBody{
        Expression: "select * from resources where provider = 'evs' and type = 'volumes' and properties.size = 100",
    }
    response, err := client.RunQuery(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
429	Limit exceeded.
500	Server error.

Error Codes

See **Error Codes**.

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4.7.2 Creating an Advanced Query

Function

This API is used to create an advanced query.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/stored-queries

Table 4-531 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Request Parameters

Table 4-532 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-533 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the ResourceQL name. Minimum: **1** Maximum: **64**

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Parameter	Mandatory	Type	Description
type	No	String	User-defined query type. The enumerated values are account and aggregator. If the value is account, it indicates the customized query statement of a single account. If the value is aggregator, it indicates the user-defined query statement of the aggregator. The default value is account.
description	No	String	Specifies the ResourceQL description. Minimum: **0** Maximum: **512**
expression	Yes	String	Specifies the ResourceQL expression. Minimum: **1** Maximum: **4096**

Response Parameters

Status code: 200

Table 4-534 Response body parameters

Parameter	Type	Description
id	String	ResourceQL ID. Maximum: **256**
name	String	Specifies the ResourceQL name. Minimum: **1** Maximum: **64**
type	String	Indicates a customized query type. The options are account and aggregator. account: customized query statement for a single account. If the value is aggregator, it indicates the customized query statement of the aggregator. The default value is account.

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Parameter	Type	Description
description	String	Specifies the ResourceQL description. Minimum: **0** Maximum: **512**
expression	String	Specifies the ResourceQL expression. Minimum: **1** Maximum: **4096**
created	String	Specifies when ResourceQL was created. Minimum: **1** Maximum: **64**
updated	String	Specifies when ResourceQL was updated. Minimum: **1** Maximum: **64**

Status code: 400

Table 4-535 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-536 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-537 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Creating an advanced query to query stopped ECSs

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/stored-queries

{
  "name" : "stopped-ecs",
  "description" : "Querying stopped ECSs",
  "expression" : "SELECT id, name FROM resources WHERE provider = 'ecs' AND type = 'cloudservers' AND
properties.status = 'SHUTOFF'"
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "id" : "62b9126566d400721efceffa",
  "name" : "stopped-ecs",
  "description" : "Querying stopped ECSs",
  "expression" : "SELECT id, name FROM resources WHERE provider = 'ecs' AND type = 'cloudservers' AND
properties.status = 'SHUTOFF'",
  "created" : "2022-06-27T02:13:57.107Z",
  "updated" : "2022-06-27T02:13:57.107Z"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Creating an advanced query to query stopped ECSs

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class CreateStoredQuerySolution {

    public static void main(String[] args) {
        // 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
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

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

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateStoredQueryRequest request = new CreateStoredQueryRequest();
        StoredQueryRequestBody body = new StoredQueryRequestBody();
        body.withExpression("SELECT id, name FROM resources WHERE provider = 'ecs' AND type = 'cloudservers' AND properties.status = 'SHUTOFF'");
        body.withDescription("Querying stopped ECSs");
        body.withName("stopped-ecs");
        request.withBody(body);
        try {
            CreateStoredQueryResponse response = client.createStoredQuery(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

Creating an advanced query to query stopped ECSs

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CreateStoredQueryRequest()
```

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```
        request.body = StoredQueryRequestBody(
            expression="SELECT id, name FROM resources WHERE provider = 'ecs' AND type = 'cloudservers'
AND properties.status = 'SHUTOFF'",
            description="Querying stopped ECSs",
            name="stopped-ecs"
        )
        response = client.create_stored_query(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

Creating an advanced query to query stopped ECSs

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateStoredQueryRequest{}
    descriptionStoredQueryRequestBody:= "Querying stopped ECSs"
    request.Body = &model.StoredQueryRequestBody{
        Expression: "SELECT id, name FROM resources WHERE provider = 'ecs' AND type = 'cloudservers' AND
properties.status = 'SHUTOFF'",
        Description: &descriptionStoredQueryRequestBody,
        Name: "stopped-ecs",
    }
    response, err := client.CreateStoredQuery(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.7.3 Querying Advanced Queries

Function

This API is used to list all advanced queries.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/stored-queries

Table 4-538 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-539 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**

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Parameter	Mandatory	Type	Description
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
name	No	String	Specifies the ResourceQL name. Minimum: **1** Maximum: **64**

Request Parameters

Table 4-540 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-541 Response body parameters

Parameter	Type	Description
value	Array of **StoredQuery** objects	Specifies the list of advanced queries.
page_info	**PageInfo** object	Specifies the pagination object.

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Table 4-542 StoredQuery

Parameter	Type	Description
id	String	ResourceQL ID. Maximum: **256**
name	String	Specifies the ResourceQL name. Minimum: **1** Maximum: **64**
type	String	Indicates a customized query type. The options are account and aggregator. account: customized query statement for a single account. If the value is aggregator, it indicates the customized query statement of the aggregator. The default value is account.
description	String	Specifies the ResourceQL description. Minimum: **0** Maximum: **512**
expression	String	Specifies the ResourceQL expression. Minimum: **1** Maximum: **4096**
created	String	Specifies when ResourceQL was created. Minimum: **1** Maximum: **64**
updated	String	Specifies when ResourceQL was updated. Minimum: **1** Maximum: **64**

Table 4-543 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**

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Parameter	Type	Description
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-544 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-545 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-546 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

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```
{
  "value" : [ {
    "id" : "62b9126566d400721efceffa",
    "name" : "stopped-ecs",
    "type" : "account",
    "description" : "Querying stopped ECSs",
    "expression" : "SELECT id, name FROM resources WHERE provider = 'ecs' AND type = 'cloudservers' AND
properties.status = 'SHUTOFF'",
    "created" : "2022-06-27T02:13:57.107Z",
    "updated" : "2022-06-27T02:13:57.107Z"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListStoredQueriesSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListStoredQueriesRequest request = new ListStoredQueriesRequest();
        try {
            ListStoredQueriesResponse response = client.listStoredQueries(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListStoredQueriesRequest()
        response = client.list_stored_queries(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
```

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```
        WithCredential(auth).
        Build())

    request := &model.ListStoredQueriesRequest{}
    response, err := client.ListStoredQueries(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.7.4 Querying an Advanced Query

Function

This API is used to query an advanced query.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/stored-queries/{query_id}

Table 4-547 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Parameter	Mandatory	Type	Description
query_id	Yes	String	Specifies the query ID. Maximum: **36**

Request Parameters

Table 4-548 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-549 Response body parameters

Parameter	Type	Description
id	String	ResourceQL ID. Maximum: **256**
name	String	Specifies the ResourceQL name. Minimum: **1** Maximum: **64**
type	String	Indicates a customized query type. The options are account and aggregator. account: customized query statement for a single account. If the value is aggregator, it indicates the customized query statement of the aggregator. The default value is account.
description	String	Specifies the ResourceQL description. Minimum: **0** Maximum: **512**

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Parameter	Type	Description
expression	String	Specifies the ResourceQL expression. Minimum: **1** Maximum: **4096**
created	String	Specifies when ResourceQL was created. Minimum: **1** Maximum: **64**
updated	String	Specifies when ResourceQL was updated. Minimum: **1** Maximum: **64**

Status code: 400

Table 4-550 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-551 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-552 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 500

Table 4-553 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "id" : "62b9126566d400721efceffa",
  "name" : "stopped-ecs",
  "type" : "account",
  "description" : "Querying stopped ECSs",
  "expression" : "SELECT id, name FROM resources WHERE provider = 'ecs' AND type = 'cloudservers' AND
properties.status = 'SHUTOFF'",
  "created" : "2022-06-27T02:13:57.107Z",
  "updated" : "2022-06-27T02:13:57.107Z"
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowStoredQuerySolution {

    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 GlobalCredentials()
```

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

        ConfigClient client = ConfigClient.newBuilder()
            .withCredential(auth)
            .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowStoredQueryRequest request = new ShowStoredQueryRequest();
        request.withQueryId("{query_id}");
        try {
            ShowStoredQueryResponse response = client.showStoredQuery(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowStoredQueryRequest()
        request.query_id = "{query_id}"
        response = client.show_stored_query(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"
```

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```
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowStoredQueryRequest{}
    request.QueryId = "{query_id}"
    response, err := client.ShowStoredQuery(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
404	No resource found.
500	Server error.

Error Codes

See **Error Codes**.

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4.7.5 Updating an Advanced Query

Function

This API is used to update a custom query.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1/resource-manager/domains/{domain_id}/stored-queries/{query_id}

Table 4-554 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
query_id	Yes	String	Specifies the query ID. Maximum: **36**

Request Parameters

Table 4-555 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-556 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the ResourceQL name. Minimum: **1** Maximum: **64**

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Parameter	Mandatory	Type	Description
type	No	String	User-defined query type. The enumerated values are account and aggregator. If the value is account, it indicates the customized query statement of a single account. If the value is aggregator, it indicates the user-defined query statement of the aggregator. The default value is account.
description	No	String	Specifies the ResourceQL description. Minimum: **0** Maximum: **512**
expression	Yes	String	Specifies the ResourceQL expression. Minimum: **1** Maximum: **4096**

Response Parameters

Status code: 200

Table 4-557 Response body parameters

Parameter	Type	Description
id	String	ResourceQL ID. Maximum: **256**
name	String	Specifies the ResourceQL name. Minimum: **1** Maximum: **64**
type	String	Indicates a customized query type. The options are account and aggregator. account: customized query statement for a single account. If the value is aggregator, it indicates the customized query statement of the aggregator. The default value is account.

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Parameter	Type	Description
description	String	Specifies the ResourceQL description. Minimum: **0** Maximum: **512**
expression	String	Specifies the ResourceQL expression. Minimum: **1** Maximum: **4096**
created	String	Specifies when ResourceQL was created. Minimum: **1** Maximum: **64**
updated	String	Specifies when ResourceQL was updated. Minimum: **1** Maximum: **64**

Status code: 400

Table 4-558 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-559 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

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Table 4-560 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-561 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Updating the advanced query to query running ECSs

```
PUT https://{endpoint}/v1/resource-manager/domains/{domain_id}/stored-queries/{query_id}

{
  "name" : "running-ecs",
  "description" : "Querying running ECSs",
  "expression" : "SELECT id, name FROM resources WHERE provider = 'ecs' AND type = 'cloudservers' AND
properties.status = 'ACTIVE'"
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "id" : "62b9126566d400721efceffa",
  "name" : "running-ecs",
  "type" : "account",
  "description" : "Querying running ECSs",
  "expression" : "SELECT id, name FROM resources WHERE provider = 'ecs' AND type = 'cloudservers' AND
properties.status = 'ACTIVE'",
  "created" : "2022-06-27T02:13:57.107Z",
  "updated" : "2022-07-09T09:12:00.007Z"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Updating the advanced query to query running ECSs

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

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```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class UpdateStoredQuerySolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateStoredQueryRequest request = new UpdateStoredQueryRequest();
        request.withQueryId("{query_id}");
        StoredQueryRequestBody body = new StoredQueryRequestBody();
        body.withExpression("SELECT id, name FROM resources WHERE provider = 'ecs' AND type = 'cloudservers' AND properties.status = 'ACTIVE'");
        body.withDescription("Querying running ECSs");
        body.withName("running-ecs");
        request.withBody(body);
        try {
            UpdateStoredQueryResponse response = client.updateStoredQuery(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

Updating the advanced query to query running ECSs

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = UpdateStoredQueryRequest()
        request.query_id = "{query_id}"
        request.body = StoredQueryRequestBody(
            expression="SELECT id, name FROM resources WHERE provider = 'ecs' AND type = 'cloudservers'
AND properties.status = 'ACTIVE'",
            description="Querying running ECSs",
            name="running-ecs"
        )
        response = client.update_stored_query(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

Updating the advanced query to query running ECSs

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateStoredQueryRequest{}
    request.QueryId = "{query_id}"
    descriptionStoredQueryRequestBody:= "Querying running ECSs"
    request.Body = &model.StoredQueryRequestBody{
        Expression: "SELECT id, name FROM resources WHERE provider = 'ecs' AND type = 'cloudservers' AND
```

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```
properties.status = 'ACTIVE'",
        Description: &descriptionStoredQueryRequestBody,
        Name: "running-ecs",
    }
    response, err := client.UpdateStoredQuery(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
404	No resource found.
500	Server error.

Error Codes

See **Error Codes**.

4.7.6 Deleting an Advanced Query

Function

This API is used to delete an advanced query.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1/resource-manager/domains/{domain_id}/stored-queries/{query_id}

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Table 4-562 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
query_id	Yes	String	Specifies the query ID. Maximum: **36**

Request Parameters

Table 4-563 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 204

Operation succeeded.

Status code: 400

Table 4-564 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-565 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 404

Table 4-566 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-567 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class DeleteStoredQuerySolution {

    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");

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

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteStoredQueryRequest request = new DeleteStoredQueryRequest();
        request.withQueryId("{query_id}");
        try {
            DeleteStoredQueryResponse response = client.deleteStoredQuery(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = DeleteStoredQueryRequest()
        request.query_id = "{query_id}"
        response = client.delete_stored_query(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteStoredQueryRequest{}
    request.QueryId = "{query_id}"
    response, err := client.DeleteStoredQuery(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
404	No resource found.
500	Server error.

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Error Codes

See **Error Codes**.

4.7.7 Querying Schemas

Function

This API is used to query schemas used by advanced queries.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/schemas

Table 4-568 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-569 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

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Request Parameters

Table 4-570 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the invoker's token.
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-571 Response body parameters

Parameter	Type	Description
value	Array of **ResourceSchemaResponse** objects	schemas object.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-572 ResourceSchemaResponse

Parameter	Type	Description
type	String	Specifies the resource type.
schema	Object	Specifies the schema content.

Table 4-573 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**

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Parameter	Type	Description
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-574 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-575 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-576 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

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```
{
  "value" : [ {
    "type" : "aad.intances",
    "schema" : {
      "expireTime" : "int",
      "ispSpec" : "string",
      "specType" : "int",
      "basicBandwidth" : "int",
      "elasticBandwidth" : "int",
      "serviceBandwidth" : "int"
    }
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListSchemasSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListSchemasRequest request = new ListSchemasRequest();
        try {
            ListSchemasResponse response = client.listSchemas(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListSchemasRequest()
        response = client.list_schemas(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
```

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

    request := &model.ListSchemasRequest{}
    response, err := client.ListSchemas(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.8 Resource Aggregators

4.8.1 Creating a Resource Aggregator

Function

This API is used to create a resource aggregator.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1/resource-manager/domains/{domain_id}/aggregators

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Table 4-577 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Request Parameters

Table 4-578 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-579 Request body parameters

Parameter	Mandatory	Type	Description
aggregator_name	Yes	String	Specifies the name of a resource aggregator. Minimum: **1** Maximum: **64**
aggregator_type	Yes	String	Specifies the resource aggregator type, which can be **ACCOUNT** or **ORGANIZATION**.
account_aggregation_sources	No	**AccountAggregationSource** object	Specifies the source account of the aggregated data.
tags	No	Array of **ResourceTag** objects	Tags.

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Table 4-580 AccountAggregationSource

Parameter	Mandatory	Type	Description
domain_ids	No	Array of strings	Specifies the account list. Minimum: **1** Maximum: **36** Array Length: **1 - 30**

Table 4-581 ResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	Yes	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Response Parameters

Status code: 200

Table 4-582 Response body parameters

Parameter	Type	Description
aggregator_name	String	Specifies the name of a resource aggregator.
aggregator_id	String	Specifies the resource aggregator ID.
aggregator_urn	String	Specifies the resource aggregator identifier.
aggregator_type	String	Specifies the resource aggregator type.
account_aggregation_sources	**AccountAggregationSource** object	Specifies the source account of the aggregated data.

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Parameter	Type	Description
updated_at	String	Specifies the time when the resource aggregator was updated.
created_at	String	Specifies the time when the resource aggregator was created.
tags	Array of **ResourceTag** objects	Tags.

Table 4-583 AccountAggregationSource

Parameter	Type	Description
domain_ids	Array of strings	Specifies the account list. Minimum: **1** Maximum: **36** Array Length: **1 - 30**

Table 4-584 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Status code: 400

Table 4-585 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.

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Parameter	Type	Description
error_msg	String	Specifies the error message.

Status code: 403

Table 4-586 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-587 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Creating a resource aggregator

```
PUT https://{endpoint}/v1/resource-manager/domains/{domain_id}/aggregators

{
  "aggregator_name" : "example_aggregator",
  "aggregator_type" : "ACCOUNT",
  "account_aggregation_sources" : {
    "domain_ids" : [ "3fd23817bd85480e8dc4f520075de348" ]
  }
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "aggregator_name" : "example_aggregator",
  "aggregator_id" : "7ca3447830bd49c9b630a99680eaf90f",
  "aggregator_urn" :
"rms::e74e043fab784a45ad88f5ef6a4bcffc:aggregationAggregator:7ca3447830bd49c9b630a99680eaf90f",
  "aggregator_type" : "ACCOUNT",
  "account_aggregation_sources" : {
    "domain_ids" : [ "3fd23817bd85480e8dc4f520075de348" ]
  },
  "updated_at" : "2020-01-18T02:49:12.465Z",
```

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```
  "created_at" : "2020-01-18T02:49:12.465Z"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Creating a resource aggregator

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class CreateConfigurationAggregatorSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateConfigurationAggregatorRequest request = new CreateConfigurationAggregatorRequest();
        ConfigurationAggregatorRequest body = new ConfigurationAggregatorRequest();
        List<String> listAccountAggregationSourcesDomainIds = new ArrayList<>();
        listAccountAggregationSourcesDomainIds.add("3fd23817bd85480e8dc4f520075de348");
        AccountAggregationSource accountAggregationSourcesbody = new AccountAggregationSource();
        accountAggregationSourcesbody.withDomainIds(listAccountAggregationSourcesDomainIds);
        body.withAccountAggregationSources(accountAggregationSourcesbody);
        body.withAggregatorType("ACCOUNT");
        body.withAggregatorName("example_aggregator");
        request.withBody(body);
        try {
            CreateConfigurationAggregatorResponse response = client.createConfigurationAggregator(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

Creating a resource aggregator

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CreateConfigurationAggregatorRequest()
        listDomainIdsAccountAggregationSources = [
            "3fd23817bd85480e8dc4f520075de348"
        ]
        accountAggregationSourcesbody = AccountAggregationSource(
            domain_ids=listDomainIdsAccountAggregationSources
        )
        request.body = ConfigurationAggregatorRequest(
            account_aggregation_sources=accountAggregationSourcesbody,
            aggregator_type="ACCOUNT",
            aggregator_name="example_aggregator"
        )
        response = client.create_configuration_aggregator(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

Creating a resource aggregator

```
package main

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

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateConfigurationAggregatorRequest{}
    var listDomainIdsAccountAggregationSources = []string{
        "3fd23817bd85480e8dc4f520075de348",
    }
    accountAggregationSourcesbody := &model.AccountAggregationSource{
        DomainIds: &listDomainIdsAccountAggregationSources,
    }
    request.Body = &model.ConfigurationAggregatorRequest{
        AccountAggregationSources: accountAggregationSourcesbody,
        AggregatorType: "ACCOUNT",
        AggregatorName: "example_aggregator",
    }
    response, err := client.CreateConfigurationAggregator(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

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4.8.2 Querying Resource Aggregators

Function

This API is used to query resource aggregators.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/aggregators

Table 4-588 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-589 Query Parameters

Parameter	Mandatory	Type	Description
aggregator_name	No	String	Specifies the name of a resource aggregator. Minimum: **1** Maximum: **64**
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

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Request Parameters

Table 4-590 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-591 Response body parameters

Parameter	Type	Description
configuration_aggregators	Array of **ConfigurationAggregatorResp** objects	Specifies resource aggregators.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-592 ConfigurationAggregatorResp

Parameter	Type	Description
aggregator_name	String	Specifies the name of a resource aggregator.
aggregator_id	String	Specifies the resource aggregator ID.
aggregator_urn	String	Specifies the resource aggregator identifier.
aggregator_type	String	Specifies the resource aggregator type.
account_aggregation_sources	**AccountAggregationSource** object	Specifies the source account of the aggregated data.
updated_at	String	Specifies the time when the resource aggregator was updated.
created_at	String	Specifies the time when the resource aggregator was created.

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Parameter	Type	Description
tags	Array of ResourceTag objects	Tags.

Table 4-593 AccountAggregationSource

Parameter	Type	Description
domain_ids	Array of strings	Specifies the account list. Minimum: **1** Maximum: **36** Array Length: **1 - 30**

Table 4-594 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Table 4-595 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**

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Parameter	Type	Description
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-596 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-597 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-598 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

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```
{
  "configuration_aggregators" : [ {
    "aggregator_name" : "example_aggregator",
    "aggregator_id" : "2f0cc4991bac4940ae20a3630818589e",
    "aggregator_urn" :
"rms::e74e043fab784a45ad88f5ef6a4bcffc:aggregationAggregator:2f0cc4991bac4940ae20a3630818589e",
    "aggregator_type" : "ACCOUNT",
    "account_aggregation_sources" : {
      "domain_ids" : [ "3fd23817bd85480e8dc4f520075de348" ]
    },
    "updated_at" : "2020-01-18T02:49:12.465Z",
    "created_at" : "2020-01-18T02:49:12.465Z"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : "CAESIDdjYTM0NDc4MzBiZDQ5YzliNjMwYTk5NjgwZWFmOTBmGgQ-0aw3"
  }
}
```


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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListConfigurationAggregatorsSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListConfigurationAggregatorsRequest request = new ListConfigurationAggregatorsRequest();
        try {
            ListConfigurationAggregatorsResponse response = client.listConfigurationAggregators(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());
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListConfigurationAggregatorsRequest()
        response = client.list_configuration_aggregators(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
```

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```
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListConfigurationAggregatorsRequest{}
    response, err := client.ListConfigurationAggregators(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.8.3 Querying a Specific Resource Aggregator

Function

This API is used to query a specific resource aggregator.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/aggregators/{aggregator_id}

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Table 4-599 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
aggregator_id	Yes	String	Specifies the resource aggregator ID. Maximum: **32**

Request Parameters

Table 4-600 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-601 Response body parameters

Parameter	Type	Description
aggregator_name	String	Specifies the name of a resource aggregator.
aggregator_id	String	Specifies the resource aggregator ID.
aggregator_urn	String	Specifies the resource aggregator identifier.
aggregator_type	String	Specifies the resource aggregator type.
account_aggregation_sources	**AccountAggregationSource** object	Specifies the source account of the aggregated data.
updated_at	String	Specifies the time when the resource aggregator was updated.
created_at	String	Specifies the time when the resource aggregator was created.

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Parameter	Type	Description
tags	Array of ResourceTag objects	Tags.

Table 4-602 AccountAggregationSource

Parameter	Type	Description
domain_ids	Array of strings	Specifies the account list. Minimum: **1** Maximum: **36** Array Length: **1 - 30**

Table 4-603 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Status code: 400

Table 4-604 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-605 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-606 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "aggregator_name" : "example_aggregator",
  "aggregator_id" : "2f0cc4991bac4940ae20a3630818589e",
  "aggregator_urn" :
"rms::e74e043fab784a45ad88f5ef6a4bcffc:aggregationAggregator:2f0cc4991bac4940ae20a3630818589e",
  "aggregator_type" : "ACCOUNT",
  "account_aggregation_sources" : {
    "domain_ids" : [ "3fd23817bd85480e8dc4f520075de348" ]
  },
  "updated_at" : "2020-01-18T02:49:12.465Z",
  "created_at" : "2020-01-18T02:49:12.465Z"
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;
```

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```
public class ShowConfigurationAggregatorSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowConfigurationAggregatorRequest request = new ShowConfigurationAggregatorRequest();
        request.withAggregatorId("{aggregator_id}");
        try {
            ShowConfigurationAggregatorResponse response = client.showConfigurationAggregator(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowConfigurationAggregatorRequest()
        request.aggregator_id = "{aggregator_id}"
```

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```
        response = client.show_configuration_aggregator(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowConfigurationAggregatorRequest{}
    request.AggregatorId = "{aggregator_id}"
    response, err := client.ShowConfigurationAggregator(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	Operation succeeded.
400	Invalid parameters.

