

EventGrid

API Reference

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Contents

1 Before You Start.....	1
2 API Overview.....	3
3 Calling APIs.....	5
3.1 Making an API Request.....	5
3.2 Performing Authentication.....	7
3.3 Checking the Response.....	9
4 Getting Started.....	11
5 APIs.....	12
5.1 Event Subscription Management.....	12
5.1.1 Creating an Event Subscription.....	12
5.1.2 Obtaining the Event Subscription List.....	27
5.1.3 Updating an Event Subscription.....	34
5.1.4 Obtaining Event Subscription Details.....	47
5.1.5 Deleting an Event Subscription.....	54
5.1.6 Updating an Event Subscription Source.....	55
5.1.7 Creating an Event Subscription Target.....	59
5.1.8 Updating an Event Subscription Target.....	70
5.1.9 Obtaining Event Subscription Target Details.....	80
5.1.10 Deleting an Event Subscription Target.....	86
5.1.11 Enabling or Disabling Event Subscriptions.....	88
5.2 Event Channel Management.....	90
5.2.1 Creating a Custom Event Channel.....	90
5.2.2 Obtaining the Event Channel List.....	93
5.2.3 Updating a Custom Event Channel.....	96
5.2.4 Obtaining Event Channel Details.....	99
5.2.5 Deleting a Custom Event Channel.....	101
5.3 Event Management.....	103
5.3.1 Viewing Event Trace Details.....	103
5.3.2 Obtaining Sent Message Content.....	107
5.3.3 Obtaining the Event Trace List.....	108
5.3.4 Publishing an Event to an Event Channel.....	111
5.3.5 Publishing an Official Event to an Event Channel.....	114

5.3.6 Prechecking Event Publishing Status.....	117
5.4 Event Source Management.....	120
5.4.1 Creating a Custom Event Source.....	120
5.4.2 Obtaining the Event Source List.....	124
5.4.3 Updating a Custom Event Source.....	127
5.4.4 Obtaining Event Source Details.....	131
5.4.5 Deleting a Custom Event Source.....	134
5.5 Event Target Catalog Management.....	135
5.5.1 Obtaining the Event Target Catalog.....	135
5.6 Connection Management.....	138
5.6.1 Creating a Connection.....	138
5.6.2 Obtaining the Connection List.....	144
5.6.3 Updating a Connection.....	149
5.6.4 Obtaining Connection Details.....	153
5.6.5 Deleting a Connection.....	157
5.7 Service Agency Management.....	158
5.7.1 Obtaining the Service Agency List.....	158
5.7.2 Creating a Service Agency.....	160
5.8 Quota Management.....	161
5.8.1 Obtaining the Quota.....	162
5.9 API Version Management.....	164
5.9.1 Obtaining the API Version List.....	164
5.10 Trigger Management.....	166
5.10.1 Obtaining the EG Trigger of a Function.....	166
5.10.2 Obtaining the EG Trigger of a Function Flow.....	173
5.11 Endpoint Management.....	180
5.11.1 Updating an Endpoint.....	180
5.11.2 Deleting an Endpoint.....	183
5.11.3 Creating an Endpoint.....	184
5.11.4 Obtaining the Endpoint List.....	188
5.12 OBS Bucket Management.....	191
5.12.1 Obtaining the OBS Bucket List.....	191
5.12.2 Refurbishing OBS.....	194
5.13 Event Example Management.....	201
5.13.1 Obtaining the Event Example List.....	201
6 Permissions Policies and Supported Actions.....	205
7 Appendix.....	209
7.1 Status Codes.....	209
7.2 Error Codes.....	212
7.3 Obtaining a Project ID.....	215
7.4 Obtaining the Account Name and Account ID.....	216

8 Description.....217

1 Before You Start

Welcome to EventGrid (EG)

EventGrid (EG) is a serverless event bus service for standard and centralized access of Huawei Cloud services and custom or SaaS applications. You can build a loosely coupled, distributed event-driven architecture to flexibly route events via CloudEvents.

This document provides API descriptions, syntax, parameters, and examples of EG.

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

Constraints

- EG is continuously upgraded with new functions, and the existing APIs may be adjusted. For example, new response parameters may be added. To reduce the impact of API changes, EG is backward compatible with APIs when possible. However, when you use EG, you should accept and ignore unused parameters and parameter values in returned content (in JSON format).
- The number of EG resources that you can create is determined by your quotas. To increase your quotas, see [My Quotas](#).
- For more constraints, see API description.

Endpoints

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

Concepts

- Account
An account 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 and should not be used directly to perform routine management. For security purposes, create IAM users and grant them permissions for routine management.

- **User**
An IAM user is created using an account to use cloud services. Each IAM user has their own identity credentials (password and access keys).
The account name, username, and password will be required for API authentication.
- **Region:** A region is a geographic area in which cloud resources are deployed. Availability zones (AZs) in the same region can communicate with each other over an intranet, while AZs in different regions are isolated from each other. Deploying cloud resources in different regions can better suit certain user requirements or comply with local laws or regulations.
- **AZ:** An AZ contains one or more physical data centers. Each AZ has independent cooling, fire extinguishing, moisture-proof, and electricity facilities. Within an AZ, compute, network, storage, and other resources are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to allow you to build cross-AZ high-availability systems.
- **Project**
A project corresponds to a region. Projects are preset by the system and have physically isolated resources (including compute, storage, and network resources) across regions. Users can be granted permissions in a default project to access all resources in the region associated with the project. If you need more refined access control, create subprojects under a default project and create resources in subprojects. Then you can assign users the permissions required to access only the resources in the specific subprojects.
- **Enterprise project**
Enterprise projects group and manage resources across regions. Resources in enterprise projects are logically isolated. An enterprise project can contain resources in multiple regions, and resources can be directly transferred between enterprise projects.
For details about how to obtain enterprise project IDs and features, see the [Enterprise Management User Guide](#).