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Status Code	Description
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.8.4 Querying Account Aggregation Statuses of a Specific Aggregator

Function

This API is used to query the status of a specific aggregator account. The status can be **authorized** or **unauthorized**. If the status is **unauthorized**, the status information contains an error code or message.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/aggregators/{aggregator_id}/aggregator-sources-status

Table 4-607 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
aggregator_id	Yes	String	Specifies the resource aggregator ID. Maximum: **32**

Table 4-608 Query Parameters

Parameter	Mandatory	Type	Description
update_status	No	String	Specifies the status of the aggregated source account. Maximum: **16**

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Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-609 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-610 Response body parameters

Parameter	Type	Description
aggregated_source_statuses	Array of **AggregatedSourceStatus** objects	Specifies the statuses of resource aggregators.
page_info	**PageInfo** object	Specifies the pagination object.

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Table 4-611 AggregatedSourceStatus

Parameter	Type	Description
last_error_code	String	Specifies the error code returned when the last resource aggregation for the source account fails.
last_error_message	String	Specifies the error message returned when the last resource aggregation for the source account fails.
last_update_status	String	Specifies the latest status of the source account.
last_update_time	String	Specifies the last update time of the source account.
source_id	String	Specifies the source account ID or organization.
source_type	String	Specifies the source account type, which can be **ACCOUNT** or **ORGANIZATION**.
source_name	String	Account name

Table 4-612 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-613 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 403

Table 4-614 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-615 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "aggregated_source_statuses" : [ {
    "last_error_code" : null,
    "last_error_message" : null,
    "last_update_status" : "SUCCEEDED",
    "last_update_time" : "2020-01-18T10:49:12.442+08:00",
    "source_id" : "3fd23817bd85480e8dc4f520075de348",
    "source_name" : "demo",
    "source_type" : "ACCOUNT"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : "CAESIDdjYTM0NDc4MzBiZDQ5YzliNjMwYTk5NjgwZWFmOTBmGgQ-0aw3"
  }
}
```

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.GlobalCredentials;
```

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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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowConfigurationAggregatorSourcesStatusSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowConfigurationAggregatorSourcesStatusRequest request = new ShowConfigurationAggregatorSourcesStatusRequest();
        request.withAggregatorId("{aggregator_id}");
        try {
            ShowConfigurationAggregatorSourcesStatusResponse response = client.showConfigurationAggregatorSourcesStatus(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)
```

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```
    client = ConfigClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(ConfigRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowConfigurationAggregatorSourcesStatusRequest()
        request.aggregator_id = "{aggregator_id}"
        response = client.show_configuration_aggregator_sources_status(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowConfigurationAggregatorSourcesStatusRequest{}
    request.AggregatorId = "{aggregator_id}"
    response, err := client.ShowConfigurationAggregatorSourcesStatus(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.8.5 Updating a Resource Aggregator

Function

This API is used to update a resource aggregator.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1/resource-manager/domains/{domain_id}/aggregators/{aggregator_id}

Table 4-616 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
aggregator_id	Yes	String	Specifies the resource aggregator ID. Maximum: **32**

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Request Parameters

Table 4-617 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-618 Request body parameters

Parameter	Mandatory	Type	Description
aggregator_name	Yes	String	Specifies the name of a resource aggregator. Minimum: **1** Maximum: **64**
aggregator_type	Yes	String	Specifies the resource aggregator type, which can be **ACCOUNT** or **ORGANIZATION**.
account_aggregation_sources	No	**AccountAggregationSource** object	Specifies the source account of the aggregated data.
tags	No	Array of **ResourceTag** objects	Tags.

Table 4-619 AccountAggregationSource

Parameter	Mandatory	Type	Description
domain_ids	No	Array of strings	Specifies the account list. Minimum: **1** Maximum: **36** Array Length: **1 - 30**

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Table 4-620 ResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	Yes	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Response Parameters

Status code: 200

Table 4-621 Response body parameters

Parameter	Type	Description
aggregator_name	String	Specifies the name of a resource aggregator.
aggregator_id	String	Specifies the resource aggregator ID.
aggregator_urn	String	Specifies the resource aggregator identifier.
aggregator_type	String	Specifies the resource aggregator type.
account_aggregation_sources	**AccountAggregationSource** object	Specifies the source account of the aggregated data.
updated_at	String	Specifies the time when the resource aggregator was updated.
created_at	String	Specifies the time when the resource aggregator was created.
tags	Array of **ResourceTag** objects	Tags.

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Table 4-622 AccountAggregationSource

Parameter	Type	Description
domain_ids	Array of strings	Specifies the account list. Minimum: **1** Maximum: **36** Array Length: **1 - 30**

Table 4-623 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Status code: 400

Table 4-624 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-625 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 500

Table 4-626 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Updating a resource aggregator

```
PUT https://{endpoint}/v1/resource-manager/domains/{domain_id}/aggregators/{aggregator_id}

{
  "aggregator_name" : "example_aggregator",
  "aggregator_type" : "ACCOUNT",
  "account_aggregation_sources" : {
    "domain_ids" : [ "3fd23817bd85480e8dc4f520075de348" ]
  }
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "aggregator_name" : "example_aggregator",
  "aggregator_id" : "7ca3447830bd49c9b630a99680eaf90f",
  "aggregator_urn" :
"rms::e74e043fab784a45ad88f5ef6a4bcffc:aggregationAggregator:7ca3447830bd49c9b630a99680eaf90f",
  "aggregator_type" : "ACCOUNT",
  "account_aggregation_sources" : {
    "domain_ids" : [ "3fd23817bd85480e8dc4f520075de348" ]
  },
  "updated_at" : "2020-01-18T02:49:12.465Z",
  "created_at" : "2020-01-18T02:49:12.465Z"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Updating a resource aggregator

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
```

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

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

public class UpdateConfigurationAggregatorSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateConfigurationAggregatorRequest request = new UpdateConfigurationAggregatorRequest();
        request.withAggregatorId("{aggregator_id}");
        ConfigurationAggregatorRequest body = new ConfigurationAggregatorRequest();
        List<String> listAccountAggregationSourcesDomainIds = new ArrayList<>();
        listAccountAggregationSourcesDomainIds.add("3fd23817bd85480e8dc4f520075de348");
        AccountAggregationSource accountAggregationSourcesbody = new AccountAggregationSource();
        accountAggregationSourcesbody.withDomainIds(listAccountAggregationSourcesDomainIds);
        body.withAccountAggregationSources(accountAggregationSourcesbody);
        body.withAggregatorType("ACCOUNT");
        body.withAggregatorName("example_aggregator");
        request.withBody(body);
        try {
            UpdateConfigurationAggregatorResponse response = client.updateConfigurationAggregator(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

Updating a resource aggregator

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = UpdateConfigurationAggregatorRequest()
        request.aggregator_id = "{aggregator_id}"
        listDomainIdsAccountAggregationSources = [
            "3fd23817bd85480e8dc4f520075de348"
        ]
        accountAggregationSourcesbody = AccountAggregationSource(
            domain_ids=listDomainIdsAccountAggregationSources
        )
        request.body = ConfigurationAggregatorRequest(
            account_aggregation_sources=accountAggregationSourcesbody,
            aggregator_type="ACCOUNT",
            aggregator_name="example_aggregator"
        )
        response = client.update_configuration_aggregator(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

Updating a resource aggregator

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

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```
    request.AggregatorId = "{aggregator_id}"
    var listDomainIdsAccountAggregationSources = []string{
        "3fd23817bd85480e8dc4f520075de348",
    }
    accountAggregationSourcesbody := &model.AccountAggregationSource{
        DomainIds: &listDomainIdsAccountAggregationSources,
    }
    request.Body = &model.ConfigurationAggregatorRequest{
        AccountAggregationSources: accountAggregationSourcesbody,
        AggregatorType: "ACCOUNT",
        AggregatorName: "example_aggregator",
    }
    response, err := client.UpdateConfigurationAggregator(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.8.6 Deleting a Resource Aggregator

Function

This API is used to delete a resource aggregator.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1/resource-manager/domains/{domain_id}/aggregators/{aggregator_id}

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Table 4-627 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
aggregator_id	Yes	String	Specifies the resource aggregator ID. Maximum: **32**

Request Parameters

Table 4-628 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 204

Operation succeeded.

None

Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class DeleteConfigurationAggregatorSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteConfigurationAggregatorRequest request = new DeleteConfigurationAggregatorRequest();
        request.withAggregatorId("{aggregator_id}");
        try {
            DeleteConfigurationAggregatorResponse response = client.deleteConfigurationAggregator(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

    client = ConfigClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(ConfigRegion.value_of("<YOUR REGION>")) \
        .build()
```

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```
    try:
        request = DeleteConfigurationAggregatorRequest()
        request.aggregator_id = "{aggregator_id}"
        response = client.delete_configuration_aggregator(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteConfigurationAggregatorRequest{}
    request.AggregatorId = "{aggregator_id}"
    response, err := client.DeleteConfigurationAggregator(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	Operation succeeded.

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Error Codes

See **Error Codes**.

4.8.7 Authorizing an Aggregator Account

Function

This API is used to authorize an aggregator account to collect data from source accounts.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1/resource-manager/domains/{domain_id}/aggregators/aggregation-authorization

Table 4-629 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Request Parameters

Table 4-630 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-631 Request body parameters

Parameter	Mandatory	Type	Description
authorized_account_id	Yes	String	Specifies the ID of the resource aggregator account to be authorized. Minimum: **1** Maximum: **36**

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Parameter	Mandatory	Type	Description
tags	No	Array of ResourceTag objects	Tags.

Table 4-632 ResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	Yes	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Response Parameters

Status code: 200

Table 4-633 Response body parameters

Parameter	Type	Description
aggregation_authorization_urn	String	Specifies the authorization identifier of the resource aggregator account.
authorized_account_id	String	Specifies the ID of the authorized resource aggregator account.
created_at	String	Specifies the time when the resource aggregator account was authorized.
tags	Array of ResourceTag objects	Tags.

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Table 4-634 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Status code: 400

Table 4-635 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-636 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-637 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Example Requests

Authorizing an aggregator account

```
PUT https://{endpoint}/v1/resource-manager/domains/{domain_id}/aggregators/aggregation-authorization

{
  "authorized_account_id" : "3fd23817bd85480e8dc4f520075de348"
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "aggregation_authorization_urn" :
"rms::e74e043fab784a45ad88f5ef6a4bcffc:aggregationAuthorization:fb51a91e798a4beb831c9be365aba4db",
  "authorized_account_id" : "3fd23817bd85480e8dc4f520075de348",
  "created_at" : "2020-01-18T02:49:12.465Z"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Authorizing an aggregator account

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class CreateAggregationAuthorizationSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateAggregationAuthorizationRequest request = new CreateAggregationAuthorizationRequest();
        AggregationAuthorizationRequest body = new AggregationAuthorizationRequest();
        body.withAuthorizedAccountId("3fd23817bd85480e8dc4f520075de348");
        request.withBody(body);
```

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```
        try {
            CreateAggregationAuthorizationResponse response =
client.createAggregationAuthorization(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

Authorizing an aggregator account

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CreateAggregationAuthorizationRequest()
        request.body = AggregationAuthorizationRequest(
            authorized_account_id="3fd23817bd85480e8dc4f520075de348"
        )
        response = client.create_aggregation_authorization(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

Authorizing an aggregator account

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
```

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```
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateAggregationAuthorizationRequest{}
    request.Body = &model.AggregationAuthorizationRequest{
        AuthorizedAccountId: "3fd23817bd85480e8dc4f520075de348",
    }
    response, err := client.CreateAggregationAuthorization(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

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4.8.8 Querying Authorized Aggregator Accounts

Function

This API is used to query authorized aggregator accounts.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/aggregators/aggregation-authorization

Table 4-638 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-639 Query Parameters

Parameter	Mandatory	Type	Description
account_id	No	String	Specifies the ID of the authorized resource aggregator account. Maximum: **36**
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

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Request Parameters

Table 4-640 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-641 Response body parameters

Parameter	Type	Description
aggregation_authorizations	Array of **AggregationAuthorizationResp** objects	Specifies authorized aggregator accounts.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-642 AggregationAuthorizationResp

Parameter	Type	Description
aggregation_authorization_urn	String	Specifies the authorization identifier of the resource aggregator account.
authorized_account_id	String	Specifies the ID of the authorized resource aggregator account.
created_at	String	Specifies the time when the resource aggregator account was authorized.
tags	Array of **ResourceTag** objects	Tags.

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Table 4-643 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Table 4-644 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-645 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-646 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-647 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "aggregation_authorizations" : [ {
    "aggregation_authorization_urn" :
"rms::e74e043fab784a45ad88f5ef6a4bcffc:aggregationAuthorization:fb51a91e798a4beb831c9be365aba4db",
    "authorized_account_id" : "3fd23817bd85480e8dc4f520075de348",
    "created_at" : "2022-12-15T07:50:01.575Z"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : "CAESIDdjYTM0NDc4MzBiZDQ5YzliNjMwYTk5NjgwZWFmOTBmGgQ-0aw3"
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;
```

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```
public class ListAggregationAuthorizationsSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAggregationAuthorizationsRequest request = new ListAggregationAuthorizationsRequest();
        try {
            ListAggregationAuthorizationsResponse response = client.listAggregationAuthorizations(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListAggregationAuthorizationsRequest()
        response = client.list_aggregation_authorizations(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

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListAggregationAuthorizationsRequest{}
    response, err := client.ListAggregationAuthorizations(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

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Error Codes

See **Error Codes**.

4.8.9 Deleting Authorization for an Aggregator Account

Function

This API is used to delete authorization for a specific aggregator account.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1/resource-manager/domains/{domain_id}/aggregators/aggregation-authorization/{authorized_account_id}

Table 4-648 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
authorized_account_id	Yes	String	Specifies the ID of the authorized resource aggregator account. Maximum: **36**

Request Parameters

Table 4-649 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 204

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Operation succeeded.

None

Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class DeleteAggregationAuthorizationSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteAggregationAuthorizationRequest request = new DeleteAggregationAuthorizationRequest();
        request.withAuthorizedAccountId("{authorized_account_id}");
        try {
            DeleteAggregationAuthorizationResponse response = client.deleteAggregationAuthorization(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = DeleteAggregationAuthorizationRequest()
        request.authorized_account_id = "{authorized_account_id}"
        response = client.delete_aggregation_authorization(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
```

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

    request := &model.DeleteAggregationAuthorizationRequest{}
    request.AuthorizedAccountId = "{authorized_account_id}"
    response, err := client.DeleteAggregationAuthorization(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	Operation succeeded.

Error Codes

See **Error Codes**.

4.8.10 Querying All Pending Aggregation Requests

Function

This API is used to query all pending aggregation requests.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/aggregators/pending-aggregation-request

Table 4-650 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Table 4-651 Query Parameters

Parameter	Mandatory	Type	Description
account_id	No	String	Specifies the ID of the authorized resource aggregator account. Maximum: **36**
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-652 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-653 Response body parameters

Parameter	Type	Description
pending_aggregation_requests	Array of **PendingAggregationRequest** objects	Specifies pending aggregation requests.

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Parameter	Type	Description
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-654 PendingAggregationRequest

Parameter	Type	Description
requester_account_id	String	Specifies the ID of the account that requests aggregated data.

Table 4-655 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-656 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-657 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 500

Table 4-658 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "pending_aggregation_requests" : [ {
    "requester_account_id" : "e74e043fab784a45ad88f5ef6a4bcffc"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : "CAESIDdjYTM0NDc4MzBiZDQ5YzliNjMwYTk5NjgwZWFmOTBmGgQ-0aw3"
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListPendingAggregationRequestsSolution {

    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 GlobalCredentials()
                .withAk(ak)
```

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```
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListPendingAggregationRequestsRequest request = new ListPendingAggregationRequestsRequest();
        try {
            ListPendingAggregationRequestsResponse response =
client.listPendingAggregationRequests(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListPendingAggregationRequestsRequest()
        response = client.list_pending_aggregation_requests(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
```

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```
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListPendingAggregationRequestsRequest{}
    response, err := client.ListPendingAggregationRequests(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.8.11 Deleting Pending Authorization Requests

Function

This API is used to delete pending authorization requests.

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Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1/resource-manager/domains/{domain_id}/aggregators/pending-aggregation-request/{requester_account_id}

Table 4-659 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
requester_account_id	Yes	String	Specifies the ID of the account that requests data aggregation. Maximum: **36**

Request Parameters

Table 4-660 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 204

Operation succeeded.

None

Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class DeletePendingAggregationRequestSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        DeletePendingAggregationRequestRequest request = new DeletePendingAggregationRequestRequest();
        request.withRequesterAccountId("{requester_account_id}");
        try {
            DeletePendingAggregationRequestResponse response = client.deletePendingAggregationRequest(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = DeletePendingAggregationRequestRequest()
        request.requester_account_id = "{requester_account_id}"
        response = client.delete_pending_aggregation_request(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeletePendingAggregationRequestRequest{}
    request.RequesterAccountId = "{requester_account_id}"
    response, err := client.DeletePendingAggregationRequest(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
204	Operation succeeded.

Error Codes

See **Error Codes**.

4.8.12 Querying the Number of Resources of an Aggregator Account

Function

This API is used to query the number of resources of an aggregator account. The number can be counted by **filter** and **GroupByKey**.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/aggregate-discovered-resource-counts

Table 4-661 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Request Parameters

Table 4-662 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-663 Request body parameters

Parameter	Mandatory	Type	Description
aggregator_id	Yes	String	Specifies the resource aggregator ID. Minimum: **1** Maximum: **256**
filter	No	**ResourceCountsFilters** object	Specifies the filter for counting resources.
group_by_key	Yes	String	Specifies the key used to group resource counts. Its value can be **RESOURCE_TYPE** or **ACCOUNT_ID**. Minimum: **1** Maximum: **16**

Table 4-664 ResourceCountsFilters

Parameter	Mandatory	Type	Description
account_id	No	String	Specifies the account ID. Minimum: **1** Maximum: **36**
resource_type	No	String	Specifies the resource type. Minimum: **1** Maximum: **32**
region_id	No	String	Specifies the region ID. Minimum: **1** Maximum: **32**

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Response Parameters

Status code: 200

Table 4-665 Response body parameters

Parameter	Type	Description
group_by_key	String	Specifies the key for grouping resource counts.
grouped_resource_counts	Array of **GroupedResourceCount** objects	Specifies the list of group resources.
total_discovered_resources	Integer	Specifies the total number of resources in a filtered resource aggregator account.

Table 4-666 GroupedResourceCount

Parameter	Type	Description
group_name	String	Specifies the group name.
resource_count	Integer	Specifies the number of resources.

Status code: 400

Table 4-667 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-668 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-669 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying the number of resources of an aggregator account

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/
aggregate-discovered-resource-counts

{
  "aggregator_id" : "7ca3447830bd49c9b630a99680eaf90f",
  "group_by_key" : "DOMAIN"
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "group_by_key" : "DOMAIN",
  "grouped_resource_counts" : [ {
    "group_name" : "3fd23817bd85480e8dc4f520075de348",
    "resource_count" : 23
  } ],
  "total_discovered_resources" : 23
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying the number of resources of an aggregator account

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowAggregateDiscoveredResourceCountsSolution {

    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");

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

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowAggregateDiscoveredResourceCountsRequest request = new ShowAggregateDiscoveredResourceCountsRequest();
        AggregateDiscoveredResourceCountsRequest body = new AggregateDiscoveredResourceCountsRequest();
        body.withGroupByKey("DOMAIN");
        body.withAggregatorId("7ca3447830bd49c9b630a99680eaf90f");
        request.withBody(body);
        try {
            ShowAggregateDiscoveredResourceCountsResponse response = client.showAggregateDiscoveredResourceCounts(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

Querying the number of resources of an aggregator account

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowAggregateDiscoveredResourceCountsRequest()
        request.body = AggregateDiscoveredResourceCountsRequest(
```

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```
            group_by_key="DOMAIN",
            aggregator_id="7ca3447830bd49c9b630a99680eaf90f"
        )
        response = client.show_aggregate_discovered_resource_counts(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

Querying the number of resources of an aggregator account

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowAggregateDiscoveredResourceCountsRequest{}
    request.Body = &model.AggregateDiscoveredResourceCountsRequest{
        GroupByKey: "DOMAIN",
        AggregatorId: "7ca3447830bd49c9b630a99680eaf90f",
    }
    response, err := client.ShowAggregateDiscoveredResourceCounts(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.8.13 Querying Resources of an Aggregator Account

Function

This API is used to query resources of an aggregator account.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/aggregate-discovered-resources

Table 4-670 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-671 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**

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Parameter	Mandatory	Type	Description
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-672 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-673 Request body parameters

Parameter	Mandatory	Type	Description
aggregator_id	Yes	String	Specifies the resource aggregator ID. Minimum: **1** Maximum: **256**
filter	No	**ResourcesFilters** object	Specifies the filter for counting resources.
provider	No	String	Specifies the cloud service type. Minimum: **1** Maximum: **20**
resource_type	No	String	Specifies the resource type. Minimum: **1** Maximum: **32**

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Table 4-674 ResourcesFilters

Parameter	Mandatory	Type	Description
account_id	No	String	Specifies the account ID. Minimum: **1** Maximum: **36**
region_id	No	String	Specifies the region ID. Minimum: **1** Maximum: **36**
resource_id	No	String	Specifies the resource ID. Minimum: **1** Maximum: **512**
resource_name	No	String	Specifies the resource name. Minimum: **1** Maximum: **256**

Response Parameters

Status code: 200

Table 4-675 Response body parameters

Parameter	Type	Description
resource_identifiers	Array of **ResourceIdentifier** objects	Specifies the resource information list.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-676 ResourceIdentifier

Parameter	Type	Description
resource_id	String	Specifies the resource ID. Minimum: **1** Maximum: **512**
resource_name	String	Specifies the resource name. Minimum: **1** Maximum: **256**

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Parameter	Type	Description
provider	String	Specifies the cloud service type. Minimum: **1** Maximum: **20**
type	String	Specifies the resource type. Minimum: **1** Maximum: **32**
source_account_id	String	Specifies the source account ID. Minimum: **1** Maximum: **36**
region_id	String	Specifies the region to which the resource belongs. Minimum: **1** Maximum: **36**

Table 4-677 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-678 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-679 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-680 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying resources of an aggregator account

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/
aggregate-discovered-resources

{
  "aggregator_id" : "7ca3447830bd49c9b630a99680eaf90f",
  "provider" : "vpc"
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "resource_identifiers" : [ {
    "resource_id" : "1a429d95-3723-4bfa-b54a-19f041f66fe5",
    "resource_name" : "vpc1",
    "provider" : "vpc",
    "type" : "vpcs",
    "source_account_id" : "3fd23817bd85480e8dc4f520075de348",
    "region_id" : "region1"
  }, {
    "resource_id" : "3d23d144-82e8-4c7c-b0f7-06e4f413d0ee",
    "resource_name" : "vpc2",
    "provider" : "vpc",
    "type" : "vpcs",
    "source_account_id" : "3fd23817bd85480e8dc4f520075de348",
    "region_id" : "region2"
  } ],
  "page_info" : {
    "current_count" : 2,
    "next_marker" : "CAESIDdjYTM0NDc4MzBiZDQ5YzliNjMwYTk5NjgwZWFmOTBmGgQ-0aw3"
  }
}
```

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SDK Sample Code

The SDK sample code is as follows.

Java

Querying resources of an aggregator account

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListAggregateDiscoveredResourcesSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAggregateDiscoveredResourcesRequest request = new ListAggregateDiscoveredResourcesRequest();
        AggregateDiscoveredResourcesRequest body = new AggregateDiscoveredResourcesRequest();
        body.withProvider("vpc");
        body.withAggregatorId("7ca3447830bd49c9b630a99680eaf90f");
        request.withBody(body);
        try {
            ListAggregateDiscoveredResourcesResponse response = client.listAggregateDiscoveredResources(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

Querying resources of an aggregator account

```
# coding: utf-8
```

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```
import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListAggregateDiscoveredResourcesRequest()
        request.body = AggregateDiscoveredResourcesRequest(
            provider="vpc",
            aggregator_id="7ca3447830bd49c9b630a99680eaf90f"
        )
        response = client.list_aggregate_discovered_resources(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

Querying resources of an aggregator account

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
    request := &model.ListAggregateDiscoveredResourcesRequest{}
    providerAggregateDiscoveredResourcesRequest:= "vpc"
    request.Body = &model.AggregateDiscoveredResourcesRequest{
        Provider: &providerAggregateDiscoveredResourcesRequest,
        AggregatorId: "7ca3447830bd49c9b630a99680eaf90f",
    }
    response, err := client.ListAggregateDiscoveredResources(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.8.14 Querying Details About a Specific Resource in a Source Account

Function

This API is used to query details about a specific resource in a source account.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-resource-config

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Table 4-681 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Request Parameters

Table 4-682 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-683 Request body parameters

Parameter	Mandatory	Type	Description
aggregator_id	Yes	String	Specifies the resource aggregator ID. Minimum: **1** Maximum: **256**
resource_identifier	Yes	**ResourceIdentifier** object	Specifies the list of resource details.

Table 4-684 ResourceIdentifier

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Specifies the resource ID. Minimum: **1** Maximum: **512**
resource_name	No	String	Specifies the resource name. Minimum: **1** Maximum: **256**

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Parameter	Mandatory	Type	Description
provider	Yes	String	Specifies the cloud service type. Minimum: **1** Maximum: **20**
type	Yes	String	Specifies the resource type. Minimum: **1** Maximum: **32**
source_account_id	Yes	String	Specifies the source account ID. Minimum: **1** Maximum: **36**
region_id	Yes	String	Specifies the region to which the resource belongs. Minimum: **1** Maximum: **36**

Response Parameters

Status code: 200

Table 4-685 Response body parameters

Parameter	Type	Description
resource_id	String	Specifies the resource ID.
aggregator_id	String	Specifies the resource aggregator ID.
aggregator_domain_id	String	Specifies the resource aggregator account.
domain_id	String	Specifies the ID of the account to which the aggregated resource belongs.
ep_id	String	Specifies the enterprise project ID.
provider	String	Specifies the cloud service name.
type	String	Specifies the resource type.
name	String	Specifies the resource name.
region_id	String	Specifies the region ID.
project_id	String	Specifies the project ID in IaaS OpenStack.

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Parameter	Type	Description
created	String	Specifies the time when the resource was created.
updated	String	Specifies the time when the resource was updated.
tags	Map<String,String>	Specifies the resource tag.
properties	Map<String,Object>	Specifies properties of the resource.

Status code: 400

Table 4-686 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-687 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-688 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying details about a specific resource in the source account

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```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/aggregators/aggregate-resource-config

{
  "aggregator_id" : "7ca3447830bd49c9b630a99680eaf90f",
  "resource_identifier" : {
    "resource_id" : "1a429d95-3723-4bfa-b54a-19f041f66fe5",
    "provider" : "vpc",
    "type" : "vpcs",
    "source_account_id" : "3fd23817bd85480e8dc4f520075de348",
    "region_id" : "regionid1"
  }
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "resource_id" : "1a429d95-3723-4bfa-b54a-19f041f66fe5",
  "aggregator_id" : "7ca3447830bd49c9b630a99680eaf90f",
  "aggregator_domain_id" : "e74e043fab784a45ad88f5ef6a4bcffc",
  "domain_id" : "3fd23817bd85480e8dc4f520075de348\"",
  "ep_id" : 0,
  "provider" : "vpc",
  "type" : "vpcs",
  "name" : "vpc-xxx",
  "region_id" : "regionid1",
  "project_id" : "377cd852c57e4e949fc27c4882310364",
  "created" : "2022-10-24T07:03:40.000+00:00",
  "updated" : "2022-10-24T07:04:17.000+00:00",
  "properties" : {
    "cidr" : "192.168.0.0/16",
    "status" : "OK"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying details about a specific resource in the source account

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowAggregateResourceConfigSolution {

    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");

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

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowAggregateResourceConfigRequest request = new ShowAggregateResourceConfigRequest();
        AggregateResourceConfigRequest body = new AggregateResourceConfigRequest();
        ResourceIdentifier resourceIdentifierbody = new ResourceIdentifier();
        resourceIdentifierbody.withResourceId("1a429d95-3723-4bfa-b54a-19f041f66fe5")
            .withProvider("vpc")
            .withType("vpcs")
            .withSourceAccountId("3fd23817bd85480e8dc4f520075de348")
            .withRegionId("regionid1");
        body.withResourceIdentifier(resourceIdentifierbody);
        body.withAggregatorId("7ca3447830bd49c9b630a99680eaf90f");
        request.withBody(body);
        try {
            ShowAggregateResourceConfigResponse response = client.showAggregateResourceConfig(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

Querying details about a specific resource in the source account

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowAggregateResourceConfigRequest()
```

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```
        resourceIdentifierbody = ResourceIdentifier(
            resource_id="1a429d95-3723-4bfa-b54a-19f041f66fe5",
            provider="vpc",
            type="vpcs",
            source_account_id="3fd23817bd85480e8dc4f520075de348",
            region_id="regionid1"
        )
        request.body = AggregateResourceConfigRequest(
            resource_identifier=resourceIdentifierbody,
            aggregator_id="7ca3447830bd49c9b630a99680eaf90f"
        )
        response = client.show_aggregate_resource_config(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

Querying details about a specific resource in the source account

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowAggregateResourceConfigRequest{}
    resourceIdentifierbody := &model.ResourceIdentifier{
        ResourceId: "1a429d95-3723-4bfa-b54a-19f041f66fe5",
        Provider: "vpc",
        Type: "vpcs",
        SourceAccountId: "3fd23817bd85480e8dc4f520075de348",
        RegionId: "regionid1",
    }
    request.Body = &model.AggregateResourceConfigRequest{
        ResourceIdentifier: resourceIdentifierbody,
        AggregatorId: "7ca3447830bd49c9b630a99680eaf90f",
    }
    response, err := client.ShowAggregateResourceConfig(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.8.15 Performing an Advanced Query on a Specific Aggregator

Function

This API is used to perform an advanced query on a specific aggregator.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/aggregators/{aggregator_id}/run-query

Table 4-689 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Parameter	Mandatory	Type	Description
aggregator_id	Yes	String	Specifies the resource aggregator ID. Maximum: **32**

Request Parameters

Table 4-690 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-691 Request body parameters

Parameter	Mandatory	Type	Description
expression	Yes	String	Specifies the ResourceQL expression. Minimum: **1** Maximum: **4096**

Response Parameters

Status code: 200

Table 4-692 Response body parameters

Parameter	Type	Description
query_info	**QueryInfo** object	Specifies the ResourceQL query field.
results	Array of objects	Specifies the ResourceQL query result.

Table 4-693 QueryInfo

Parameter	Type	Description
select_fields	Array of strings	Specifies the ResourceQL query field.

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Status code: 400

Table 4-694 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-695 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-696 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying all ECS IDs in the current organization

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/aggregators/{aggregator_id}/run-query

{
  "expression" : "select id from aggregator_resources where provider = 'ecs' and type = 'cloudservers'"
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "query_info" : {
    "select_fields" : [ "id" ]
  },
  "results" : [ {
    "id" : "91252cc9-bfd9-0709-0912-56b397e0ba3f"
```

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```
 } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying all ECS IDs in the current organization

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class RunAggregateResourceQuerySolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        RunAggregateResourceQueryRequest request = new RunAggregateResourceQueryRequest();
        request.withAggregatorId("{aggregator_id}");
        QueryRunRequestBody body = new QueryRunRequestBody();
        body.withExpression("select id from aggregator_resources where provider = 'ecs' and type = 'cloudservers'");
        request.withBody(body);
        try {
            RunAggregateResourceQueryResponse response = client.runAggregateResourceQuery(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

Querying all ECS IDs in the current organization

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = RunAggregateResourceQueryRequest()
        request.aggregator_id = "{aggregator_id}"
        request.body = QueryRunRequestBody(
            expression="select id from aggregator_resources where provider = 'ecs' and type = 'cloudservers'"
        )
        response = client.run_aggregate_resource_query(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

Querying all ECS IDs in the current organization

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
```

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```
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.RunAggregateResourceQueryRequest{}
    request.AggregatorId = "{aggregator_id}"
    request.Body = &model.QueryRunRequestBody{
        Expression: "select id from aggregator_resources where provider = 'ecs' and type = 'cloudservers'",
    }
    response, err := client.RunAggregateResourceQuery(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.8.16 Querying the Compliance Summary of One or More Source Accounts in an Aggregator

Function

This API is used to query the number of compliant and non-compliant rules of one or more accounts in the aggregator.

Calling Method

For details, see **Calling APIs**.

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URI

POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/policy-states/compliance-summary

Table 4-697 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Request Parameters

Table 4-698 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-699 Request body parameters

Parameter	Mandatory	Type	Description
aggregator_id	Yes	String	Specifies the resource aggregator ID. Minimum: **1** Maximum: **256**
account_id	No	String	Specifies the source account ID. Minimum: **1** Maximum: **36**
group_by_key	No	String	Specifies the key **DOMAIN** used to group resource counts. Minimum: **1** Maximum: **16**

Response Parameters

Status code: 200

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Table 4-700 Response body parameters

Parameter	Type	Description
results	Array of **AggregatePolicyComplianceSummaryResult** objects	Specifies the compliance summary results.

Table 4-701 AggregatePolicyComplianceSummaryResult

Parameter	Type	Description
resource_details	**ResourceComplianceSummaryUnit** object	Resource compliance summary details.
assignment_details	**PolicyComplianceSummaryUnit** object	Specifies the compliance summary details.
group_name	String	Specifies the group name
group_account_name	String	Account name

Table 4-702 ResourceComplianceSummaryUnit

Parameter	Type	Description
compliant_count	Integer	Specifies the number of compliant resources.
non_compliant_count	Integer	Specifies the number of non-compliant resources.

Table 4-703 PolicyComplianceSummaryUnit

Parameter	Type	Description
compliant_count	Integer	Specifies the number of compliant resources.
non_compliant_count	Integer	Specifies the number of non-compliant resources.

Status code: 400

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Table 4-704 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-705 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-706 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying the compliance summary of one or more source accounts in an aggregator

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/policy-states/compliance-summary

{
  "aggregator_id" : "7ca3447830bd49c9b630a99680eaf90f",
  "group_by_key" : "DOMAIN"
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "results" : [ {
    "resource_details" : {
      "compliant_count" : null,
      "non_compliant_count" : 70
    },
```

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```
    "assignment_details" : {
      "compliant_count" : 0,
      "non_compliant_count" : 1
    },
    "group_name" : "39f4a9434e0c4bf3806e5aff54adea39",
    "group_account_name" : "demo1"
  }, {
    "resource_details" : {
      "compliant_count" : null,
      "non_compliant_count" : 0
    },
    "assignment_details" : {
      "compliant_count" : 1,
      "non_compliant_count" : 0
    },
    "group_name" : "789d4ac10eda4d9b8e090f5c2b1e4459",
    "group_account_name" : "demo2"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying the compliance summary of one or more source accounts in an aggregator

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowAggregatePolicyStateComplianceSummarySolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowAggregatePolicyStateComplianceSummaryRequest request = new ShowAggregatePolicyStateComplianceSummaryRequest();
        AggregatePolicyStatesRequest body = new AggregatePolicyStatesRequest();
        body.withGroupByKey("DOMAIN");
        body.withAggregatorId("7ca3447830bd49c9b630a99680eaf90f");
        request.withBody(body);
        try {
```

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```
            ShowAggregatePolicyStateComplianceSummaryResponse response =
client.showAggregatePolicyStateComplianceSummary(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

Querying the compliance summary of one or more source accounts in an aggregator

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowAggregatePolicyStateComplianceSummaryRequest()
        request.body = AggregatePolicyStatesRequest(
            group_by_key="DOMAIN",
            aggregator_id="7ca3447830bd49c9b630a99680eaf90f"
        )
        response = client.show_aggregate_policy_state_compliance_summary(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

Querying the compliance summary of one or more source accounts in an aggregator

```
package main
```

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```
import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowAggregatePolicyStateComplianceSummaryRequest{}
    groupByKeyAggregatePolicyStatesRequest:= "DOMAIN"
    request.Body = &model.AggregatePolicyStatesRequest{
        GroupByKey: &groupByKeyAggregatePolicyStatesRequest,
        AggregatorId: "7ca3447830bd49c9b630a99680eaf90f",
    }
    response, err := client.ShowAggregatePolicyStateComplianceSummary(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

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4.8.17 Querying Aggregated Rules

Function

This API is used to query aggregated rules. For a rule, the numbers of both compliant and non-compliant resources are included.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/policy-assignments/compliance

Table 4-707 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-708 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

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Request Parameters

Table 4-709 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-710 Request body parameters

Parameter	Mandatory	Type	Description
aggregator_id	Yes	String	Specifies the resource aggregator ID. Minimum: **1** Maximum: **256**
filter	No	**AggregatePolicyAssignmentsFilters** object	Specifies the filter of aggregated rules.

Table 4-711 AggregatePolicyAssignmentsFilters

Parameter	Mandatory	Type	Description
account_id	No	String	Specifies the source account ID. Minimum: **1** Maximum: **36**
compliance_state	No	String	Specifies the compliance result.
policy_assignment_name	No	String	Specifies the rule name. Maximum: **64**

Response Parameters

Status code: 200

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Table 4-712 Response body parameters

Parameter	Type	Description
aggregate_policy_assignments	Array of **AggregatePolicyAssignments** objects	Specifies the aggregated rules.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-713 AggregatePolicyAssignments

Parameter	Type	Description
policy_assignment_id	String	Specifies the rule ID
policy_assignment_name	String	Specifies the rule name.
compliance	**Compliance** object	Specifies the compliance of a rule.
account_id	String	Specifies the source account ID.
account_name	String	Account name

Table 4-714 Compliance

Parameter	Type	Description
compliance_state	String	Specifies the compliance result.
resource_details	**PolicyComplianceSummaryUnit** object	Specifies the compliance summary details.

Table 4-715 PolicyComplianceSummaryUnit

Parameter	Type	Description
compliant_count	Integer	Specifies the number of compliant resources.
non_compliant_count	Integer	Specifies the number of non-compliant resources.

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Table 4-716 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-717 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-718 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-719 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying aggregated rules

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```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/policy-assignments/compliance

{
  "aggregator_id" : "7ca3447830bd49c9b630a99680eaf90f"
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "aggregate_policy_assignments" : [ {
    "policy_assignment_id" : "62bdbe5913c6836025b1e3af",
    "policy_assignment_name" : "volumes-encrypted-check",
    "compliance" : {
      "compliance_state" : "Compliant",
      "resource_details" : {
        "compliant_count" : 18,
        "non_compliant_count" : 0
      }
    },
    "account_id" : "789d4ac10eda4d9b8e090f5c2b1e4459",
    "account_name" : "demo1"
  }, {
    "policy_assignment_id" : "631ea13f57e0427679a1794d",
    "policy_assignment_name" : "cts-lts-enable",
    "compliance" : {
      "compliance_state" : "NonCompliant",
      "resource_details" : {
        "compliant_count" : 28,
        "non_compliant_count" : 2
      }
    },
    "account_id" : "83240c3f2ec1465aaa0124c87810ce65",
    "account_name" : "demo2"
  } ],
  "page_info" : {
    "current_count" : 2,
    "next_marker" : "CAESIDdjYTM0NDc4MzBiZDQ5YzliNjMwYTk5NjgwZWFmOTBmGgQ-0aw3"
  }
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying aggregated rules

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListAggregateComplianceByPolicyAssignmentSolution {
```

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```
    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAggregateComplianceByPolicyAssignmentRequest request = new ListAggregateComplianceByPolicyAssignmentRequest();
        AggregatePolicyAssignmentsRequest body = new AggregatePolicyAssignmentsRequest();
        body.withAggregatorId("7ca3447830bd49c9b630a99680eaf90f");
        request.withBody(body);
        try {
            ListAggregateComplianceByPolicyAssignmentResponse response = client.listAggregateComplianceByPolicyAssignment(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

Querying aggregated rules

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

    client = ConfigClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(ConfigRegion.value_of("<YOUR REGION>")) \
        .build()
```

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```
    try:
        request = ListAggregateComplianceByPolicyAssignmentRequest()
        request.body = AggregatePolicyAssignmentsRequest(
            aggregator_id="7ca3447830bd49c9b630a99680eaf90f"
        )
        response = client.list_aggregate_compliance_by_policy_assignment(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

Querying aggregated rules

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListAggregateComplianceByPolicyAssignmentRequest{}
    request.Body = &model.AggregatePolicyAssignmentsRequest{
        AggregatorId: "7ca3447830bd49c9b630a99680eaf90f",
    }
    response, err := client.ListAggregateComplianceByPolicyAssignment(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.8.18 Querying Compliance Results of Aggregated Resources

Function

This API is used to query resources evaluated by a specified aggregated rule and their compliance statuses. A compliance result contains the evaluated resource and its compliance status.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/policy-states/compliance-details

Table 4-720 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Table 4-721 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

Table 4-722 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-723 Request body parameters

Parameter	Mandatory	Type	Description
aggregator_id	Yes	String	Specifies the resource aggregator ID. Minimum: **1** Maximum: **256**
account_id	No	String	Specifies the source account ID. Minimum: **1** Maximum: **36**
compliance_state	No	String	Specifies the compliance result.

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Parameter	Mandatory	Type	Description
policy_assignment_name	No	String	Specifies the rule name. Maximum: **64**
resource_name	No	String	Specifies the resource name. Minimum: **1** Maximum: **256**
resource_id	No	String	Specifies the resource ID. Minimum: **1** Maximum: **512**

Response Parameters

Status code: 200

Table 4-724 Response body parameters

Parameter	Type	Description
policy_states	Array of **PolicyState** objects	Specifies the return value of querying the compliance result.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-725 PolicyState

Parameter	Type	Description
domain_id	String	Specifies the user ID.
region_id	String	Specifies the ID of the region the resource belongs to.
resource_id	String	Specifies the resource ID.
resource_name	String	Specifies the resource name.
resource_provider	String	Specifies the cloud service name.
resource_type	String	Specifies the resource type.
trigger_type	String	Specifies the trigger type. The value can be **resource** or **period**.
compliance_state	String	Specifies the compliance status.
policy_assignment_id	String	Specifies the rule ID.

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Parameter	Type	Description
policy_assignment_name	String	Specifies the rule name.
policy_definition_id	String	Specifies the policy ID.
evaluation_time	String	Specifies the evaluation time of compliance status.

Table 4-726 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-727 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-728 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-729 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying compliance results of aggregated resources

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/policy-states/compliance-details

{
  "aggregator_id" : "7ca3447830bd49c9b630a99680eaf90f",
  "account_id" : "39f4a9434e0c4bf3806e5aff54adea39",
  "policy_assignment_name" : "required-tag-check"
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "policy_states" : [ {
    "domain_id" : "39f4a9434e0c4bf3806e5aff54adea39",
    "region_id" : "region1",
    "resource_id" : "04d5a1a31c314ebba8c73daa66c6cd12",
    "resource_name" : "group1",
    "resource_provider" : "iam",
    "resource_type" : "groups",
    "trigger_type" : "resource",
    "compliance_state" : "NonCompliant",
    "policy_assignment_id" : "64104fff86952b3af614cabb",
    "policy_assignment_name" : "required-tag-check",
    "policy_definition_id" : "5fa9f89b6eed194ccb2c04db",
    "evaluation_time" : 1678790655196
  }, {
    "domain_id" : "39f4a9434e0c4bf3806e5aff54adea39",
    "region_id" : "global",
    "resource_id" : "06c113bd3edf40eabc552d29a775b9cf",
    "resource_name" : "group2",
    "resource_provider" : "iam",
    "resource_type" : "groups",
    "trigger_type" : "resource",
    "compliance_state" : "NonCompliant",
    "policy_assignment_id" : "64104fff86952b3af614cabb",
    "policy_assignment_name" : "required-tag-check",
    "policy_definition_id" : "5fa9f89b6eed194ccb2c04db",
    "evaluation_time" : 1678790655197
  } ],
  "page_info" : {
    "current_count" : 2,
    "next_marker" : "CAESIDdjYTM0NDc4MzBiZDQ5YzliNjMwYTk5NjgwZWFmOTBmGgQ-0aw3"
  }
}
```

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SDK Sample Code

The SDK sample code is as follows.

Java

Querying compliance results of aggregated resources

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowAggregateComplianceDetailsByPolicyAssignmentSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowAggregateComplianceDetailsByPolicyAssignmentRequest request = new ShowAggregateComplianceDetailsByPolicyAssignmentRequest();
        AggregateComplianceDetailRequest body = new AggregateComplianceDetailRequest();
        body.withPolicyAssignmentName("required-tag-check");
        body.withAccountId("39f4a9434e0c4bf3806e5aff54adea39");
        body.withAggregatorId("7ca3447830bd49c9b630a99680eaf90f");
        request.withBody(body);
        try {
            ShowAggregateComplianceDetailsByPolicyAssignmentResponse response = client.showAggregateComplianceDetailsByPolicyAssignment(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

Querying compliance results of aggregated resources

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```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowAggregateComplianceDetailsByPolicyAssignmentRequest()
        request.body = AggregateComplianceDetailRequest(
            policy_assignment_name="required-tag-check",
            account_id="39f4a9434e0c4bf3806e5aff54adea39",
            aggregator_id="7ca3447830bd49c9b630a99680eaf90f"
        )
        response = client.show_aggregate_compliance_details_by_policy_assignment(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

Querying compliance results of aggregated resources

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
```

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

    request := &model.ShowAggregateComplianceDetailsByPolicyAssignmentRequest{}
    policyAssignmentNameAggregateComplianceDetailRequest:= "required-tag-check"
    accountIdAggregateComplianceDetailRequest:= "39f4a9434e0c4bf3806e5aff54adea39"
    request.Body = &model.AggregateComplianceDetailRequest{
        PolicyAssignmentName: &policyAssignmentNameAggregateComplianceDetailRequest,
        AccountId: &accountIdAggregateComplianceDetailRequest,
        AggregatorId: "7ca3447830bd49c9b630a99680eaf90f",
    }
    response, err := client.ShowAggregateComplianceDetailsByPolicyAssignment(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.8.19 Querying Details About a Specified Aggregated Rule

Function

This API is used to query details about a specified aggregated rule.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/policy-assignment/detail

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Table 4-730 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Request Parameters

Table 4-731 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Table 4-732 Request body parameters

Parameter	Mandatory	Type	Description
aggregator_id	Yes	String	Specifies the resource aggregator ID. Minimum: **1** Maximum: **256**
account_id	Yes	String	Specifies the source account ID. Minimum: **1** Maximum: **36**
policy_assignment_id	Yes	String	Specifies the rule ID. Maximum: **36**

Response Parameters

Status code: 200

Table 4-733 Response body parameters

Parameter	Type	Description
policy_assignment_type	String	Specifies the rule type, which can be **builtin** or **custom**.

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Parameter	Type	Description
id	String	Specifies the rule ID.
name	String	Specifies the rule name.
description	String	Specifies the rule description.
policy_filter	**PolicyFilterDefinition** object	Specifies the policy filter of a rule.
policy_filter_v2	**PolicyFilterDefinitionV2** object	Specifies the policy filter of a rule.
period	String	Specifies how often the rule is triggered, which can be **One_Hour**, **Three_Hours**, **Six_Hours**, **Twelve_Hours**, or **TwentyFour_Hours**.
state	String	Specifies the rule status.
created	String	Specifies the time when the rule was added.
updated	String	Specifies the time when the rule was modified.
policy_definition_id	String	Specifies the ID of the policy associated with a rule.
custom_policy	**CustomPolicy** object	Specifies the custom rule.
parameters	Map<String,**PolicyParameterValue**>	Specifies rule parameters.
tags	Array of **ResourceTag** objects	Tags
created_by	String	Specifies the rule creator.
target_type	String	Execution method of remediation.
target_id	String	The ID of a remediation object.

Table 4-734 PolicyFilterDefinition

Parameter	Type	Description
region_id	String	Specifies the region ID. Maximum: **128**
resource_provider	String	Specifies the cloud service name. Maximum: **128**

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Parameter	Type	Description
resource_type	String	Specifies the resource type. Maximum: **128**
resource_id	String	Specifies the resource ID. Maximum: **512**
tag_key	String	Specifies the tag key. Maximum: **128**
tag_value	String	Specifies the tag value. Maximum: **256**

Table 4-735 PolicyFilterDefinitionV2

Parameter	Type	Description
region_ids	Array of strings	Specifies the region IDs.
resource_types	Array of strings	Specifies the cloud services.
resource_ids	Array of strings	Specifies the resource list.
tag_key_logic	String	The logical relationship when parameter tags takes multiple values, for example: When the tags is "tags.1.key":"a", "tags.1.values":"a", "tags.2.key":"b", "tags.2.values":"b", if this parameter is set to AND, it means that the rule only applies to resources bound with both tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
tags	Array of **FilterTagDetail** objects	Tags.

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Parameter	Type	Description
exclude_tag_key_logic	String	The logical relationship when parameter exclude_tags takes multiple values, for example: When the exclude_tags is "exclude_tags.1.key":"a", "exclude_tags.1.values":"a", "exclude_tags.2.key":"b", "exclude_tags.2.values":"b", if this parameter is set to AND, it means that the rule excludes resources that are bound with the tags a:a and b:b. If not specified, the default logic is OR. Default: **OR**
exclude_tags	Array of **FilterTagDetail** objects	Exclude Tags.

Table 4-736 FilterTagDetail

Parameter	Type	Description
key	String	Specifies the tag key.
values	Array of strings	Specifies tag values.

Table 4-737 CustomPolicy

Parameter	Type	Description
function_urn	String	Specifies the URN of a custom function. Maximum: **1024**
auth_type	String	Specifies the method used by a custom rule to call a function.
auth_value	Map<String,Object>	Specifies the value of the method used by a custom rule to call a function.

Table 4-738 PolicyParameterValue

Parameter	Type	Description
value	Object	Specifies the value of the rule parameter.

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Table 4-739 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Status code: 400

Table 4-740 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-741 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-742 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Example Requests

Querying details about a specified aggregated rule

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/policy-assignment/detail

{
  "aggregator_id" : "7ca3447830bd49c9b630a99680eaf90f",
  "account_id" : "39f4a9434e0c4bf3806e5aff54adea39",
  "policy_assignment_id" : "64104fff86952b3af614cabb"
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "policy_assignment_type" : "builtin",
  "id" : "64104fff86952b3af614cabb",
  "name" : "required-tag-check",
  "description" : "A resource is non-compliant if it does not have a specified tag.",
  "policy_filter" : {
    "region_id" : null,
    "resource_provider" : null,
    "resource_type" : null,
    "resource_id" : null,
    "tag_key" : null,
    "tag_value" : null
  },
  "period" : null,
  "state" : "Enabled",
  "created" : "2023-04-03T06:40:12.846Z",
  "updated" : "2023-04-03T06:40:12.846Z",
  "policy_definition_id" : "5fa9f89b6eed194ccb2c04db",
  "tags" : [ {
    "key" : "tagkey",
    "value" : "tagValue"
  } ],
  "created_by" : "custom"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying details about a specified aggregated rule

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowAggregatePolicyAssignmentDetailSolution {
```

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```
    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowAggregatePolicyAssignmentDetailRequest request = new ShowAggregatePolicyAssignmentDetailRequest();
        AggregatePolicyAssignmentDetailRequest body = new AggregatePolicyAssignmentDetailRequest();
        body.withPolicyAssignmentId("64104fff86952b3af614cabb");
        body.withAccountId("39f4a9434e0c4bf3806e5aff54adea39");
        body.withAggregatorId("7ca3447830bd49c9b630a99680eaf90f");
        request.withBody(body);
        try {
            ShowAggregatePolicyAssignmentDetailResponse response = client.showAggregatePolicyAssignmentDetail(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

Querying details about a specified aggregated rule

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

    client = ConfigClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(ConfigRegion.value_of("<YOUR REGION>")) \
        .build()
```

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```
    try:
        request = ShowAggregatePolicyAssignmentDetailRequest()
        request.body = AggregatePolicyAssignmentDetailRequest(
            policy_assignment_id="64104fff86952b3af614cabb",
            account_id="39f4a9434e0c4bf3806e5aff54adea39",
            aggregator_id="7ca3447830bd49c9b630a99680eaf90f"
        )
        response = client.show_aggregate_policy_assignment_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

Querying details about a specified aggregated rule

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowAggregatePolicyAssignmentDetailRequest{}
    request.Body = &model.AggregatePolicyAssignmentDetailRequest{
        PolicyAssignmentId: "64104fff86952b3af614cabb",
        AccountId: "39f4a9434e0c4bf3806e5aff54adea39",
        AggregatorId: "7ca3447830bd49c9b630a99680eaf90f",
    }
    response, err := client.ShowAggregatePolicyAssignmentDetail(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	Operation succeeded.
400	Invalid parameters.
403	Authentication failed or you do not have the operation permissions.
500	Server error.

Error Codes

See **Error Codes**.

4.9 Conformance Packages

4.9.1 Querying Conformance Packages

Function

This API is used to query conformance packages.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/conformance-packs

Table 4-743 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Table 4-744 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
conformance_pack_name	No	String	Specifies the conformance package name. Minimum: **1** Maximum: **64**

Request Parameters

Table 4-745 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-746 Response body parameters

Parameter	Type	Description
value	Array of **ConformancePack** objects	Specifies conformance packages queried.
page_info	**PageInfo** object	Specifies the pagination object.

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Table 4-747 ConformancePack

Parameter	Type	Description
id	String	Specifies the ID of a conformance package.
name	String	Specifies the conformance package name.
stack_id	String	Specifies the unique ID of a resource stack. Minimum: **1** Maximum: **64**
stack_name	String	Specifies the name of a resource stack. Minimum: **1** Maximum: **64**
deployment_id	String	Specifies the deployment ID.
created_at	String	Specifies the time when a conformance package was created.
updated_at	String	Specifies the time when a conformance package was updated.
template_key	String	The name of a predefined conformance package template.
template_uri	String	The OBS address of a conformance package template
agency_name	String	The name of an agency.
status	String	Specifies the deployment status of a conformance package.
error_message	String	Specifies the error message when you failed to deploy or delete a conformance package.
vars_structure	Array of **VarsStructure** objects	Specifies the parameters of a conformance package.
created_by	String	Creator

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Table 4-748 VarsStructure

Parameter	Type	Description
var_key	String	Specifies the name of a parameter. Minimum: **1** Maximum: **64**
var_value	Object	Specifies the value of a parameter.

Table 4-749 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-750 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-751 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-752 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "value" : [ {
    "id" : "a0123456789",
    "name" : "conformance_pack_name-e35r",
    "stack_id" : "stack-id-1234",
    "stack_name" : "stack-name-1234",
    "deployment_id" : "deployment_id_1234",
    "created_at" : "2023-02-28T09:39:19Z",
    "updated_at" : "2023-02-28T09:39:19Z",
    "status" : "CREATE_FAILED",
    "error_message" : "policy assignments exceed quota",
    "vars_structure" : [ {
      "var_key" : "test",
      "var_value" : "test"
    } ],
    "created_by" : "custom"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListConformancePacksSolution {

    public static void main(String[] args) {
```

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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
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

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

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListConformancePacksRequest request = new ListConformancePacksRequest();
        try {
            ListConformancePacksResponse response = client.listConformancePacks(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListConformancePacksRequest()
        response = client.list_conformance_packs(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListConformancePacksRequest{}
    response, err := client.ListConformancePacks(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

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4.9.2 Creating a Conformance Package

Function

This API is used to create a conformance package.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/domains/{domain_id}/conformance-packs

Table 4-753 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Request Parameters

Table 4-754 Request header parameters

Parameter	Mandatory	Type	Description
X-Language	No	String	Specifies the language of conformance package information. The default name is **en-us**, which can be **zh-cn** and **en-us**. Default: **en-us**
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

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Table 4-755 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the conformance package name. Minimum: **0** Maximum: **64**
agency_name	No	String	Specifies the agency name. The agency needs to authorize RFS to invoke the APIs for creating, updating, deleting a rule. Minimum: **0** Maximum: **64**
template_key	No	String	Specifies the name of a built-in conformance package template. Maximum: **128**
template_body	No	String	Specifies the content of a custom conformance package. Minimum: **1** Maximum: **51200**
template_uri	No	String	Specifies the URL address of the OBS bucket where a conformance package template was stored. Minimum: **0** Maximum: **1024**
vars_structure	No	Array of **VarsStructure** objects	Specifies the parameters of a conformance package. Array Length: **0 - 50**

Table 4-756 VarsStructure

Parameter	Mandatory	Type	Description
var_key	No	String	Specifies the name of a parameter. Minimum: **1** Maximum: **64**
var_value	No	Object	Specifies the value of a parameter.

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Response Parameters

Status code: 200

Table 4-757 Response body parameters

Parameter	Type	Description
id	String	Specifies the ID of a conformance package.
name	String	Specifies the conformance package name.
stack_id	String	Specifies the unique ID of a resource stack. Minimum: **1** Maximum: **64**
stack_name	String	Specifies the name of a resource stack. Minimum: **1** Maximum: **64**
deployment_id	String	Specifies the deployment ID.
created_at	String	Specifies the time when a conformance package was created.
updated_at	String	Specifies the time when a conformance package was updated.
template_key	String	The name of a predefined conformance package template.
template_uri	String	The OBS address of a conformance package template
agency_name	String	The name of an agency.
status	String	Specifies the deployment status of a conformance package.
error_message	String	Specifies the error message when you failed to deploy or delete a conformance package.
vars_structure	Array of **VarsStructure** objects	Specifies the parameters of a conformance package.
created_by	String	Creator

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Table 4-758 VarsStructure

Parameter	Type	Description
var_key	String	Specifies the name of a parameter. Minimum: **1** Maximum: **64**
var_value	Object	Specifies the value of a parameter.

Status code: 400

Table 4-759 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-760 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-761 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Create a conformance package based on a template.

```
POST https://{endpoint}/v1/resource-manager/domains/{domain_id}/conformance-packs

{
  "name" : "conformance_pack_name",
```

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```
  "agency_name" : "config_conformance_pack_template",
  "template_key" : "example-001.yaml",
  "template_body" : null,
  "template_uri" : null,
  "vars_structure" : [ {
    "var_key" : "test",
    "var_value" : "test"
  } ]
}
```

Example Responses

Status code: 200

Operation succeeded.

```
{
  "id" : "a0123456789",
  "name" : "conformance_pack_name-e35r",
  "stack_id" : "stack-id-1234",
  "stack_name" : "stack-name-1234",
  "deployment_id" : "deployment_id_1234",
  "created_at" : "2023-02-28T09:39:19Z",
  "updated_at" : "2023-02-28T09:39:19Z",
  "status" : "CREATE_FAILED",
  "error_message" : "policy assignments exceed quota",
  "vars_structure" : [ {
    "var_key" : "test",
    "var_value" : "test"
  } ],
  "created_by" : "custom"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Create a conformance package based on a template.

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class CreateConformancePackSolution {

    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");
```

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

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateConformancePackRequest request = new CreateConformancePackRequest();
        ConformancePackRequestBody body = new ConformancePackRequestBody();
        List<VarsStructure> listbodyVarsStructure = new ArrayList<>();
        listbodyVarsStructure.add(
            new VarsStructure()
                .withVarKey("test")
                .withVarValue("test")
        );
        body.withVarsStructure(listbodyVarsStructure);
        body.withTemplateKey("example-001.yaml");
        body.withAgencyName("config_conformance_pack_template");
        body.withName("conformance_pack_name");
        request.withBody(body);
        try {
            CreateConformancePackResponse response = client.createConformancePack(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 conformance package based on a template.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CreateConformancePackRequest()
        listVarsStructurebody = [
```

```
            VarsStructure(
                var_key="test",
                var_value="test"
            )
        ]
        request.body = ConformancePackRequestBody(
            vars_structure=listVarsStructurebody,
            template_key="example-001.yaml",
            agency_name="config_conformance_pack_template",
            name="conformance_pack_name"
        )
        response = client.create_conformance_pack(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 conformance package based on a template.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateConformancePackRequest{}
    varKeyVarsStructure:= "test"
    varValueVarsStructure:= "test"
    var varValueVarsStructureInterface interface{} = varValueVarsStructure
    var listVarsStructurebody = []model.VarsStructure{
        {
            VarKey: &varKeyVarsStructure,
            VarValue: &varValueVarsStructureInterface,
        },
    }
    templateKeyConformancePackRequestBody:= "example-001.yaml"
    agencyNameConformancePackRequestBody:= "config_conformance_pack_template"
    request.Body = &model.ConformancePackRequestBody{
        VarsStructure: &listVarsStructurebody,
        TemplateKey: &templateKeyConformancePackRequestBody,
        AgencyName: &agencyNameConformancePackRequestBody,
```

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```
        Name: "conformance_pack_name",
    }
    response, err := client.CreateConformancePack(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.9.3 Querying a Specific Conformance Package

Function

This API is used to query a conformance package by ID.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/conformance-packs/{conformance_pack_id}

Table 4-762 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Parameter	Mandatory	Type	Description
conformance_pack_id	Yes	String	Specifies the ID of a conformance package. Maximum: **36**

Request Parameters

Table 4-763 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-764 Response body parameters

Parameter	Type	Description
id	String	Specifies the ID of a conformance package.
name	String	Specifies the conformance package name.
stack_id	String	Specifies the unique ID of a resource stack. Minimum: **1** Maximum: **64**
stack_name	String	Specifies the name of a resource stack. Minimum: **1** Maximum: **64**
deployment_id	String	Specifies the deployment ID.
created_at	String	Specifies the time when a conformance package was created.
updated_at	String	Specifies the time when a conformance package was updated.

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Parameter	Type	Description
template_key	String	The name of a predefined conformance package template.
template_uri	String	The OBS address of a conformance package template
agency_name	String	The name of an agency.
status	String	Specifies the deployment status of a conformance package.
error_message	String	Specifies the error message when you failed to deploy or delete a conformance package.
vars_structure	Array of VarsStructure objects	Specifies the parameters of a conformance package.
created_by	String	Creator

Table 4-765 VarsStructure

Parameter	Type	Description
var_key	String	Specifies the name of a parameter. Minimum: **1** Maximum: **64**
var_value	Object	Specifies the value of a parameter.

Status code: 400

Table 4-766 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-767 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-768 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-769 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "id" : "a0123456789",
  "name" : "conformance_pack_name-e35r",
  "stack_id" : "stack-id-1234",
  "stack_name" : "stack-name-1234",
  "deployment_id" : "deployment_id_1234",
  "created_at" : "2023-02-28T09:39:19Z",
  "updated_at" : "2023-02-28T09:39:19Z",
  "status" : "CREATE_FAILED",
  "error_message" : "policy assignments exceed quota",
  "vars_structure" : [ {
    "var_key" : "test",
    "var_value" : "test"
  } ],
  "created_by" : "custom"
}
```

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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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowConformancePackSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowConformancePackRequest request = new ShowConformancePackRequest();
        request.withConformancePackId("{conformance_pack_id}");
        try {
            ShowConformancePackResponse response = client.showConformancePack(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowConformancePackRequest()
        request.conformance_pack_id = "{conformance_pack_id}"
        response = client.show_conformance_pack(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowConformancePackRequest{}
    request.ConformancePackId = "{conformance_pack_id}"
    response, err := client.ShowConformancePack(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.9.4 Deleting a Conformance Package

Function

This API is used to delete a conformance package.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1/resource-manager/domains/{domain_id}/conformance-packs/{conformance_pack_id}

Table 4-770 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
conformance_pack_id	Yes	String	Specifies the ID of a conformance package. Maximum: **36**

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Request Parameters

Table 4-771 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 202

Operation accepted.

Status code: 400

Table 4-772 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-773 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-774 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 500

Table 4-775 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class DeleteConformancePackSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteConformancePackRequest request = new DeleteConformancePackRequest();
        request.withConformancePackId("{conformance_pack_id}");
        try {
            DeleteConformancePackResponse response = client.deleteConformancePack(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
```

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```
            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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = DeleteConformancePackRequest()
        request.conformance_pack_id = "{conformance_pack_id}"
        response = client.delete_conformance_pack(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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")

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteConformancePackRequest{}
    request.ConformancePackId = "{conformance_pack_id}"
    response, err := client.DeleteConformancePack(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
202	Operation accepted.
400	Invalid parameters.
403	User authentication failed.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.9.5 Updating Conformance Packages

Function

Updating conformance packages

Calling Method

For details, see **Calling APIs**.

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URI

PUT /v1/resource-manager/domains/{domain_id}/conformance-packs/{conformance_pack_id}

Table 4-776 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
conformance_pack_id	Yes	String	Specifies the ID of a conformance package. Maximum: **36**

Request Parameters

Table 4-777 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	The name of a conformance package. Minimum: **1** Maximum: **64**
vars_structure	No	Array of **VarsStructure** objects	Parameters of a conformance package. Array Length: **0 - 50**

Table 4-778 VarsStructure

Parameter	Mandatory	Type	Description
var_key	No	String	Specifies the name of a parameter. Minimum: **1** Maximum: **64**
var_value	No	Object	Specifies the value of a parameter.

Response Parameters

Status code: 200

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Table 4-779 Response body parameters

Parameter	Type	Description
id	String	Specifies the ID of a conformance package.
name	String	Specifies the conformance package name.
stack_id	String	Specifies the unique ID of a resource stack. Minimum: **1** Maximum: **64**
stack_name	String	Specifies the name of a resource stack. Minimum: **1** Maximum: **64**
deployment_id	String	Specifies the deployment ID.
created_at	String	Specifies the time when a conformance package was created.
updated_at	String	Specifies the time when a conformance package was updated.
template_key	String	The name of a predefined conformance package template.
template_uri	String	The OBS address of a conformance package template
agency_name	String	The name of an agency.
status	String	Specifies the deployment status of a conformance package.
error_message	String	Specifies the error message when you failed to deploy or delete a conformance package.
vars_structure	Array of **VarsStructure** objects	Specifies the parameters of a conformance package.
created_by	String	Creator

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Table 4-780 VarsStructure

Parameter	Type	Description
var_key	String	Specifies the name of a parameter. Minimum: **1** Maximum: **64**
var_value	Object	Specifies the value of a parameter.

Status code: 400

Table 4-781 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-782 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-783 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

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Table 4-784 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Updating conformance packages

```
PUT https://{endpoint}/v1/resource-manager/domains/{domain_id}/conformance-packs/
{conformance_pack_id}

{
  "name" : "conformance_pack_name-e35r",
  "vars_structure" : [ {
    "var_key" : "test",
    "var_value" : "test"
  } ]
}
```

Example Responses

Status code: 200

Updated.

```
{
  "id" : "a0123456789",
  "name" : "conformance_pack_name-e35r",
  "stack_id" : "stack-id-1234",
  "stack_name" : "stack-name-1234",
  "deployment_id" : "deployment_id_1234",
  "created_at" : "2023-02-28T09:39:19Z",
  "updated_at" : "2023-02-28T09:40:19Z",
  "status" : "UPDATE_IN_PROGRESS",
  "error_message" : "policy assignments exceed quota",
  "vars_structure" : [ {
    "var_key" : "test",
    "var_value" : "test"
  } ],
  "created_by" : "custom"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Updating conformance packages

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class UpdateConformancePackSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateConformancePackRequest request = new UpdateConformancePackRequest();
        request.withConformancePackId("{conformance_pack_id}");
        UpdateConformancePackRequestBody body = new UpdateConformancePackRequestBody();
        List<VarsStructure> listbodyVarsStructure = new ArrayList<>();
        listbodyVarsStructure.add(
            new VarsStructure()
                .withVarKey("test")
                .withVarValue("test")
        );
        body.withVarsStructure(listbodyVarsStructure);
        body.withName("conformance_pack_name-e35r");
        request.withBody(body);
        try {
            UpdateConformancePackResponse response = client.updateConformancePack(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

Updating conformance packages

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = UpdateConformancePackRequest()
        request.conformance_pack_id = "{conformance_pack_id}"
        listVarsStructurebody = [
            VarsStructure(
                var_key="test",
                var_value="test"
            )
        ]
        request.body = UpdateConformancePackRequestBody(
            vars_structure=listVarsStructurebody,
            name="conformance_pack_name-e35r"
        )
        response = client.update_conformance_pack(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

Updating conformance packages

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
    request := &model.UpdateConformancePackRequest{}
    request.ConformancePackId = "{conformance_pack_id}"
    varKeyVarsStructure:= "test"
    varValueVarsStructure:= "test"
    var varValueVarsStructureInterface interface{} = varValueVarsStructure
    var listVarsStructurebody = []model.VarsStructure{
        {
            VarKey: &varKeyVarsStructure,
            VarValue: &varValueVarsStructureInterface,
        },
    }
    request.Body = &model.UpdateConformancePackRequestBody{
        VarsStructure: &listVarsStructurebody,
        Name: "conformance_pack_name-e35r",
    }
    response, err := client.UpdateConformancePack(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	Updated.
400	Invalid parameter.
403	Authentication failed.
404	Conformance package not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.9.6 Querying Compliance of all Conformance Packages

Function

This API is used to query the compliance results of conformance packages.

Calling Method

For details, see **Calling APIs**.

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URI

GET /v1/resource-manager/domains/{domain_id}/conformance-packs/compliance/summary

Table 4-785 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

Table 4-786 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
conformance_pack_name	No	String	Specifies the conformance package name. Minimum: **1** Maximum: **64**

Request Parameters

Table 4-787 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

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Response Parameters

Status code: 200

Table 4-788 Response body parameters

Parameter	Type	Description
value	Array of **ConformancePackComplianceSummary** objects	Specifies the summary of the compliance results of conformance packages.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-789 ConformancePackComplianceSummary

Parameter	Type	Description
id	String	Specifies the ID of a conformance package.
name	String	Specifies the conformance package name.
compliance	String	Specifies the compliance result of a conformance package.

Table 4-790 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

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Table 4-791 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-792 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-793 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "value" : [ {
    "id" : "a0123456789",
    "name" : "conformance_pack_name-e35r",
    "compliance" : "NonCompliant"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class CollectConformancePackComplianceSummarySolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CollectConformancePackComplianceSummaryRequest request = new CollectConformancePackComplianceSummaryRequest();
        try {
            CollectConformancePackComplianceSummaryResponse response = client.collectConformancePackComplianceSummary(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CollectConformancePackComplianceSummaryRequest()
        response = client.collect_conformance_pack_compliance_summary(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CollectConformancePackComplianceSummaryRequest{}
    response, err := client.CollectConformancePackComplianceSummary(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.9.7 Querying Compliance of all Rules in a Conformance Package

Function

This API is used to query the compliance results of rules in a conformance package.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/conformance-packs/{conformance_pack_id}/compliance

Table 4-794 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
conformance_pack_id	Yes	String	Specifies the ID of a conformance package. Maximum: **36**

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Table 4-795 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
policy_assignment_name	No	String	Specifies the rule name. Minimum: **1** Maximum: **64**

Request Parameters

Table 4-796 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-797 Response body parameters

Parameter	Type	Description
value	Array of **ConformancePackCompliance** objects	Specifies the compliance results of rules in a conformance package.
page_info	**PageInfo** object	Specifies the pagination object.

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Table 4-798 ConformancePackCompliance

Parameter	Type	Description
policy_assignment_id	String	Specifies the rule ID.
policy_assignment_name	String	Specifies the rule name.
policy_assignment_compliance	String	Specifies the compliance result of a rule.

Table 4-799 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-800 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-801 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 404

Table 4-802 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-803 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "value" : [ {
    "policy_assignment_id" : "p0123456789",
    "policy_assignment_name" : "policy_assignment_name-0709",
    "policy_assignment_compliance" : "NonCompliant"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
```

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


public class ListConformancePackComplianceByPackIdSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListConformancePackComplianceByPackIdRequest request = new ListConformancePackComplianceByPackIdRequest();
        request.withConformancePackId("{conformance_pack_id}");
        try {
            ListConformancePackComplianceByPackIdResponse response = client.listConformancePackComplianceByPackId(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

    client = ConfigClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(ConfigRegion.value_of("<YOUR REGION>")) \
        .build()
```

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```
    try:
        request = ListConformancePackComplianceByPackIdRequest()
        request.conformance_pack_id = "{conformance_pack_id}"
        response = client.list_conformance_pack_compliance_by_pack_id(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListConformancePackComplianceByPackIdRequest{}
    request.ConformancePackId = "{conformance_pack_id}"
    response, err := client.ListConformancePackComplianceByPackId(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	Operation succeeded.

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Status Code	Description
400	Invalid parameters.
403	User authentication failed.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.9.8 Querying Compliance of All Resources Evaluated with a Conformance Package

Function

This API is used to query the details about compliance results of resources evaluated by rules in a conformance package.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/conformance-packs/{conformance_pack_id}/compliance/details

Table 4-804 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**
conformance_pack_id	Yes	String	Specifies the ID of a conformance package. Maximum: **36**

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Table 4-805 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
policy_assignment_name	No	String	Specifies the rule name. Minimum: **1** Maximum: **64**

Request Parameters

Table 4-806 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-807 Response body parameters

Parameter	Type	Description
value	Array of **ConformancePackComplianceDetail** objects	Specifies the details about compliance results of rules in a conformance package.
page_info	**PageInfo** object	Specifies the pagination object.

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Table 4-808 ConformancePackComplianceDetail

Parameter	Type	Description
policy_assignment_id	String	Specifies the assignment ID.
policy_assignment_name	String	Specifies the rule name.
resource_id	String	Specifies the ID of a resource to be evaluated.
compliance_state	String	Specifies the compliance result of a rule.
evaluation_time	String	Specifies the time for evaluating resources.

Table 4-809 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-810 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-811 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-812 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-813 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "value" : [ {
    "policy_assignment_id" : "p0123456789",
    "policy_assignment_name" : "policy_assignment_name-0709",
    "resource_id" : "ecs_001",
    "compliance_state" : "NonCompliant",
    "evaluation_time" : 1667378537566
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListConformancePackComplianceDetailsByPackIdSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListConformancePackComplianceDetailsByPackIdRequest request = new ListConformancePackComplianceDetailsByPackIdRequest();
        request.withConformancePackId("{conformance_pack_id}");
        try {
            ListConformancePackComplianceDetailsByPackIdResponse response = client.listConformancePackComplianceDetailsByPackId(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListConformancePackComplianceDetailsByPackIdRequest()
        request.conformance_pack_id = "{conformance_pack_id}"
        response = client.list_conformance_pack_compliance_details_by_pack_id(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListConformancePackComplianceDetailsByPackIdRequest{}
    request.ConformancePackId = "{conformance_pack_id}"
    response, err := client.ListConformancePackComplianceDetailsByPackId(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.9.9 Querying Scores of All Conformance Packages

Function

This API is used to query scores of conformance packages.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/domains/{domain_id}/conformance-packs/scores

Table 4-814 Path Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Specifies the account ID. Maximum: **36**

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Table 4-815 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
conformance_pack_name	No	String	Specifies the conformance package name. Minimum: **1** Maximum: **64**

Request Parameters

Table 4-816 Request header parameters

Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-817 Response body parameters

Parameter	Type	Description
value	Array of **ConformancePackScore** objects	Specifies the scores of conformance packages.
page_info	**PageInfo** object	Specifies the pagination object.

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Table 4-818 ConformancePackScore

Parameter	Type	Description
id	String	Specifies the ID of a conformance package.
name	String	Specifies the conformance package name.
score	String	Specifies the score of a conformance package.

Table 4-819 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-820 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-821 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 404

Table 4-822 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-823 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "value" : [ {
    "id" : "a0123456789",
    "name" : "conformance_pack_name-e35r",
    "score" : "98.20"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
```

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


public class ListConformancePackComplianceScoresSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListConformancePackComplianceScoresRequest request = new ListConformancePackComplianceScoresRequest();
        try {
            ListConformancePackComplianceScoresResponse response = client.listConformancePackComplianceScores(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

    client = ConfigClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(ConfigRegion.value_of("<YOUR REGION>")) \
        .build()
```

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```
    try:
        request = ListConformancePackComplianceScoresRequest()
        response = client.list_conformance_pack_compliance_scores(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListConformancePackComplianceScoresRequest{}
    response, err := client.ListConformancePackComplianceScores(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	Operation succeeded.
400	Invalid parameters.

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Status Code	Description
403	User authentication failed.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.9.10 Querying Built-in Conformance Package Templates

Function

This API is used to query built-in conformance package templates.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/conformance-packs/templates

Table 4-824 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

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Parameter	Mandatory	Type	Description
template_key	No	String	Specifies the name of a built-in conformance package template. Minimum: **1** Maximum: **128**

Request Parameters

Table 4-825 Request header parameters

Parameter	Mandatory	Type	Description
X-Language	No	String	Specifies the language of the information to return. The default name is **zh-cn**, which can be **zh-cn** and **en-us**. Default: **zh-cn**
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-826 Response body parameters

Parameter	Type	Description
value	Array of **ConformancePackTemplate** objects	Specifies built-in conformance package templates.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-827 ConformancePackTemplate

Parameter	Type	Description
id	String	Specifies the ID of a built-in conformance package template.

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Parameter	Type	Description
template_key	String	Specifies the name of a built-in conformance package template.
description	String	Specifies the description for a built-in conformance package template.
template_body	String	Specifies the content of a built-in conformance package template.
parameters	Map<String,**TemplateParameterDefinition**>	Specifies the parameters for a built-in conformance package template.

Table 4-828 TemplateParameterDefinition

Parameter	Type	Description
name	String	Specifies the name of a parameter for a built-in conformance package template.
description	String	Specifies the description of a parameter for a built-in conformance package template.
default_value	Object	Specifies the default value of a parameter for a built-in conformance package.
allowed_values	Array of objects	Specifies the list of allowed parameter values.
minimum	Float	Specifies the minimum value of the policy parameter. This parameter is valid for Interger or Float parameters.
maximum	Float	Specifies the maximum value of the policy parameter. This parameter is valid for Interger or Float parameters.
min_items	Integer	Specifies the minimum number of the policy parameter. This parameter is valid for Array parameters.
max_items	Integer	Specifies the maximum number of the policy parameter. This parameter is valid for Array parameters.
min_length	Integer	Specifies the minimum string length for policy parameters or for each item. This parameter is valid for String or Array parameters.

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Parameter	Type	Description
max_length	Integer	Specifies the maximum string length for policy parameters or for each item. This parameter is valid for String or Array parameters.
pattern	String	Specifies the pattern for policy parameters or for each item. This parameter is valid for String or Array parameters.
type	String	Specifies the type of a parameter for a built-in conformance package template.

Table 4-829 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-830 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-831 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.

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Parameter	Type	Description
error_msg	String	Specifies the error message.

Status code: 500

Table 4-832 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "value" : [ {
    "id" : "k0123456789",
    "template_key" : "example-001.yaml",
    "description" : "Example of built-in conformance package templates",
    "template_body" : "Omit it.",
    "parameters" : {
      "listOfAllowedFlavors" : {
        "description" : "The list of allowed flavor types.",
        "type" : "Array",
        "default_value" : "STAT",
        "allowed_values" : [ "STAT" ]
      }
    }
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListBuiltInConformancePackTemplatesSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListBuiltInConformancePackTemplatesRequest request = new ListBuiltInConformancePackTemplatesRequest();
        try {
            ListBuiltInConformancePackTemplatesResponse response = client.listBuiltInConformancePackTemplates(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

    client = ConfigClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(ConfigRegion.value_of("<YOUR REGION>")) \
```

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```
        .build()

    try:
        request = ListBuiltInConformancePackTemplatesRequest()
        response = client.list_built_in_conformance_pack_templates(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListBuiltInConformancePackTemplatesRequest{}
    response, err := client.ListBuiltInConformancePackTemplates(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	Operation succeeded.

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Status Code	Description
400	Invalid parameters.
403	User authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.9.11 Querying the Template of a Built-in Conformance Package

Function

This API is used to query a built-in conformance package template by ID.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/conformance-packs/templates/{template_id}

Table 4-833 Path Parameters

Parameter	Mandatory	Type	Description
template_id	Yes	String	Specifies the ID of a conformance package template. Maximum: **36**

Request Parameters

Table 4-834 Request header parameters

Parameter	Mandatory	Type	Description
X-Language	No	String	Specifies the language of the information to return. The default name is **zh-cn**, which can be **zh-cn** and **en-us**. Default: **zh-cn**

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Parameter	Mandatory	Type	Description
X-Security-Token	No	String	Specifies a temporary security credential. This parameter is mandatory when you make an API call using a temporary security credential.

Response Parameters

Status code: 200

Table 4-835 Response body parameters

Parameter	Type	Description
id	String	Specifies the ID of a built-in conformance package template.
template_key	String	Specifies the name of a built-in conformance package template.
description	String	Specifies the description for a built-in conformance package template.
template_body	String	Specifies the content of a built-in conformance package template.
parameters	Map<String,**TemplateParameterDefinition**>	Specifies the parameters for a built-in conformance package template.

Table 4-836 TemplateParameterDefinition

Parameter	Type	Description
name	String	Specifies the name of a parameter for a built-in conformance package template.
description	String	Specifies the description of a parameter for a built-in conformance package template.
default_value	Object	Specifies the default value of a parameter for a built-in conformance package.
allowed_values	Array of objects	Specifies the list of allowed parameter values.

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Parameter	Type	Description
minimum	Float	Specifies the minimum value of the policy parameter. This parameter is valid for Interger or Float parameters.
maximum	Float	Specifies the maximum value of the policy parameter. This parameter is valid for Interger or Float parameters.
min_items	Integer	Specifies the minimum number of the policy parameter. This parameter is valid for Array parameters.
max_items	Integer	Specifies the maximum number of the policy parameter. This parameter is valid for Array parameters.
min_length	Integer	Specifies the minimum string length for policy parameters or for each item. This parameter is valid for String or Array parameters.
max_length	Integer	Specifies the maximum string length for policy parameters or for each item. This parameter is valid for String or Array parameters.
pattern	String	Specifies the pattern for policy parameters or for each item. This parameter is valid for String or Array parameters.
type	String	Specifies the type of a parameter for a built-in conformance package template.

Status code: 400

Table 4-837 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

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Table 4-838 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-839 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-840 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "id" : "k0123456789",
  "template_key" : "example-001.yaml",
  "description" : "Example of a built-in conformance package template",
  "template_body" : "Omit it.",
  "parameters" : {
    "listOfAllowedFlavors" : {
      "description" : "The list of allowed flavor types.",
      "type" : "Array",
      "default_value" : "STAT",
      "allowed_values" : [ "STAT" ]
    }
  }
}
```

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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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowBuiltInConformancePackTemplateSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowBuiltInConformancePackTemplateRequest request = new ShowBuiltInConformancePackTemplateRequest();
        request.withTemplateId("{template_id}");
        try {
            ShowBuiltInConformancePackTemplateResponse response = client.showBuiltInConformancePackTemplate(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowBuiltInConformancePackTemplateRequest()
        request.template_id = "{template_id}"
        response = client.show_built_in_conformance_pack_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

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowBuiltInConformancePackTemplateRequest{}
    request.TemplateId = "{template_id}"
    response, err := client.ShowBuiltInConformancePackTemplate(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	Operation succeeded.
400	Invalid parameters.
403	User authentication failed.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.9.12 Creating organization conformance packages.

Function

Create a new organization conformance package.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/organizations/{organization_id}/conformance-packs

Table 4-841 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**

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Request Parameters

Table 4-842 Request header parameters

Parameter	Mandatory	Type	Description
X-Language	No	String	Specifies the language of organization conformance package information. The default name is **en-us**, which can be **zh-cn** and **en-us**. Default: **en-us**

Table 4-843 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Organization conformance package name Minimum: **1** Maximum: **60**
excluded_accounts	No	Array of strings	The excluded accounts for conformance package deployment
template_key	No	String	The name of a predefined conformance package Maximum: **128**
template_body	No	String	The content of a custom conformance package Minimum: **0** Maximum: **51200**
template_uri	No	String	The OBS address of a conformance package Minimum: **0** Maximum: **1024**
vars_structure	No	Array of **VarsStructure** objects	Parameters of a conformance package Array Length: **0 - 50**

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Table 4-844 VarsStructure

Parameter	Mandatory	Type	Description
var_key	No	String	Specifies the name of a parameter. Minimum: **1** Maximum: **64**
var_value	No	Object	Specifies the value of a parameter.

Response Parameters

Status code: 200

Table 4-845 Response body parameters

Parameter	Type	Description
org_conformance_pack_id	String	Organization conformance package ID
org_conformance_pack_name	String	Organization conformance package name
owner_id	String	The creator of an organization conformance package
organization_id	String	Organization ID
org_conformance_pack_urn	String	The unique identifier of resources in an organization conformance package
vars_structure	Array of **VarsStructure** objects	Parameters of a conformance package
created_at	String	The creation time of an organization conformance package
updated_at	String	The update time of an organization conformance package

Table 4-846 VarsStructure

Parameter	Type	Description
var_key	String	Specifies the name of a parameter. Minimum: **1** Maximum: **64**

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Parameter	Type	Description
var_value	Object	Specifies the value of a parameter.

Status code: 400

Table 4-847 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-848 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-849 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

```
POST https://{endpoint}/v1/resource-manager/organizations/{organization_id}/conformance-packs

{
  "name" : "org_conformance_pack_name-e35r",
  "template_key" : "example-001.yaml",
  "template_body" : null,
  "template_uri" : null,
  "vars_structure" : null
}
```

Example Responses

Status code: 200

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Operation succeeded.

```
{
  "org_conformance_pack_id" : "d02b7fa9d5a74e638c1402d0868f71fd",
  "org_conformance_pack_name" : "org_conformance_pack_name-e35r",
  "owner_id" : "a1b2c043fab784a45ad88f5ef6a4bdaas",
  "organization_id" : "o-doxbpkzqsdd51ti1k27w2y8fitakrknp",
  "org_conformance_pack_urn" :
"rms::a1b2c043fab784a45ad88f5ef6a4bdaas:organizationConformancePack:o-
doxbpkzqsdd51ti1k27w2y8fitakrknp/d02b7fa9d5a74e638c1402d0868f71fd",
  "created_at" : "2023-02-28T09:39:19Z",
  "updated_at" : "2023-02-28T09:39:19Z"
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class CreateOrganizationConformancePackSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateOrganizationConformancePackRequest request = new
CreateOrganizationConformancePackRequest();
        request.withOrganizationId("{organization_id}");
        OrgConformancePackRequestBody body = new OrgConformancePackRequestBody();
        body.withTemplateKey("example-001.yaml");
        body.withName("org_conformance_pack_name-e35r");
        request.withBody(body);
        try {
            CreateOrganizationConformancePackResponse response =
client.createOrganizationConformancePack(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
```

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```
            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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CreateOrganizationConformancePackRequest()
        request.organization_id = "{organization_id}"
        request.body = OrgConformancePackRequestBody(
            template_key="example-001.yaml",
            name="org_conformance_pack_name-e35r"
        )
        response = client.create_organization_conformance_pack(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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")
```

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateOrganizationConformancePackRequest{}
    request.OrganizationId = "{organization_id}"
    templateKeyOrgConformancePackRequestBody:= "example-001.yaml"
    request.Body = &model.OrgConformancePackRequestBody{
        TemplateKey: &templateKeyOrgConformancePackRequestBody,
        Name: "org_conformance_pack_name-e35r",
    }
    response, err := client.CreateOrganizationConformancePack(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	Operation succeeded.
400	Invalid parameter.
403	Authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.9.13 Querying Organization Conformance Packages

Function

List organization conformance packages of a user.

Calling Method

For details, see **Calling APIs**.

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URI

GET /v1/resource-manager/organizations/{organization_id}/conformance-packs

Table 4-850 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**

Table 4-851 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
organization_conformance_pack_id	No	String	Organization conformance package ID Maximum: **36**
conformance_pack_name	No	String	Conformance package name Minimum: **1** Maximum: **60**

Request Parameters

None

Response Parameters

Status code: 200

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Table 4-852 Response body parameters

Parameter	Type	Description
organization_conformance_packs	Array of **OrgConformancePackResponse** objects	Organization conformance package list
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-853 OrgConformancePackResponse

Parameter	Type	Description
org_conformance_pack_id	String	Organization conformance package ID
org_conformance_pack_name	String	Organization conformance package name
owner_id	String	The creator of an organization conformance package
organization_id	String	Organization ID
org_conformance_pack_urn	String	The unique identifier of resources in an organization conformance package
vars_structure	Array of **VarsStructure** objects	Parameters of a conformance package
created_at	String	The creation time of an organization conformance package
updated_at	String	The update time of an organization conformance package

Table 4-854 VarsStructure

Parameter	Type	Description
var_key	String	Specifies the name of a parameter. Minimum: **1** Maximum: **64**
var_value	Object	Specifies the value of a parameter.

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Table 4-855 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-856 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-857 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-858 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

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Example Responses

Status code: 200

Operation succeeded.

```
{
  "organization_conformance_packs" : [ {
    "org_conformance_pack_id" : "d02b7fa9d5a74e638c1402d0868f71fd",
    "org_conformance_pack_name" : "org_conformance_pack_name-e35r",
    "owner_id" : "a1b2c043fab784a45ad88f5ef6a4bdaas",
    "organization_id" : "o-doxbpkzqsdd51ti1k27w2y8fitakrknp",
    "org_conformance_pack_urn" :
"rms::a1b2c043fab784a45ad88f5ef6a4bdaas:organizationConformancePack:o-
doxbpkzqsdd51ti1k27w2y8fitakrknp/d02b7fa9d5a74e638c1402d0868f71fd",
    "created_at" : "2023-02-28T09:39:19Z",
    "updated_at" : "2023-02-28T09:39:19Z"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListOrganizationConformancePacksSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListOrganizationConformancePacksRequest request = new
ListOrganizationConformancePacksRequest();
        request.withOrganizationId("{organization_id}");
        try {
            ListOrganizationConformancePacksResponse response =
client.listOrganizationConformancePacks(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

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListOrganizationConformancePacksRequest()
        request.organization_id = "{organization_id}"
        response = client.list_organization_conformance_packs(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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
```

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListOrganizationConformancePacksRequest{}
    request.OrganizationId = "{organization_id}"
    response, err := client.ListOrganizationConformancePacks(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	Operation succeeded.
400	Invalid parameter.
403	Authentication failed.
500	Server error.

Error Codes

See **Error Codes**.

4.9.14 Querying an Organization Conformance Package

Function

Obtain details of an organization conformance package based on an ID.

Calling Method

For details, see **Calling APIs**.

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URI

GET /v1/resource-manager/organizations/{organization_id}/conformance-packs/{conformance_pack_id}

Table 4-859 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**
conformance_pack_id	Yes	String	Specifies the ID of a conformance package. Maximum: **36**

Request Parameters

None

Response Parameters

Status code: 200

Table 4-860 Response body parameters

Parameter	Type	Description
org_conformance_pack_id	String	Organization conformance package ID
org_conformance_pack_name	String	Organization conformance package name
owner_id	String	The creator of an organization conformance package
organization_id	String	Organization ID
org_conformance_pack_urn	String	The unique identifier of resources in an organization conformance package
excluded_accounts	Array of strings	Excluded accounts for conformance package deployment
vars_structure	Array of **VarsStructure** objects	Parameters of a conformance package
created_at	String	The creation time of an organization conformance package

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Parameter	Type	Description
updated_at	String	The update time of an organization conformance package
template_key	String	The name of a predefined conformance package template.
template_uri	String	The OBS address of a conformance package template

Table 4-861 VarsStructure

Parameter	Type	Description
var_key	String	Specifies the name of a parameter. Minimum: **1** Maximum: **64**
var_value	Object	Specifies the value of a parameter.

Status code: 400

Table 4-862 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-863 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

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Table 4-864 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-865 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "org_conformance_pack_id" : "d02b7fa9d5a74e638c1402d0868f71fd",
  "org_conformance_pack_name" : "org_conformance_pack_name-e35r",
  "owner_id" : "a1b2c043fab784a45ad88f5ef6a4bdaas",
  "organization_id" : "o-doxbpkzqsdd51ti1k27w2y8fitakrknp",
  "org_conformance_pack_urn" :
"rms::a1b2c043fab784a45ad88f5ef6a4bdaas:organizationConformancePack:o-
doxbpkzqsdd51ti1k27w2y8fitakrknp/d02b7fa9d5a74e638c1402d0868f71fd",
  "created_at" : "2023-02-28T09:39:19Z",
  "updated_at" : "2023-02-28T09:39:19Z"
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;
```

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```
public class ShowOrganizationConformancePackSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowOrganizationConformancePackRequest request = new ShowOrganizationConformancePackRequest();
        request.withOrganizationId("{organization_id}");
        request.withConformancePackId("{conformance_pack_id}");
        try {
            ShowOrganizationConformancePackResponse response = client.showOrganizationConformancePack(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
```

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```
        request = ShowOrganizationConformancePackRequest()
        request.organization_id = "{organization_id}"
        request.conformance_pack_id = "{conformance_pack_id}"
        response = client.show_organization_conformance_pack(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowOrganizationConformancePackRequest{}
    request.OrganizationId = "{organization_id}"
    request.ConformancePackId = "{conformance_pack_id}"
    response, err := client.ShowOrganizationConformancePack(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	Operation succeeded.

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Status Code	Description
400	Invalid parameter.
403	Authentication failed.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.9.15 Delete organization conformance packages.

Function

Delete organization conformance packages of a user.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v1/resource-manager/organizations/{organization_id}/conformance-packs/{conformance_pack_id}

Table 4-866 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**
conformance_pack_id	Yes	String	Specifies the ID of a conformance package. Maximum: **36**

Request Parameters

None

Response Parameters

Status code: 202

Operation accepted.

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Status code: 400

Table 4-867 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-868 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-869 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-870 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class DeleteOrganizationConformancePackSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteOrganizationConformancePackRequest request = new DeleteOrganizationConformancePackRequest();
        request.withOrganizationId("{organization_id}");
        request.withConformancePackId("{conformance_pack_id}");
        try {
            DeleteOrganizationConformancePackResponse response = client.deleteOrganizationConformancePack(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = DeleteOrganizationConformancePackRequest()
        request.organization_id = "{organization_id}"
        request.conformance_pack_id = "{conformance_pack_id}"
        response = client.delete_organization_conformance_pack(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteOrganizationConformancePackRequest{}
    request.OrganizationId = "{organization_id}"
    request.ConformancePackId = "{conformance_pack_id}"
    response, err := client.DeleteOrganizationConformancePack(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
202	Operation accepted.
400	Invalid parameter.
403	Authentication failed.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

4.9.16 Updating Organization Conformance Packages

Function

This API is used to update organization conformance packages.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v1/resource-manager/organizations/{organization_id}/conformance-packs/{conformance_pack_id}

Table 4-871 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**
conformance_pack_id	Yes	String	Specifies the ID of a conformance package. Maximum: **36**

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Request Parameters

Table 4-872 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	The name of an organization conformance package. Minimum: **1** Maximum: **60**
excluded_accounts	No	Array of strings	The accounts for which the conformance package will not be deployed.
vars_structure	No	Array of **VarsStructure** objects	Parameters of a conformance package. Array Length: **0 - 50**

Table 4-873 VarsStructure

Parameter	Mandatory	Type	Description
var_key	No	String	Specifies the name of a parameter. Minimum: **1** Maximum: **64**
var_value	No	Object	Specifies the value of a parameter.

Response Parameters

Status code: 200

Table 4-874 Response body parameters

Parameter	Type	Description
org_conformance_pack_id	String	Organization conformance package ID
org_conformance_pack_name	String	Organization conformance package name
owner_id	String	The creator of an organization conformance package

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Parameter	Type	Description
organization_id	String	Organization ID
org_conformance_pack_urn	String	The unique identifier of resources in an organization conformance package
vars_structure	Array of VarsStructure objects	Parameters of a conformance package
created_at	String	The creation time of an organization conformance package
updated_at	String	The update time of an organization conformance package

Table 4-875 VarsStructure

Parameter	Type	Description
var_key	String	Specifies the name of a parameter. Minimum: **1** Maximum: **64**
var_value	Object	Specifies the value of a parameter.

Status code: 400

Table 4-876 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-877 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

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Table 4-878 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-879 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Updating Organization Conformance Packages

```
POST https://{endpoint}/v1/resource-manager/organizations/{organization_id}/conformance-packs

{
  "name" : "org_conformance_pack_name-e35r",
  "vars_structure" : [ {
    "var_key" : "test",
    "var_value" : "test"
  } ]
}
```

Example Responses

Status code: 200

Update task created.

```
{
  "org_conformance_pack_id" : "d02b7fa9d5a74e638c1402d0868f71fd",
  "org_conformance_pack_name" : "org_conformance_pack_name-e35r",
  "owner_id" : "a1b2c043fab784a45ad88f5ef6a4bdaas",
  "organization_id" : "o-doxbpkzqsdd51ti1k27w2y8fitakrknp",
  "org_conformance_pack_urn" :
"rms::a1b2c043fab784a45ad88f5ef6a4bdaas:organizationConformancePack:o-
doxbpkzqsdd51ti1k27w2y8fitakrknp/d02b7fa9d5a74e638c1402d0868f71fd",
  "created_at" : "2023-02-28T09:39:19Z",
  "updated_at" : "2023-02-28T09:39:19Z"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Updating Organization Conformance Packages

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class UpdateOrganizationConformancePackSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateOrganizationConformancePackRequest request = new UpdateOrganizationConformancePackRequest();
        request.withOrganizationId("{organization_id}");
        request.withConformancePackId("{conformance_pack_id}");
        UpdateOrgConformancePackRequestBody body = new UpdateOrgConformancePackRequestBody();
        List<VarsStructure> listbodyVarsStructure = new ArrayList<>();
        listbodyVarsStructure.add(
            new VarsStructure()
                .withVarKey("test")
                .withVarValue("test")
        );
        body.withVarsStructure(listbodyVarsStructure);
        body.withName("org_conformance_pack_name-e35r");
        request.withBody(body);
        try {
            UpdateOrganizationConformancePackResponse response = client.updateOrganizationConformancePack(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

Updating Organization Conformance Packages

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```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = UpdateOrganizationConformancePackRequest()
        request.organization_id = "{organization_id}"
        request.conformance_pack_id = "{conformance_pack_id}"
        listVarsStructurebody = [
            VarsStructure(
                var_key="test",
                var_value="test"
            )
        ]
        request.body = UpdateOrgConformancePackRequestBody(
            vars_structure=listVarsStructurebody,
            name="org_conformance_pack_name-e35r"
        )
        response = client.update_organization_conformance_pack(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

Updating Organization Conformance Packages

```
package main

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

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateOrganizationConformancePackRequest{}
    request.OrganizationId = "{organization_id}"
    request.ConformancePackId = "{conformance_pack_id}"
    varKeyVarsStructure:= "test"
    varValueVarsStructure:= "test"
    var varValueVarsStructureInterface interface{} = varValueVarsStructure
    var listVarsStructurebody = []model.VarsStructure{
        {
            VarKey: &varKeyVarsStructure,
            VarValue: &varValueVarsStructureInterface,
        },
    }
    request.Body = &model.UpdateOrgConformancePackRequestBody{
        VarsStructure: &listVarsStructurebody,
        Name: "org_conformance_pack_name-e35r",
    }
    response, err := client.UpdateOrganizationConformancePack(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	Update task created.
400	Invalid parameter.
403	Authentication failed.
404	Conformance package not found.
500	Internal server error.

Error Codes

See **Error Codes**.

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4.9.17 Querying the Deployment Status of the Organization Conformance Package

Function

View deployment status of a user's organization conformance packages.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/organizations/{organization_id}/conformance-packs/statuses

Table 4-880 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**

Table 4-881 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**
organization_conformance_pack_id	No	String	Organization conformance package ID Maximum: **36**
conformance_pack_name	No	String	Conformance package name Minimum: **1** Maximum: **60**

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Request Parameters

None

Response Parameters

Status code: 200

Table 4-882 Response body parameters

Parameter	Type	Description
statuses	Array of **OrgConformancePackStatus** objects	Organization conformance package list
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-883 OrgConformancePackStatus

Parameter	Type	Description
org_conformance_pack_id	String	Organization conformance package ID
org_conformance_pack_name	String	Organization conformance package name
state	String	Deployment status of an organization conformance package
error_message	String	An error message for deploying or deleting an organization conformance package
created_at	String	The creation time of an organization conformance package
updated_at	String	The update time of an organization conformance package

Table 4-884 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**

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Parameter	Type	Description
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-885 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-886 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-887 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-888 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.

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Parameter	Type	Description
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "statuses" : [ {
    "org_conformance_pack_id" : "d02b7fa9d5a74e638c1402d0868f71fd",
    "org_conformance_pack_name" : "org_conformance_pack_name-e35r",
    "state" : "CREATE_SUCCESSFUL",
    "error_message" : null,
    "created_at" : "2023-08-16T03:13:50Z",
    "updated_at" : "2023-08-16T03:13:50Z"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListOrganizationConformancePackStatusesSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);
```

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```
        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListOrganizationConformancePackStatusesRequest request = new
ListOrganizationConformancePackStatusesRequest();
        request.withOrganizationId("{organization_id}");
        try {
            ListOrganizationConformancePackStatusesResponse response =
client.listOrganizationConformancePackStatuses(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListOrganizationConformancePackStatusesRequest()
        request.organization_id = "{organization_id}"
        response = client.list_organization_conformance_pack_statuses(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/global"
```

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```
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListOrganizationConformancePackStatusesRequest{}
    request.OrganizationId = "{organization_id}"
    response, err := client.ListOrganizationConformancePackStatuses(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	Operation succeeded.
400	Invalid parameter.
403	Authentication failed.
404	Resources not found.
500	Server error.

Error Codes

See **Error Codes**.

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4.9.18 Querying the Statuses of Organization Conformance Package Deployment to Members.

Function

View deployment status of a user's specific organization conformance packages.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/organizations/{organization_id}/conformance-packs/detailed-statuses

Table 4-889 Path Parameters

Parameter	Mandatory	Type	Description
organization_id	Yes	String	Specifies the organization ID. Maximum: **34**

Table 4-890 Query Parameters

Parameter	Mandatory	Type	Description
conformance_pack_name	No	String	Conformance package name Minimum: **1** Maximum: **60**
organization_conformance_pack_id	No	String	Organization conformance package ID Maximum: **36**
domain_id	No	String	Specifies the account ID. Maximum: **36**
state	No	String	Deployment status (case sensitive) Maximum: **20**
limit	No	Integer	Specifies the maximum number of records to return. Minimum: **1** Maximum: **200** Default: **200**

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Parameter	Mandatory	Type	Description
marker	No	String	Specifies the pagination parameter. You can use the marker value in a subsequent call to request the next set of list items. Minimum: **4** Maximum: **400**

Request Parameters

None

Response Parameters

Status code: 200

Table 4-891 Response body parameters

Parameter	Type	Description
statuses	Array of **OrgConformancePackDetailedStatus** objects	Service agencies for remediation.
page_info	**PageInfo** object	Specifies the pagination object.

Table 4-892 OrgConformancePackDetailedStatus

Parameter	Type	Description
domain_id	String	Specifies the member account ID.
conformance_pack_id	String	Conformance package ID
conformance_pack_name	String	Specifies the conformance package name.
state	String	Deployment status of a conformance package
error_message	String	Specifies the error message when you fail to deploy or delete an organization conformance package.
created_at	String	Creation time
updated_at	String	Update time

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Table 4-893 PageInfo

Parameter	Type	Description
current_count	Integer	Specifies the resource quantity on the current page. Minimum: **0** Maximum: **200**
next_marker	String	Specifies the **marker** value of the next page. Minimum: **4** Maximum: **400**

Status code: 400

Table 4-894 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-895 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-896 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 500

Table 4-897 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

None

Example Responses

Status code: 200

Operation succeeded.

```
{
  "statuses" : [ {
    "domain_id" : "d02b7fa9d5a74e638c1402d0868f71fd",
    "conformance_pack_id" : "d02b7fa9d5a74e638c1402d0868f71fd",
    "conformance_pack_name" : "org_conformance_pack_name-e35r",
    "state" : "CREATE_SUCCESSFUL",
    "error_message" : "null,",
    "created_at" : "2023-01-17T09:38:26.165Z",
    "updated_at" : "2023-01-17T09:38:26.165Z"
  } ],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : null
  }
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ShowOrganizationConformancePackDetailedStatusesSolution {

    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");

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

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowOrganizationConformancePackDetailedStatusesRequest request = new
ShowOrganizationConformancePackDetailedStatusesRequest();
        request.withOrganizationId("{organization_id}");
        try {
            ShowOrganizationConformancePackDetailedStatusesResponse response =
client.showOrganizationConformancePackDetailedStatuses(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ShowOrganizationConformancePackDetailedStatusesRequest()
        request.organization_id = "{organization_id}"
        response = client.show_organization_conformance_pack_detailed_statuses(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowOrganizationConformancePackDetailedStatusesRequest{}
    request.OrganizationId = "{organization_id}"
    response, err := client.ShowOrganizationConformancePackDetailedStatuses(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	Operation succeeded.
400	Invalid parameter.
403	Authentication failed.
404	Resources not found.
500	Server error.

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Error Codes

See **Error Codes**.

4.10 Resource Tags

4.10.1 Querying Resources

Function

This API is used to filter resources by tag. TMS enables you to search for resources by tag and displays query results in a list. Using this API requires corresponding services to provide query capabilities. Note that there is a limit in the number of tags for fields: tags, tags_any, not_tags, and not_tags_any.

Note: This API only supports filtering Config resources by tag, and resource_type supports config:policyAssignments, config:aggregators, config:aggregationAuthorizations.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/{resource_type}/resource-instances/filter

Table 4-898 Path Parameters

Parameter	Mandatory	Type	Description
resource_type	Yes	String	Resource type.

Table 4-899 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Up to how many records can be queried. This parameter is not available when the action element is set to count. If action is set to filter, the default value is 1000. The maximum value is 1,000, and the minimum value is 1. Minimum: **1** Maximum: **1000** Default: **1000**

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Parameter	Mandatory	Type	Description
offset	No	Integer	Index position. This parameter is not available when the action element is set to count. If the offset element is set to N, the resource query starts from the N+1 piece of data. If action is set to filter, the value of offset is 0 by default, indicating that the query starts from the first piece of data. The offset value must be a number and cannot be a negative number. Minimum: **0** Default: **0**

Request Parameters

Table 4-900 Request body parameters

Parameter	Mandatory	Type	Description
without_any_tag	No	Boolean	Tags to be excluded. If this parameter is set to true, all resources that do not have the specified tags will be returned. If this parameter is set to false or is not specified, resources are filtered by tags, matches, and other specified filtering criteria. Default: **false**

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Parameter	Mandatory	Type	Description
tags	No	Array of **Tag** objects	Specified tags. Up to 20 tag keys can be specified, and up to 20 values can be specified for each key. Each tag value can be an empty array, but the tag structure cannot be missing. Each tag key must be unique, and the values of the same key must be unique. Resources containing any of the specified tags will be returned. Keys in this list are in an AND relationship while values in each key-value structure is in an OR relationship.If no tag filtering condition is specified, full data is returned.
matches	No	Array of **Match** objects	Search field. A field contains a key (such as resource_name) and a value. Keys are predefined and must be unique and valid. Whether fuzzy or exact match is used is determined based on the field key. For example, exact match is used for the field key resource_name. If the field value is an empty string, exact match is used. Since very few resources have an empty-string name, an empty list is returned. Exact match is used for the field key resource_id. Currently only resource_name is supported.

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Table 4-901 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A key can contain up to 128 Unicode characters and cannot be left blank. The system does not verify the character set of the key when searching for resources. The key element cannot be empty, an empty string, or spaces. Before using the key element, delete single-byte character (SBC) spaces before and after the value. Minimum: **1** Maximum: **128**
values	Yes	Array of strings	Tag values. A key can contain up to 255 Unicode characters. Before verifying or using the value element, delete single-byte character (SBC) spaces before and after the value. The value can be an empty array but cannot be left blank. If no value is specified, any values are supported. Values are in an Or relationship. The system does not verify the character set of bvaluesb when searching for resources, but only verifies the length. Maximum: **255** Array Length: **0 - 20**

Table 4-902 Match

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. Currently, only the resource_name is supported.
value	Yes	String	Tag value. A tag value can contain up to 255 Unicode characters. The character set of a tag value will not be verified by the system. Maximum: **255**

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Response Parameters

Status code: 200

Table 4-903 Response body parameters

Parameter	Type	Description
resources	Array of **ResourceResp** objects	Resource List
total_count	Integer	The total number of records.

Table 4-904 ResourceResp

Parameter	Type	Description
resource_id	String	Resource ID.
resource_detail	Object	Resource details. The field is reserved for extension and defaults to an empty string.
tags	Array of **ResourceTag** objects	Tags. If no tag is specified, this parameter is an empty array by default.
resource_name	String	Resource name. If no resource is specified, this parameter is an empty array by default. For EIP, IPs will be returned.

Table 4-905 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

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Status code: 400

Table 4-906 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 401

Table 4-907 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-908 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-909 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-910 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.

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Parameter	Type	Description
error_msg	String	Specifies the error message.

Example Requests

Querying Instances by Tag

```
POST https://{endpoint}/v1/resource-manager/{resource_type}/resource-instances/filter

{
  "tags" : [ {
    "key" : "key1",
    "values" : [ "value1", "value2" ]
  }, {
    "key" : "key2",
    "values" : [ "value1", "value2" ]
  } ],
  "matches" : [ {
    "key" : "resource_name",
    "value" : "resource1"
  } ],
  "without_any_tag" : "false"
}
```

Example Responses

Status code: 200

Succeeded.

```
{
  "resources" : [ {
    "resource_detail" : "",
    "resource_id" : "cdfs_cefs_wesas_12_dsad",
    "resource_name" : "resouece1",
    "tags" : [ {
      "key" : "key1",
      "value" : "value1"
    } ]
  } ],
  "total_count" : 1000
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying Instances by Tag

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
```

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

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

public class ListResourcesByTagSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListResourcesByTagRequest request = new ListResourcesByTagRequest();

request.withResourceType(ListResourcesByTagRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        ResourceInstancesReq body = new ResourceInstancesReq();
        List<Match> listbodyMatches = new ArrayList<>();
        listbodyMatches.add(
            new Match()
                .withKey(Match.KeyEnum.fromValue("resource_name"))
                .withValue("resource1")
        );
        List<String> listTagsValues = new ArrayList<>();
        listTagsValues.add("value1");
        listTagsValues.add("value2");
        List<String> listTagsValues1 = new ArrayList<>();
        listTagsValues1.add("value1");
        listTagsValues1.add("value2");
        List<Tag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new Tag()
                .withKey("key1")
                .withValues(listTagsValues1)
        );
        listbodyTags.add(
            new Tag()
                .withKey("key2")
                .withValues(listTagsValues)
        );
        body.withMatches(listbodyMatches);
        body.withTags(listbodyTags);
        body.withWithoutAnyTag(false);
        request.withBody(body);
        try {
            ListResourcesByTagResponse response = client.listResourcesByTag(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

Querying Instances by Tag

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListResourcesByTagRequest()
        request.resource_type = "{resource_type}"
        listMatchesbody = [
            Match(
                key="resource_name",
                value="resource1"
            )
        ]
        listValuesTags = [
            "value1",
            "value2"
        ]
        listValuesTags1 = [
            "value1",
            "value2"
        ]
        listTagsbody = [
            Tag(
                key="key1",
                values=listValuesTags1
            ),
            Tag(
                key="key2",
                values=listValuesTags
            )
        ]
        request.body = ResourceInstancesReq(
            matches=listMatchesbody,
            tags=listTagsbody,
            without_any_tag=False
        )
        response = client.list_resources_by_tag(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

Querying Instances by Tag

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListResourcesByTagRequest{}
    request.ResourceType = model.GetListResourcesByTagRequestResourceTypeEnum().RESOURCE_TYPE
    var listMatchesbody = []model.Match{
        {
            Key: model.GetMatchKeyEnum().RESOURCE_NAME,
            Value: "resource1",
        },
    }
    var listValuesTags = []string{
        "value1",
        "value2",
    }
    var listValuesTags1 = []string{
        "value1",
        "value2",
    }
    var listTagsbody = []model.Tag{
        {
            Key: "key1",
            Values: listValuesTags1,
        },
        {
            Key: "key2",
            Values: listValuesTags,
        },
    }
    withoutAnyTagResourceInstancesReq:= false
    request.Body = &model.ResourceInstancesReq{
        Matches: &listMatchesbody,
        Tags: &listTagsbody,
        WithoutAnyTag: &withoutAnyTagResourceInstancesReq,
    }
```

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```
    response, err := client.ListResourcesByTag(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	Succeeded.
400	Invalid parameter.
401	Unauthorized.
403	Forbidden.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.10.2 Querying Resource Statistics

Function

This API is used to filter resources by tag. TMS enables you to search for resources by tag and displays query results in a list. Using this API requires corresponding services to provide query capabilities. Note that there is a limit in the number of tags for fields: tags, tags_any, not_tags, and not_tags_any.

Note: This API only supports filtering Config resources by tag, and resource_type supports config:policyAssignments, config:aggregators, config:aggregationAuthorizations.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/{resource_type}/resource-instances/count

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Table 4-911 Path Parameters

Parameter	Mandatory	Type	Description
resource_type	Yes	String	Resource type.

Request Parameters

Table 4-912 Request body parameters

Parameter	Mandatory	Type	Description
without_any_tag	No	Boolean	Tags to be excluded. If this parameter is set to true, all resources that do not have the specified tags will be returned. If this parameter is set to false or is not specified, resources are filtered by tags, matches, and other specified filtering criteria. Default: **false**
tags	No	Array of **Tag** objects	Specified tags. Up to 20 tag keys can be specified, and up to 20 values can be specified for each key. Each tag value can be an empty array, but the tag structure cannot be missing. Each tag key must be unique, and the values of the same key must be unique. Resources containing any of the specified tags will be returned. Keys in this list are in an AND relationship while values in each key-value structure is in an OR relationship.If no tag filtering condition is specified, full data is returned.

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Parameter	Mandatory	Type	Description
matches	No	Array of **Match** objects	Search field. A field contains a key (such as resource_name) and a value. Keys are predefined and must be unique and valid. Whether fuzzy or exact match is used is determined based on the field key. For example, exact match is used for the field key resource_name. If the field value is an empty string, exact match is used. Since very few resources have an empty-string name, an empty list is returned. Exact match is used for the field key resource_id. Currently only resource_name is supported.

Table 4-913 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A key can contain up to 128 Unicode characters and cannot be left blank. The system does not verify the character set of the key when searching for resources. The key element cannot be empty, an empty string, or spaces. Before using the key element, delete single-byte character (SBC) spaces before and after the value. Minimum: **1** Maximum: **128**

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Parameter	Mandatory	Type	Description
values	Yes	Array of strings	Tag values. A key can contain up to 255 Unicode characters. Before verifying or using the value element, delete single-byte character (SBC) spaces before and after the value. The value can be an empty array but cannot be left blank. If no value is specified, any values are supported. Values are in an Or relationship. The system does not verify the character set of bvaluesb when searching for resources, but only verifies the length. Maximum: **255** Array Length: **0 - 20**

Table 4-914 Match

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. Currently, only the resource_name is supported.
value	Yes	String	Tag value. A tag value can contain up to 255 Unicode characters. The character set of a tag value will not be verified by the system. Maximum: **255**

Response Parameters

Status code: 200

Table 4-915 Response body parameters

Parameter	Type	Description
total_count	Integer	The total number of records.

Status code: 400

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Table 4-916 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 401

Table 4-917 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-918 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-919 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-920 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Example Requests

Querying the Number of Instances By Tags

```
POST https://{endpoint}/v1/resource-manager/{resource_type}/resource-instances/count

{
  "tags" : [ {
    "key" : "key1",
    "values" : [ "value1", "value2" ]
  }, {
    "key" : "key2",
    "values" : [ "value1", "value2" ]
  } ],
  "matches" : [ {
    "key" : "resource_name",
    "value" : "resource1"
  } ]
}
```

Example Responses

Status code: 200

Succeeded.

```
{
  "total_count" : 1000
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Querying the Number of Instances By Tags

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class CountResourcesByTagSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);
```

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```
        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        CountResourcesByTagRequest request = new CountResourcesByTagRequest();

request.withResourceType(CountResourcesByTagRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        ResourceInstancesReq body = new ResourceInstancesReq();
        List<Match> listbodyMatches = new ArrayList<>();
        listbodyMatches.add(
            new Match()
                .withKey(Match.KeyEnum.fromValue("resource_name"))
                .withValue("resource1")
        );
        List<String> listTagsValues = new ArrayList<>();
        listTagsValues.add("value1");
        listTagsValues.add("value2");
        List<String> listTagsValues1 = new ArrayList<>();
        listTagsValues1.add("value1");
        listTagsValues1.add("value2");
        List<Tag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new Tag()
                .withKey("key1")
                .withValues(listTagsValues1)
        );
        listbodyTags.add(
            new Tag()
                .withKey("key2")
                .withValues(listTagsValues)
        );
        body.withMatches(listbodyMatches);
        body.withTags(listbodyTags);
        request.withBody(body);
        try {
            CountResourcesByTagResponse response = client.countResourcesByTag(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

Querying the Number of Instances By Tags

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = CountResourcesByTagRequest()
        request.resource_type = "{resource_type}"
        listMatchesbody = [
            Match(
                key="resource_name",
                value="resource1"
            )
        ]
        listValuesTags = [
            "value1",
            "value2"
        ]
        listValuesTags1 = [
            "value1",
            "value2"
        ]
        listTagsbody = [
            Tag(
                key="key1",
                values=listValuesTags1
            ),
            Tag(
                key="key2",
                values=listValuesTags
            )
        ]
        request.body = ResourceInstancesReq(
            matches=listMatchesbody,
            tags=listTagsbody
        )
        response = client.count_resources_by_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

Querying the Number of Instances By Tags

```
package main

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

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

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CountResourcesByTagRequest{}
    request.ResourceType = model.GetCountResourcesByTagRequestResourceTypeEnum().RESOURCE_TYPE
    var listMatchesbody = []model.Match{
        {
            Key: model.GetMatchKeyEnum().RESOURCE_NAME,
            Value: "resource1",
        },
    }
    var listValuesTags = []string{
        "value1",
        "value2",
    }
    var listValuesTags1 = []string{
        "value1",
        "value2",
    }
    var listTagsbody = []model.Tag{
        {
            Key: "key1",
            Values: listValuesTags1,
        },
        {
            Key: "key2",
            Values: listValuesTags,
        },
    }
    request.Body = &model.ResourceInstancesReq{
        Matches: &listMatchesbody,
        Tags: &listTagsbody,
    }
    response, err := client.CountResourcesByTag(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	Succeeded.

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Status Code	Description
400	Invalid parameter.
401	Unauthorized.
403	Forbidden.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.10.3 Batch Adding Resource Tags

Function

This API is idempotent and is used to batch add tags for a specified resource. You can add up to 20 tags to a resource.

Note: This api supports only resource type of Config. Currently, resource_type supports config:policyAssignments, config:aggregators, config:aggregationAuthorizations.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/{resource_type}/{resource_id}/tags/create

Table 4-921 Path Parameters

Parameter	Mandatory	Type	Description
resource_type	Yes	String	Resource type.
resource_id	Yes	String	Resource ID.

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Request Parameters

Table 4-922 Request body parameters

Parameter	Mandatory	Type	Description
tags	No	Array of **ResourceTag** objects	Specifies tags. For tenant permissions, this parameter is mandatory. For the op_service permission, choose either this parameter or sys_tags. Array Length: **1 - 20**

Table 4-923 ResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	Yes	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Response Parameters

Status code: 204

No content.

Status code: 400

Table 4-924 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 401

Table 4-925 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-926 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-927 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-928 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Adding Tags to Specified Instances in Batches

```
POST https://{endpoint}/v1/resource-manager/{resource_type}/{resource_id}/tags/create

{
  "tags" : [ {
    "key" : "key1",
```

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

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Adding Tags to Specified Instances in Batches

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class TagResourceSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        TagResourceRequest request = new TagResourceRequest();
        request.withResourceType(TagResourceRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        request.withResourceId("{resource_id}");
        TagsReq body = new TagsReq();
        List<ResourceTag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new ResourceTag()
                .withKey("key1")
                .withValue("value1")
        );
        listbodyTags.add(
            new ResourceTag()
                .withKey("key2")
                .withValue("value2")
```

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```
        );
        body.withTags(listbodyTags);
        request.withBody(body);
        try {
            TagResourceResponse response = client.tagResource(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

Adding Tags to Specified Instances in Batches

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = TagResourceRequest()
        request.resource_type = "{resource_type}"
        request.resource_id = "{resource_id}"
        listTagsbody = [
            ResourceTag(
                key="key1",
                value="value1"
            ),
            ResourceTag(
                key="key2",
                value="value2"
            )
        ]
        request.body = TagsReq(
            tags=listTagsbody
        )
        response = client.tag_resource(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
```

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

Go

Adding Tags to Specified Instances in Batches

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.TagResourceRequest{}
    request.ResourceType = model.GetTagResourceRequestResourceTypeEnum().RESOURCE_TYPE
    request.ResourceId = "{resource_id}"
    var listTagsbody = []model.ResourceTag{
        {
            Key: "key1",
            Value: "value1",
        },
        {
            Key: "key2",
            Value: "value2",
        },
    }
    request.Body = &model.TagsReq{
        Tags: &listTagsbody,
    }
    response, err := client.TagResource(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	No content.
400	Invalid parameter.
401	Unauthorized.
403	Forbidden.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.10.4 Batch Deleting Resource Tags

Function

This API is idempotent and is used to batch delete tags for a specified resource. Each resource can have 20 tags at most.

Note: This api supports only resource type of Config. Currently, resource_type supports config:policyAssignments, config:aggregators, config:aggregationAuthorizations.

Calling Method

For details, see **Calling APIs**.

URI

POST /v1/resource-manager/{resource_type}/{resource_id}/tags/delete

Table 4-929 Path Parameters

Parameter	Mandatory	Type	Description
resource_type	Yes	String	Resource type.
resource_id	Yes	String	Resource ID.

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Request Parameters

Table 4-930 Request body parameters

Parameter	Mandatory	Type	Description
tags	No	Array of **ResourceUnTag** objects	Specifies tags. For tenant permissions, this parameter is mandatory. For the op_service permission, choose either this parameter or sys_tags. Array Length: **1 - 20**

Table 4-931 ResourceUnTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	Yes	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Response Parameters

Status code: 204

No content.

Status code: 400

Table 4-932 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

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Status code: 401

Table 4-933 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 403

Table 4-934 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-935 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-936 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Deleting Tags for Specified Instances in Batches

```
POST https://{endpoint}/v1/resource-manager/{resource_type}/{resource_id}/tags/delete

{
  "tags" : [ {
    "key" : "key1"
```

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```
 }, {
   "key" : "key2",
   "value" : "value2"
 } ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Deleting Tags for Specified Instances in Batches

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;

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

public class UnTagResourceSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        UnTagResourceRequest request = new UnTagResourceRequest();
        request.withResourceType(UnTagResourceRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        request.withResourceId("{resource_id}");
        UnTagsReq body = new UnTagsReq();
        List<ResourceUnTag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new ResourceUnTag()
                .withKey("key1")
        );
        listbodyTags.add(
            new ResourceUnTag()
                .withKey("key2")
                .withValue("value2")
        );
        body.withTags(listbodyTags);
```

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```
        request.withBody(body);
        try {
            UnTagResourceResponse response = client.unTagResource(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

Deleting Tags for Specified Instances in Batches

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = UnTagResourceRequest()
        request.resource_type = "{resource_type}"
        request.resource_id = "{resource_id}"
        listTagsbody = [
            ResourceUnTag(
                key="key1"
            ),
            ResourceUnTag(
                key="key2",
                value="value2"
            )
        ]
        request.body = UnTagsReq(
            tags=listTagsbody
        )
        response = client.un_tag_resource(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

Deleting Tags for Specified Instances in Batches

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UnTagResourceRequest{}
    request.ResourceType = model.GetUnTagResourceRequestResourceTypeEnum().RESOURCE_TYPE
    request.ResourceId = "{resource_id}"
    var listTagsbody = []model.ResourceUnTag{
        {
            Key: "key1",
        },
        {
            Key: "key2",
            Value: "value2",
        },
    }
    request.Body = &model.UnTagsReq{
        Tags: &listTagsbody,
    }
    response, err := client.UnTagResource(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	No content.
400	Invalid parameter.
401	Unauthorized.
403	Forbidden.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.10.5 Querying Tags of a Resource

Function

This API is used to query resource tags.

Note: This api supports only resource type of Config. Currently, resource_type supports config:policyAssignments, config:aggregators, config:aggregationAuthorizations.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/{resource_type}/{resource_id}/tags

Table 4-937 Path Parameters

Parameter	Mandatory	Type	Description
resource_type	Yes	String	Resource type.
resource_id	Yes	String	Resource ID.

Request Parameters

None

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Response Parameters

Status code: 200

Table 4-938 Response body parameters

Parameter	Type	Description
tags	Array of ResourceTag objects	Tags.

Table 4-939 ResourceTag

Parameter	Type	Description
key	String	Tag key. A tag key can contain up to 128 Unicode characters and must comply with the character set specifications in section 3.1. Minimum: **1** Maximum: **128**
value	String	Tag value. A tag value can contain up to 255 Unicode characters and must comply with the character set specifications in section 3.2. Minimum: **0** Maximum: **255**

Status code: 400

Table 4-940 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 401

Table 4-941 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.

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Parameter	Type	Description
error_msg	String	Specifies the error message.

Status code: 403

Table 4-942 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-943 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-944 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying Tags of a Specified Instance

```
GET https://{endpoint}/v1/resource-manager/{resource_type}/{resource_id}/tags
```

Example Responses

Status code: 200

Succeeded.

```
{
  "tags" : [ {
    "key" : "key1",
```

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

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListTagsForResourceSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListTagsForResourceRequest request = new ListTagsForResourceRequest();

request.withResourceType(ListTagsForResourceRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        request.withResourceId("{resource_id}");
        try {
            ListTagsForResourceResponse response = client.listTagsForResource(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListTagsForResourceRequest()
        request.resource_type = "{resource_type}"
        request.resource_id = "{resource_id}"
        response = client.list_tags_for_resource(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/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
    request := &model.ListTagsForResourceRequest{}
    request.ResourceType = model.GetListTagsForResourceRequestResourceTypeEnum().RESOURCE_TYPE
    request.ResourceId = "{resource_id}"
    response, err := client.ListTagsForResource(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	Succeeded.
400	Invalid parameter.
401	Unauthorized.
403	Forbidden.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

4.10.6 Querying Tags of a Resource Type

Function

This API is used to query tags of resources that are in a specified project.

Note: This api supports only resource type of Config. Currently, resource_type supports config:policyAssignments, config:aggregators, config:aggregationAuthorizations.

Calling Method

For details, see **Calling APIs**.

URI

GET /v1/resource-manager/{resource_type}/tags

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Table 4-945 Path Parameters

Parameter	Mandatory	Type	Description
resource_type	Yes	String	Resource type.

Table 4-946 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records that can be queried. The default value is 1000. The minimum value is 1. Minimum: **1** Maximum: **1000** Default: **1000**
offset	No	Integer	Index position. If the offset element is set to N, the resource query starts from the N+1 piece of data. If action is set to filter, the value of offset is 0 by default, indicating that the query starts from the first piece of data. The offset value must be a number and cannot be a negative number. Minimum: **0** Default: **0**

Request Parameters

None

Response Parameters

Status code: 200

Table 4-947 Response body parameters

Parameter	Type	Description
tags	Array of **Tag** objects	Tags.
total_count	Integer	The total number of records.

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Table 4-948 Tag

Parameter	Type	Description
key	String	Tag key. A key can contain up to 128 Unicode characters and cannot be left blank. The system does not verify the character set of the key when searching for resources. The key element cannot be empty, an empty string, or spaces. Before using the key element, delete single-byte character (SBC) spaces before and after the value. Minimum: **1** Maximum: **128**
values	Array of strings	Tag values. A key can contain up to 255 Unicode characters. Before verifying or using the value element, delete single-byte character (SBC) spaces before and after the value. The value can be an empty array but cannot be left blank. If no value is specified, any values are supported. Values are in an Or relationship. The system does not verify the character set of bvaluesb when searching for resources, but only verifies the length. Maximum: **255** Array Length: **0 - 20**

Status code: 400

Table 4-949 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 401

Table 4-950 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.

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Parameter	Type	Description
error_msg	String	Specifies the error message.

Status code: 403

Table 4-951 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 404

Table 4-952 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Status code: 500

Table 4-953 Response body parameters

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying All Resource Tag Sets of a Tenant Instance Type

```
GET https://{endpoint}/v1/resource-manager/{resource_type}/tags
```

Example Responses

Status code: 200

Succeeded.

```
{
  "tags" : [ {
    "key" : "key1",
```

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```
    "values" : [ "value1", "value2" ]
  }, {
    "key" : "key2",
    "values" : [ "value1", "value2" ]
  } ],
  "total_count" : 1001
}
```

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.GlobalCredentials;
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.config.v1.region.ConfigRegion;
import com.huaweicloud.sdk.config.v1.*;
import com.huaweicloud.sdk.config.v1.model.*;


public class ListTagsForResourceTypeSolution {

    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 GlobalCredentials()
                .withAk(ak)
                .withSk(sk);

        ConfigClient client = ConfigClient.newBuilder()
                .withCredential(auth)
                .withRegion(ConfigRegion.valueOf("<YOUR REGION>"))
                .build();
        ListTagsForResourceTypeRequest request = new ListTagsForResourceTypeRequest();

request.withResourceType(ListTagsForResourceTypeRequest.ResourceTypeEnum.fromValue("{resource_type}"));
        try {
            ListTagsForResourceTypeResponse response = client.listTagsForResourceType(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 GlobalCredentials
from huaweicloudsdkconfig.v1.region.config_region import ConfigRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkconfig.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"]

    credentials = GlobalCredentials(ak, sk)

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

    try:
        request = ListTagsForResourceTypeRequest()
        request.resource_type = "{resource_type}"
        response = client.list_tags_for_resource_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

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/global"
    config "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/config/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 := global.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := config.NewConfigClient(
        config.ConfigClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

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```
    request := &model.ListTagsForResourceTypeRequest{}
    request.ResourceType = model.GetListTagsForResourceTypeRequestResourceTypeEnum().RESOURCE_TYPE
    response, err := client.ListTagsForResourceType(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	Succeeded.
400	Invalid parameter.
401	Unauthorized.
403	Forbidden.
404	Resources not found.
500	Internal server error.

Error Codes

See **Error Codes**.

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5 Permissions Policies and Supported Actions

5.1 Permissions Policies and Supported Actions

This chapter describes how to use IAM to implement fine-grained permissions control for your Config resources. If your account does not need individual IAM users, skip this chapter.

A policy is a set of permissions defined in JSON format. By default, new IAM users do not have permissions assigned. You need to add a user to one or more groups, and attach permissions policies or roles to these groups. Users inherit permissions from the groups to which they are added and can perform specified operations on cloud services based on the permissions.

Based on authorization granularity, permissions are classified into **Roles** and **Policies**.

- Roles are a type of service-based, coarse-grained authorization mechanism that defines permissions related to user responsibilities.
- Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

NOTE

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

An account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API successfully. For example, if an IAM user wants to query a resource recorder using an API, the user must have the permissions that allow the **rms:trackerConfig:get** action.

Supported Actions

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

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- Permissions: Statements in a policy that allow or deny certain operations.
- APIs: REST APIs that can be called by a user who has been granted specific permissions.
- Actions: Specific operations that are allowed or denied.
- Related actions: Actions on which a specific action depends to take effect. When assigning permissions for the action to a user, you also need to assign permissions for the related actions.
- IAM projects or enterprise projects: Type of projects in which policies can be used to grant permissions. A policy can be applied to IAM projects, enterprise projects, or both. Policies that contain actions for both IAM and enterprise projects can be used and take effect for both IAM and Enterprise Management. Policies that only contain actions for IAM projects can be used and only take effect for IAM. For details about the differences between IAM and enterprise projects, see **What Are the Differences Between IAM and Enterprise Management?**

  Config supports the following actions that can be defined in custom policies:

  Resource Query describes the actions and corresponding APIs for viewing resource history, listing specific resources, and other related operations.

  Resource Recorder describes the actions and corresponding APIs for querying, enabling, and disabling the resource recorder.

  Compliance describes the actions and corresponding APIs for adding, deleting, modifying, and querying Config rules.

  Advanced Queries describes the actions and corresponding APIs for adding, deleting, modifying, and querying advanced queries.

  Resource Aggregation describes the actions and corresponding APIs for creating, updating, and deleting resource aggregators.

  Conformance Packages describes the actions and corresponding APIs for creating, listing, and deleting conformance packages.

  Resource Tag the actions and corresponding APIs for listing resources, querying the number of resources, batch adding and deleting resource tags, and querying resource and project tags.

  NOTE

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

5.2 Resource Query

Permission	API	Action	IAM Project	Enterprise Project
Querying change records of a resource	GET /v1/resource-manager/domains/{domain_id}/resources/{resource_id}/history	rms:resources:getHistory	√	x

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Permission	API	Action	IAM Project	Enterprise Project
Querying resource relationships	GET /v1/resource-manager/domains/{domain_id}/resources/{resource_id}/relations	rms:resources:summarize	√	x
Querying details about resource relationships	GET /v1/resource-manager/domains/{domain_id}/all-resources/{resource_id}/relations	rms:resources:getRelation	√	x
Querying resources of a specific type	GET /v1/resource-manager/domains/{domain_id}/provider/{provider}/type/{type}/resources	rms:resources:list	√	x
Querying a resource	GET /v1/resource-manager/domains/{domain_id}/provider/{provider}/type/{type}/resources/{resource_id}	rms:resources:get	√	x
Listing resources recorded by the resource recorder	GET /v1/resource-manager/domains/{domain_id}/tracked-resources	rms:resources:list	√	x
Querying how many resources are recorded by the resource recorder	GET /v1/resource-manager/domains/{domain_id}/tracked-resources/count	rms:resources:list	√	x
Querying resource tags recorded by the resource recorder	GET /v1/resource-manager/domains/{domain_id}/tracked-resources/tags	rms:resources:list	√	x

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Permission	API	Action	IAM Project	Enterprise Project
Querying resource overview recorded by the resource recorder	GET /v1/resource-manager/domains/{domain_id}/tracked-resources/summary	rms:resources:list	√	x
Querying a specific resource recorded by the resource recorder	GET /v1/resource-manager/domains/{domain_id}/tracked-resources/{resource_id}	rms:resources:get	√	x
Querying a resource summary	GET /v1/resource-manager/domains/{domain_id}/all-resources/summary	rms:resources:list	√	x
Querying the number of resources	GET /v1/resource-manager/domains/{domain_id}/all-resources/count	rms:resources:list	√	x
Querying all resources under your account	GET /v1/resource-manager/domains/{domain_id}/all-resources	rms:resources:list	√	x
Listing cloud services	GET /v1/resource-manager/domains/{domain_id}/providers	Not required	x	x
Querying resource tags	GET /v1/resource-manager/domains/{domain_id}/all-resources/tags	rms:resources:list	√	x
Querying a resource under your account	GET /v1/resource-manager/domains/{domain_id}/all-resources/{resource_id}	rms:resources:get	√	x

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5.3 Resource Recorder

Permission	API	Action	IAM Project	Enterprise Project
Querying the resource recorder	GET /v1/resource-manager/domains/{domain_id}/tracker-config	rms:trackerConfig:get	√	x
Creating or modifying the resource recorder	PUT /v1/resource-manager/domains/{domain_id}/tracker-config	rms:trackerConfig:put	√	x
Deleting the resource recorder	DELETE /v1/resource-manager/domains/{domain_id}/tracker-config	rms:trackerConfig:delete	√	x

5.4 Compliance

Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Querying all built-in policies	GET /v1/resource-manager/policy-definitions	rms:policyDefinitions:get	-	√	x
Querying a built-in policy	GET /v1/resource-manager/policy-definitions/{policy_definition_id}	rms:policyDefinitions:get	-	√	x
Modifying a rule	PUT /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}	rms:policyAssignments:update	-	√	x

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Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Enabling a rule	POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/enable	rms:policyAssignments:update	-	√	x
Disabling a rule	POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/disable	rms:policyAssignments:update	-	√	x
Adding a rule	PUT /v1/resource-manager/domains/{domain_id}/policy-assignments	rms:policyAssignments:create	-	√	x
Querying all rules	GET /v1/resource-manager/domains/{domain_id}/policy-assignments	rms:policyAssignments:get	-	√	x
Querying a rule	GET /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}	rms:policyAssignments:get	-	√	x
Deleting a rule	DELETE /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}	rms:policyAssignments:delete	-	√	x
Querying the evaluation status of a rule	GET /v1/resource-manager/domains/{domain_id}/policy-states/evaluation-state	rms:policyStates:get	-	√	x

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Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Querying the compliance results of a resource	GET /v1/resource-manager/domains/{domain_id}/resources/{resource_id}/policy-states	rms:policyStates:get	-	√	x
Querying all compliance results of resources under a user	GET /v1/resource-manager/domains/{domain_id}/policy-states	rms:policyStates:get	-	√	x
Querying all compliance results of resources evaluated by a rule	GET /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/policy-states	rms:policyStates:get	-	√	x
Running a resource compliance evaluation	POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/policy-states/run-evaluation	rms:policyStates:runEvaluation	-	√	x
Updating evaluation results	PUT /v1/resource-manager/domains/{domain_id}/policy-states	rms:policyStates:update	-	√	x

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Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Creating or updating an organization rule	PUT /v1/resource-manager/organizations/{organization_id}/policy-assignments	rms:organizationPolicyAssignments:put	• organizations:organizations:get • organizations:accounts:list • organizations:delegatedAdministrators:list • organizations:trustedServices:enable • organizations:trustedServices:list	√	x
Querying organization rules	GET /v1/resource-manager/organizations/{organization_id}/policy-assignments	rms:organizationPolicyAssignments:list	organizations:organizations:get	√	x
Querying a specific organization rule	GET /v1/resource-manager/organizations/{organization_id}/policy-assignments/{organization_policy_assignment_id}	rms:organizationPolicyAssignments:get	organizations:organizations:get	√	x
Querying statuses of organization rules	GET /v1/resource-manager/organizations/{organization_id}/policy-assignment-statuses	rms:organizationPolicyAssignments:list	organizations:organizations:get	√	x

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Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Querying details about the rule statuses of each member account in an organization	GET /v1/resource-manager/organizations/{organization_id}/policy-assignment-detailed-status	rms:organizationPolicyAssignments:list	organizations:organizations:get	√	x
Deleting an organization rule	DELETE /v1/resource-manager/organizations/{organization_id}/policy-assignments/{organization_policy_assignment_id}	rms:organizationPolicyAssignments:delete	organizations:organizations:get	√	x
Adding or updating remediation configurations	PUT /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-configuration	rms:policyAssignmentsRemediation:putRemediationConfiguration	• iam:agencies:pass • iam:agencies:createServiceLinkedAgencyV5	√	x
Querying remediation configurations	GET /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-configuration	rms:policyAssignmentsRemediation:getRemediationConfiguration	-	√	x
Deleting remediation configurations	DELETE /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-configuration	rms:policyAssignmentsRemediation:deleteRemediationConfiguration	-	√	x

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Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Batch adding remediation configurations	POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-exception/create	rms:policyAssignmentsRemediation:createRemediationExceptions	-	√	x
Batch deleting remediation configurations	POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-exception/delete	rms:policyAssignmentsRemediation:deleteRemediationExceptions	-	√	x
Querying remediation exceptions	GET /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-exception	rms:policyAssignmentsRemediation:listRemediationExceptions	-	√	x
Running remediation execution	POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-execution	rms:policyAssignmentsRemediation:runRemediation	• functiongraph:function:invokeAsync • functiongraph:function:getFunctionConfig • rf:stack:create • rf:stack:delete • rf:stack:getTemplate • rf:stack:getMetadata • rf:privateTemplate:showMetadata	√	x

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Permission	API	Action	Dependencies	IAM Project	Enterprise Project
Viewing remediation execution results	GET /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-execution-statuses	rms:policyAssignmentsRemediation:listRemediationExecutionStatuses	-	√	x
Listing remediation records	POST /v1/resource-manager/domains/{domain_id}/policy-assignments/{policy_assignment_id}/remediation-execution-statuses/summary	rms:policyAssignmentsRemediation:listRemediationExecutionStatuses	-	√	x

5.5 Advanced Queries

Permissions	API	Action	IAM Project	Enterprise Project
Running advanced queries	POST /v1/resource-manager/domains/{domain_id}/run-query	rms:resources:runQuery	√	x
Creating an advanced query	POST /v1/resource-manager/domains/{domain_id}/stored-queries	rms:storedQueries:create	√	x
Querying an advanced query	GET /v1/resource-manager/domains/{domain_id}/stored-queries/{query_id}	rms:storedQueries:get	√	x
Listing advanced queries	GET /v1/resource-manager/domains/{domain_id}/stored-queries	rms:storedQueries:list	√	x
Updating an advanced query	PUT /v1/resource-manager/domains/{domain_id}/stored-queries/{query_id}	rms:storedQueries:update	√	x

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Permissions	API	Action	IAM Project	Enterprise Project
Deleting an advanced query	DELETE /v1/resource-manager/domains/{domain_id}/stored-queries/{query_id}	rms:storedQueries:delete	√	x
Querying schemas	GET /v1/resource-manager/domains/{domain_id}/schemas	rms:schemas:list	√	x

5.6 Resource Aggregation

Permissions	API	Action	Dependencies	IAM Project	Enterprise project
Authorizing a resource aggregator account	PUT /v1/resource-manager/domains/{domain_id}/aggregators/aggregation-authorization	rms:aggregationAuthorizations:create	-	√	x
Deleting authorization for a resource aggregator account	DELETE /v1/resource-manager/domains/{domain_id}/aggregators/aggregation-authorization/{authorized_account_id}	rms:aggregationAuthorizations:delete	-	√	x
Querying authorized resource aggregators accounts	GET /v1/resource-manager/domains/{domain_id}/aggregators/aggregation-authorization	rms:aggregationAuthorizations:list	-	√	x

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Permissions	API	Action	Dependencies	IAM Project	Enterprise project
Creating a resource aggregator	PUT /v1/resource-manager/domains/{domain_id}/aggregators	rms:aggregators:create	• organizations:organizations:get • organizations:accounts:list • organizations:delegatedAdministrators:list • organizations:trustedServices:enable • organizations:trustedServices:list **NOTE** Only organization aggregators require these dependencies.	√	x
Querying resource aggregators	GET /v1/resource-manager/domains/{domain_id}/aggregators	rms:aggregators:list	-	√	x
Querying a specific resource aggregator	GET /v1/resource-manager/domains/{domain_id}/aggregators/{aggregator_id}	rms:aggregators:get	-	√	x
Querying the status of a specific resource aggregator account	GET /v1/resource-manager/domains/{domain_id}/aggregators/{aggregator_id}/aggregator-sources-status	rms:aggregators:get	-	√	x

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Permissions	API	Action	Dependencies	IAM Project	Enterprise project
Deleting a resource aggregator	DELETE /v1/resource-manager/domains/{domain_id}/aggregators/{aggregator_id}	rms:aggregators:delete	-	√	x
Updating a resource aggregator	PUT /v1/resource-manager/domains/{domain_id}/aggregators/{aggregator_id}	rms:aggregators:update	• organizations:organizations:get • organizations:accounts:list • organizations:delegatedAdministrators:list • organizations:trustedServices:enable • organizations:trustedServices:list **NOTE** Only organization aggregators require these dependencies.	√	x
Deleting pending authorization requests	DELETE /v1/resource-manager/domains/{domain_id}/aggregators/pending-aggregation-request/{requester_account_id}	rms:aggregationRequests:delete	-	√	x
Querying all pending aggregation requests	GET /v1/resource-manager/domains/{domain_id}/aggregators/pending-aggregation-request	rms:aggregationRequests:list	-	√	x

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Permissions	API	Action	Dependencies	IAM Project	Enterprise project
Querying resources of a resource aggregator account	POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/aggregate-discovered-resources	rms:aggregatorResources:list	• organizations:organizations:get • organizations:delegatedAdministrators:list • organizations:trustedServices:list **NOTE** Only organization aggregators require these dependencies.	√	x
Performing an advanced query on a specific aggregator	POST /v1/resource-manager/domains/{domain_id}/aggregators/{aggregator_id}/run-query	rms:aggregatorResources:runQuery	-	√	x
Querying details about a specific resource in a source account	POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-resource-config	rms:aggregatorResources:get	-	√	x

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Permissions	API	Action	Dependencies	IAM Project	Enterprise project
Querying the number of resources of a resource aggregator account	POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/aggregate-discovered-resource-counts	rms:aggregatorResources:list	• organizations:organizations:get • organizations:delegatedAdministrators:list • organizations:trustedServices:list **NOTE** Only organization aggregators require these dependencies.	√	x
Querying the compliance summary of one or more source accounts in an aggregator	POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/policy-states/compliance-summary	rms:aggregatorResources:list	• organizations:organizations:get • organizations:delegatedAdministrators:list • organizations:trustedServices:list **NOTE** Only organization aggregators require these dependencies.	√	x

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Permissions	API	Action	Dependencies	IAM Project	Enterprise project
Querying aggregated rules	POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/policy-assignments/compliance	rms:aggregatorResources:list	• organizations:organizations:get • organizations:delegatedAdministrators:list • organizations:trustedServices:list **NOTE** Only organization aggregators require these dependencies.	√	x
Querying compliance results of aggregated resources	POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/policy-states/compliance-details	rms:aggregatorResources:list	• organizations:organizations:get • organizations:delegatedAdministrators:list • organizations:trustedServices:list **NOTE** Only organization aggregators require these dependencies.	√	x

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Permissions	API	Action	Dependencies	IAM Project	Enterprise project
Querying details about a specified aggregated rule	POST /v1/resource-manager/domains/{domain_id}/aggregators/aggregate-data/policy-assignment/detail	rms:aggregatorResources:list	• organizations:organizations:get • organizations:delegatedAdministrators:list • organizations:trustedServices:list **NOTE** Only organization aggregators require these dependencies.	√	x

5.7 Conformance Packages

Permissions	API	Action	Dependencies	IAM Project	Enterprise Project
Creating conformance packages	POST /v1/resource-manager/domains/{domain_id}/conformance-packs	rms:conformancePacks:create	• rf:stack:createStack • rf:stack:getStackMetadata • rf:stack:listStackResources	√	x
Querying details of an organization conformance package	GET /v1/resource-manager/domains/{domain_id}/conformance-packs/{conformance_pack_id}	rms:conformancePacks:get	-	√	x

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Permissions	API	Action	Dependencies	IAM Project	Enterprise Project
Querying conformance packages	GET /v1/resource-manager/domains/{domain_id}/conformance-packs	rms:conformancePacks:list	-	√	x
Deleting conformance packages	DELETE /v1/resource-manager/domains/{domain_id}/conformance-packs/{conformance_pack_id}	rms:conformancePacks:delete	• rf:stack:deleteStack • rf:stack:getStackMetadata	√	x
Updating conformance packages	PUT /v1/resource-manager/domains/{domain_id}/conformance-packs/{conformance_pack_id}	rms:conformancePacks:update	• rf:stack:deployStack • rf:stack:getStackMetadata • rf:stack:listStackResources	√	x
Querying the compliance results of conformance packages	GET /v1/resource-manager/domains/{domain_id}/conformance-packs/compliance/summary	rms:conformancePacks:list	-	√	x
Querying the compliance results of rules in a conformance package	GET /v1/resource-manager/domains/{domain_id}/conformance-packs/{conformance_pack_id}/compliance	rms:conformancePacks:get	-	√	x

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Permissions	API	Action	Dependencies	IAM Project	Enterprise Project
Querying the details about compliance results of resources evaluated by rules in a conformance package	GET /v1/resource-manager/domains/{domain_id}/conformance-packs/{conformance_pack_id}/compliance/details	rms:conformancePacks:get	-	√	x
Querying scores of conformance packages	GET /v1/resource-manager/domains/{domain_id}/conformance-packs/scores	rms:conformancePacks:list	-	√	x
Creating organization conformance packages	POST /v1/resource-manager/organizations/{organization_id}/conformance-packs	rms:organizationConformancePacks:create	• organizations:organizations:get • organizations:accounts:list • organizations:delegatedAdministrators:list • organizations:trustedServices:enable • organizations:trustedServices:list	√	x
Listing organization conformance packages	GET /v1/resource-manager/organizations/{organization_id}/conformance-packs	rms:organizationConformancePacks:list	organizations:organizations:get	√	x

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Permissions	API	Action	Dependencies	IAM Project	Enterprise Project
Viewing an organization conformance package	GET /v1/resource-manager/organizations/{organization_id}/conformance-packs/{conformance_pack_id}	rms:organizationConformancePacks:get	organizations:organizations:get	√	x
Deleting organization conformance packages	DELETE /v1/resource-manager/organizations/{organization_id}/conformance-packs/{conformance_pack_id}	rms:organizationConformancePacks:delete	organizations:organizations:get	√	x
Updating organization conformance packages	PUT /v1/resource-manager/organizations/{organization_id}/conformance-packs/{conformance_pack_id}	rms:organizationConformancePacks:update	• organizations:organizations:get • organizations:accounts:list • organizations:delegatedAdministrators:list • organizations:trustedServices:enable • organizations:trustedServices:list	√	x
Querying deployment statuses of organization conformance packages	GET /v1/resource-manager/organizations/{organization_id}/conformance-packs/statuses	rms:organizationConformancePacks:list	organizations:organizations:get	√	x

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Permissions	API	Action	Dependencies	IAM Project	Enterprise Project
Querying deployment status details of an organization conformance package	GET /v1/resource-manager/organizations/{organization_id}/conformance-packs/detailed-statuses	rms:organizationConformancePacks:list	organizations:organizations:get	√	x

5.8 Resource Tag

Permissions	API	Action	Dependencies	IAM Project	Enterprise Project
Listing resources	POST /v1/resource-manager/{resource_type}/resource-instances/filter	rms:resources:listResourcesByTag	-	√	x
Querying the number of resources	POST /v1/resource-manager/{resource_type}/resource-instances/count	rms:resources:listResourcesByTag	-	√	x
Batch adding resource tags	POST /v1/resource-manager/{resource_type}/{resource_id}/tags/create	rms:resources:tagResource	-	√	x
Batch deleting resource tags	POST /v1/resource-manager/{resource_type}/{resource_id}/tags/delete	rms:resources:unTagResource	-	√	x

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Permissions	API	Action	Dependencies	IAM Project	Enterprise Project
Querying resource tags	GET /v1/resource-manager/{resource_type}/{resource_id}/tags	rms:resources:listTagsForResource	-	√	x
Query project tags	GET /v1/resource-manager/{resource_type}/tags	rms:resources:listTags	-	√	x

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6 Appendixes

6.1 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	RMS.00010001	some region is restricted to access.	Invalid region.	Specify a valid region.
400	RMS.00010002	resource type invalid.	Invalid value for resource type.	Specify a valid value for resource type.
400	RMS.00010003	service invalid.	Invalid value for service.	Specify a valid value for service.
400	RMS.00010004	invalid parameter.	Invalid value for parameter.	Specify a valid value for parameter.
400	RMS.00010007	The max length of domainId must be less than or equal to 36.	DomainId cannot be more than 36 characters.	Enter 1 to 36 characters for domainId.
400	RMS.00010008	domainId is illegal.	Invalid value for domainId.	Specify a valid value for domainId.

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Status Code	Error Codes	Error Message	Description	Solution
400	RMS.00010009	The max length of id must be less than or equal to 512.	Id cannot be more than 512 characters.	Enter 1 to 512 characters for id.
400	RMS.00010010	id is illegal.	Invalid value for id.	Specify a valid value for id.
400	RMS.00010011	The max length of name must be less than or equal to 256.	Name cannot be more than 256 characters.	Enter 1 to 256 characters for name.
400	RMS.00010012	name is illegal.	Invalid value for name.	Specify a valid value for name.
400	RMS.00010013	The size of resource type array must be between 1 and 100.	Invalid number of resource types. Value range: 1–100	Enter 1 to 100 resource types.
400	RMS.00010014	The max length of resource type must be less than or equal to 40.	Resource type cannot be more than 40 characters.	Enter 1 to 40 characters for resource type.
400	RMS.00010015	resource type is illegal.	Invalid value for resource type.	Specify a valid value for resource type.
400	RMS.00010016	The size of region id array must be between 1 and 10.	The number of region IDs must be 1 to 10.	Enter 1 to 10 region IDs.
400	RMS.00010017	The max length of region id must be less than or equal to 36.	Region id cannot be more than 36 characters.	Enter 1 to 36 characters for region id.
400	RMS.00010018	region id is illegal.	Invalid value for region id.	Specify a valid value for region id.

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Status Code	Error Codes	Error Message	Description	Solution
400	RMS.00010019	The size of enterprise project array must be between 1 and 10.	Invalid number of enterprise projects. Value range: 1–10	Enter 1 to 10 enterprise projects.
400	RMS.00010020	enterprise project is invalid.	Invalid value for enterprise project.	Specify a valid value for enterprise project.
400	RMS.00010021	The max length of project id array must be between 1 and 10.	The number of project IDs must be 1 to 10.	Enter 1 to 10 project IDs.
400	RMS.00010022	The max length of project id must be less than or equal to 36.	Project id cannot be more than 36 characters.	Enter 1 to 36 characters for project id.
400	RMS.00010023	project id is illegal.	Invalid value for project id.	Specify a valid value for project id.
400	RMS.00010024	The minimum value of limit must be greater than or equal to 1.	Limit cannot be smaller than 1.	Specify a valid value for limit.
400	RMS.00010025	The maximum value of limit must be less than or equal to 200.	Limit cannot be more than 200.	Specify a valid value for limit.
400	RMS.00010026	The minimum value of offset must be greater than or equal to 1.	Offset cannot be smaller than 1.	Specify a valid value for offset.

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Status Code	Error Codes	Error Message	Description	Solution
400	RMS.00010027	The maximum value of offset must be less than or equal to 1000.	Offset cannot be more than 1000.	Specify a valid value for offset.
400	RMS.00010028	The number of tag keys must be between 1 and 5.	Invalid number of tag keys.	Enter 1 to 5 tag keys.
400	RMS.00010029	The length of a tag key must be less than or equal to 128.	Tag key cannot be more than 128 characters.	Enter 1 to 128 characters for tag key.
400	RMS.00010030	The number of values in a tag key must be less than or equal to 5.	The number of values for a tag key cannot be more than 5.	Specify a valid number of tag key values.
400	RMS.00010031	The length of a tag value must be less than or equal to 255.	Tag value cannot be more than 255 characters.	Enter 1 to 255 characters for tag value.
400	RMS.00010032	Tag value is illegal.	Invalid value for Tag value.	Specify a valid value for Tag value.
400	RMS.00010033	Tag key is illegal.	Invalid value for Tag key.	Specify a valid value for Tag key.
400	RMS.00010034	marker is illegal.	Invalid value for marker.	Specify a valid value for marker.
400	RMS.00010035	The length of marker must be between 4 and 400.	Invalid marker length. Value range: 4–400 characters	Enter 4 to 400 characters for marker.

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Status Code	Error Codes	Error Message	Description	Solution
400	RMS.00010036	The minimum value of limit must be greater than or equal to 1.	Limit cannot be smaller than 1.	Specify a valid value for limit.
400	RMS.00010037	The maximum value of limit must be less than or equal to 200.	Limit cannot be more than 200.	Specify a valid value for limit.
400	RMS.00010038	The minimum value of offset must be greater than or equal to 1.	Offset cannot be smaller than 1.	Specify a valid value for offset.
400	RMS.00010039	The maximum value of offset must be less than or equal to 1000.	Offset cannot be more than 1000.	Specify a valid value for offset.
400	RMS.00010040	The max length of auth action must be less than or equal to 64.	Auth action cannot be more than 64 characters.	Enter 1 to 64 characters for auth action.
400	RMS.00010041	policy assignment id is illegal.	Invalid value for policy assignment id.	Specify a valid value for policy assignment id.
400	RMS.00010042	policy definition id is illegal.	Invalid value for policy definition id.	Specify a valid value for policy definition id.
400	RMS.00010043	The max length of policy assignment id must be less than or equal to 36.	Policy assignment id cannot be more than 36 characters.	Enter 1 to 36 characters for policy definition id.

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Status Code	Error Codes	Error Message	Description	Solution
400	RMS.00010044	The max length of policy definition id must be less than or equal to 36.	Policy definition id cannot be more than 36 characters.	Enter 1 to 36 characters for policy definition id.
400	RMS.00010045	The max length of name must be less than or equal to 64.	Name cannot be more than 64 characters.	Enter 1 to 64 characters for name.
400	RMS.00010046	name is illegal.	Invalid value for name.	Specify a valid value for name.
400	RMS.00010047	The max length of keyword must be less than or equal to 64.	keyword cannot be more than 64 characters.	Enter 1 to 64 characters for keyword.
400	RMS.00010048	keyword is illegal.	Invalid value for keyword .	Specify a valid value for keyword.
400	RMS.00010049	The max length of compliance state must be less than or equal to 16.	Compliance state cannot be more than 16 characters.	Enter 1 to 16 characters for compliance state.
400	RMS.00010050	compliance state is illegal.	Invalid value for compliance state.	Specify a valid value for compliance state.
400	RMS.00010051	The max length of policy assignment state must be less than or equal to 16.	Policy assignment state cannot be more than 16 characters.	Enter 1 to 16 characters for policy assignment state.
400	RMS.00010052	policy assignment state is illegal.	Invalid value for policy assignment state.	Specify a valid value for policy assignment state.

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Status Code	Error Codes	Error Message	Description	Solution
400	RMS.00010053	X-Language header is invalid.	Invalid value for X-Language header.	Specify a valid value for X-Language header.
400	RMS.00010054	The max length of queryId must be less than or equal to 36.	QueryId cannot be more than 36 characters.	Enter 1 to 36 characters for QueryId.
400	RMS.00010055	QueryId is illegal.	Invalid value for QueryId.	Specify a valid value for QueryId.
400	RMS.00010056	The minimum value of limit must be greater than or equal to 1.	Limit cannot be smaller than 1.	Specify a valid value for limit.
400	RMS.00010057	The maximum value of limit must be less than or equal to 200.	Limit cannot be more than 200.	Specify a valid value for limit.
400	RMS.00010058	marker is illegal.	Invalid value for marker.	Specify a valid value for marker.
400	RMS.00010059	The length of marker must be between 4 and 400.	Marker must contain 4 to 400 characters.	Enter 4 to 400 characters for marker.
400	RMS.00010060	Incorrect resource query language.	Incorrect advanced query statement.	Check whether the advanced query statement is correct.
400	RMS.00010061	Stored query name is illegal.	Invalid advanced query name.	Check the request parameter.
400	RMS.00010062	The length of stored query name must be between 1 and 64.	The advanced query name must contain 1 to 64 characters.	Enter 1 to 64 characters for the advanced query name.

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Status Code	Error Codes	Error Message	Description	Solution
400	RMS.00010064	Organization_id is illegal.	Invalid value for organization_id.	Specify a valid value for organization_id.
400	RMS.00010065	Organization_id length must be between 1 and 34.	Invalid organization_id length. Value range: 1–34 characters	Enter 1 to 34 characters for organization_id.
400	RMS.00010066	Organization_policy_assignment_id is illegal.	Invalid value for organization_policy_assignment_id.	Specify a valid value for organization_policy_assignment_id.
400	RMS.00010067	Organization_policy_assignment_id length must be between 1 and 32.	Invalid organization_policy_assignment_id length. Value range: 1–32 characters	Enter 1 to 32 characters for organization_policy_assignment_id.
400	RMS.00010068	Organization_policy_assignment_name is illegal.	Invalid value for organization_policy_assignment_name.	Specify a valid value for organization_policy_assignment_name.
400	RMS.00010069	Organization_policy_assignment_name must be between 1 and 64.	Invalid organization_policy_assignment_name length. Value range: 1–64 characters	Enter 1 to 64 characters for organization_policy_assignment_name.
400	RMS.00010070	The aggregator is not found.	Aggregator not found.	Ensure that the aggregator exists.
400	RMS.00010071	Aggregator_id is illegal.	Invalid value for aggregator_id.	Specify a valid value for aggregator_id.

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Status Code	Error Codes	Error Message	Description	Solution
400	RMS.00010072	Aggregator_id length must be between 1 and 32.	Invalid aggregator_id length. Value range: 1–32 characters	Enter 1 to 36 characters for aggregator_id.
400	RMS.00010073	Authorized_account_id is illegal.	Invalid value for authorized_account_id.	Specify a valid value for authorized_account_id.
400	RMS.00010074	Authorized_account_id length must be between 1 and 36.	Invalid authorized_account_id length. Value range: 1–36 characters	Enter 1 to 36 characters for authorized_account_id.
400	RMS.00010075	Requester_account_id is illegal.	Invalid value for requester_account_id.	Specify a valid value for requester_account_id.
400	RMS.00010076	Requester_account_id length must be between 1 and 36.	Invalid requester_account_id length. Value range: 1–36 characters	Enter 1 to 36 characters for requester_account_id.
400	RMS.00010077	Aggregator_name is illegal.	Invalid value for aggregator_name.	Specify a valid value for aggregator_name.
400	RMS.00010078	Aggregator_name length must be between 1 and 64.	Invalid aggregator_name length. Value range: 1–64 characters	Enter 1 to 64 characters for aggregator_name.
400	RMS.00010080	Aggregator_update_status length must be between 1 and 16.	Invalid aggregator_update_status length. Value range: 1–16 characters	Enter 1 to 36 characters for aggregator_update_status.

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Status Code	Error Codes	Error Message	Description	Solution
400	RMS.00010081	The maximum value of limit is 2000.	Limit cannot be more than 2000.	Specify a valid value for limit.
400	RMS.00010082	The number of aggregators exceed quota.	The number of aggregators exceed quota. The quota of organization aggregator is 1, account aggregator is 30.	Delete useless aggregators.
400	RMS.00010083	Conformance_pack_name is illegal.	Invalid value for conformance_pack_name.	Specify a valid value for conformance_pack_name.
400	RMS.00010084	Conformance_pack_name length must be between 1 and 64.	Invalid conformance_pack_name length. Value range: 1–64 characters	Enter 1 to 64 characters for conformance_pack_name.
400	RMS.00010085	Conformance_pack_id is illegal.	Invalid value for conformance_pack_id.	Specify a valid value for conformance_pack_id.
400	RMS.00010086	Conformance_pack_id length must be between 1 and 36.	Invalid conformance_pack_id length. Value range: 1–36 characters	Enter 1 to 36 characters for conformance_pack_id.
400	RMS.00010087	Template_key is illegal.	Invalid value for template_key.	Specify a valid value for template_key.
400	RMS.00010088	Template_key length must be between 1 and 128.	Invalid template_key length. Value range: 1–128 characters	Enter 1 to 128 characters for template_key.

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Status Code	Error Codes	Error Message	Description	Solution
400	RMS.00010089	Template_id is illegal.	Invalid value for template_id.	Specify a valid value for template_id.
400	RMS.00010090	Template_id length must be between 1 and 36.	Invalid template_id length. Value range: 1–36 characters	Enter 1 to 36 characters for template_id.
400	RMS.00010091	The tracker-config is not enabled.	The tracker-config is not enabled.	Enable the tracker-config.
400	RMS.00010092	The number of accounts operated by the aggregator exceeds the limit.	The aggregator operation has exceeded the limit. The maximum number of accounts that can be added or removed from the account aggregator within seven days is 1000	Please check if the maximum number of accounts added or removed within seven days exceeds 1000.
400	RMS.00010093	Exceeded limit on organization aggregator operations.	The aggregator operation has exceeded the limit. the maximum number of new additions to the organization aggregator within one day is 1.	Please check the number of organization aggregators created within a day.
400	RMS.00010101	The maximum value of limit must be less than or equal to 500.	Limit cannot be more than 500.	Specify a valid value for limit.

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Status Code	Error Codes	Error Message	Description	Solution
401	RMS.00010079	Incorrect IAM authentication information: Authorization header is missing.	Incorrect IAM authentication information: Authorization header is missing.	Add authentication header.
403	RMS.00010006	access denied.	Access denied.	Check whether you have the required permissions.
404	RMS.00010005	resource not found.	Resource not found.	Ensure that the resource exists.
429	RMS.00010063	ResourceQL is busy.	Advanced queries are busy.	Try again later.
500	RMS.INTERNAL.ERROR	Internal server error occurred.	Service internal error occurred.	Try again later or contact customer service.

6.2 Supported Services and Resource Types

You can obtain cloud services (**provider**) and resources (**type**) supported by RMSConfig in either of the following ways:

- Calling APIs

  You can call the API for **listing cloud services** to query cloud services, resources, and regions supported by Config. The **provider** field indicates the cloud service name, and the **name** field in **resource_types** indicates the resource type name.

- Management console

  For details about the services and resources supported by Config, see **Supported Services and Regions**. You can view related information in the **Resource Type** column of the list.

6.3 Obtaining an Account ID

An account ID is required for some URLs when an API is called. To obtain an account ID, perform the following operations:

1. Log in to the management console.
2. Hover over the username and select **My Credentials** from the drop-down list.

   View the account ID on the **API Credentials** page.

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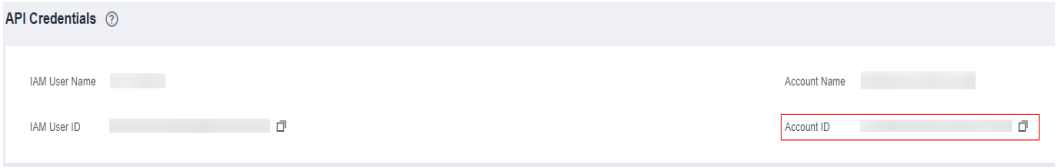
Figure 6-1 Obtaining an account ID



6.4 Status Codes

- Normal

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

- Abnormal

Returned Value	Description
400 Bad Request	The server failed to process the request.
401 Unauthorized	You must enter a username and password to access the requested page.
403 Forbidden	You are forbidden to access the requested page.
404 Not Found	The server cannot find the requested page.
405 Method Not Allowed	You are not allowed to use the method specified in the request.
406 Not Acceptable	The response generated by the server cannot be accepted by the client.
407 Proxy Authentication Required	You must use the proxy server for authentication so that the request can be processed.
408 Request Timeout	The request timed out.
409 Conflict	The request could not be processed due to a conflict.

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Returned Value	Description
500 Internal Server Error	Failed to complete the request because of a service error.
501 Not Implemented	Failed to complete the request because the server does not support the requested function.
502 Bad Gateway	Failed to complete the request because the request is invalid.
503 Service Unavailable	Failed to complete the request. The service is unavailable.
504 Gateway Timeout	A gateway timeout error occurred.

6.5 Obtaining a Project ID

Scenarios

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

- **Obtain the Project ID by Calling an API**
- **Obtain the Project ID from the Console**

Obtain the Project ID by Calling an API

You can obtain a project ID by calling the API used to **query projects based on specified criteria**.

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

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

```
{
    "projects": [
        {
            "domain_id": "65ewtrgaggshhk1223245sghjlse684b",
            "is_domain": false,
            "parent_id": "65ewtrgaggshhk1223245sghjlse684b",
            "name": "project_name",
            "description": "",
            "links": {
                "next": null,
                "previous": null,
                "self": "https://www.example.com/v3/projects/a4adasfjljaaaakla12334jklga9sasfg"
            },
            "id": "a4adasfjljaaaakla12334jklga9sasfg",
            "enabled": true
        }
    ],
    "links": {
        "next": null,
```

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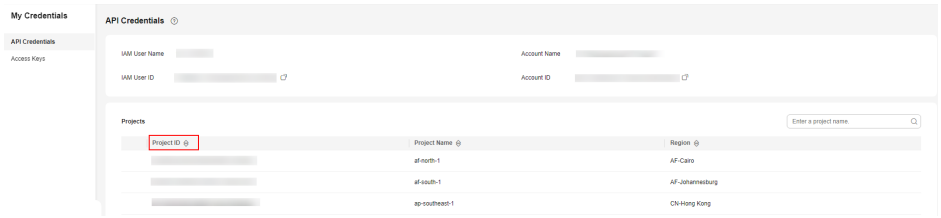
```
    "previous": null,
    "self": "https://www.example.com/v3/projects"
  }
}
```

Obtain a Project ID from the Console

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

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

Figure 6-2 Viewing the project ID



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