2 API Overview

Table 2-1 describes the EG APIs.

Table 2-1 API overview

API	Description
Event Subscription Management	Create, update, delete, and enable/disable event subscriptions, query the event subscription list and details, and update event subscription sources. Create, update, delete, and query event subscription targets.
Event Channel Management	Create, update, and delete custom event channels, and query the event channel list and details.
Event Management	Publish an event to an event channel and precheck the event publishing status.
Event Source Management	Create, update, and delete custom event sources, and query the event source list and details.
Event Target Catalog Management	Query event target catalogs.
Connection Management	Create, update, and delete connections, and query the connection list and details.
Service Agency Management	Query and create service agencies.
Quota Management	Query quotas.
API Version Management	Obtain the API version list.
Trigger Management	Query the EG trigger of a function or a function flow.

API	Description
Endpoint Management	Update, delete, create, and query access endpoints.
OBS Bucket Management	Obtain the OBS bucket list.

3 Calling APIs

3.1 Making an API Request

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

Request URI

A request URI is in the following format:

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

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

- **URI-scheme:**
Protocol used to transmit requests. All APIs use **HTTPS**.
- **Endpoint:**
Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from "Regions and Endpoints".
For example, the endpoint of IAM in the **EU-Dublin** region is **iam.eu-west-101.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.

 NOTE

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

Request Methods

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

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

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

```
https://iam.eu-west-101.myhuaweicloud.com/v3/auth/tokens
```

Request Header

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

Common request headers are as follows:

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

 NOTE

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

For details, see [AK/SK Authentication](#).

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

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

Request Body

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

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

In the case of the API used to [obtain a user token](#), the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Replace **username**, **domainname**, ********* (login password), and **xxxxxxxxxxxxxxxxxxxxx** (project name) with the actual values (for example, **eu-west-101**). The project name can be obtained from "Regions and Endpoints".

NOTE

The **scope** parameter specifies where a token takes effect. In the following example, the token takes effect only for the resources in a specified project. For more information about this API, see [Obtaining a User Token](#).

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

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

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

3.2 Performing Authentication

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

- Token authentication: Requests are authenticated using tokens.

- AK/SK authentication: Requests are encrypted using an AK/SK. AK/SK authentication is recommended because it is more secure than token authentication.

Constraints

- 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.
- For AK/SK authentication, the signing SDK is only used for signing requests and is different from the SDKs provided by services.

Token Authentication

NOTE

A token is valid for 24 hours. If a token is required, the system caches the token to avoid frequent calling.

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

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

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

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

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

AK/SK Authentication

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

- AK: a unique identifier used in conjunction with an SK to sign requests cryptographically.
- SK: used 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 use the signing SDK to sign requests. For details about how to sign requests and use the signing SDK, see [API Request Signing Guide](#).

3.3 Checking the 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](#).

If status code **201** is returned for the calling of the API for [obtaining a user token](#), the request is successful.

Response Headers

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

[Figure 3-1](#) shows the response header for the API of [obtaining a user token](#), in which **x-subject-token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

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

```
connection → keep-alive
content-type → application/json
date → Tue, 12 Feb 2019 06:52:13 GMT
server → Web Server
strict-transport-security → max-age=31536000; includeSubdomains;
transfer-encoding → chunked
via → proxy A
x-content-type-options → nosniff
x-download-options → noopen
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token → MIIVXQYJKoZIhvcNAQcCoIIYJCCEoCAQExDAlBgIghkgB8ZQMEAgEwgharBgkqhkiG9w0BBwGgghacBIIWmHsidG9rZW4iO3siZXhwaXJlc19hdCI6IjIwMTk0MTNUMC
fj3KJ56YgKnpVNRbW2eZ5eb78SZ0kqjACgkqlQ01wi4JlGzrpd18LGXK5tdfq4lqHCYb8P4NaY0NYejcAgz/VeFYtLWT1GSO0zxKZmlQHqJ82HBqHdglZO9fuEbL5dMhdavj+33wEI
xHRCE9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXl1jipPEGA270g1FrucL6jaglfKfNPQuFSOU8+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUbpvGw-oPNFYxjECKnoH3HRozv0vN--n5d6Nbxg==
x-xss-protection → 1; mode=block;
```

Response Body (Optional)

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

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

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

```

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

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

4 Getting Started

Application Scenario

You can create a custom event source based on service requirements.

For details on how to call APIs, see [Calling APIs](#).

Prerequisites

- IAM endpoint obtained from Regions and Endpoints.
- EG endpoint obtained from Regions and Endpoints.

Creating an Event Source

Step 1 Create a custom channel by calling the [event channel creation](#) API.

```
POST https://{endpoint}/v1/{project_id}/channels
```

```
{
  "name" : "channel",
  "description" : "first channel"
}
```

- name: custom channel name.
- description: description of a custom channel.

Step 2 Create a custom event source by calling the [event source creation](#) API.

```
POST https://{endpoint}/v1/{project_id}/sources
```

```
{
  "name" : "first-source",
  "description" : "first event source",
  "channel_id" : "bd14144e-8f3c-43d6-bdfd-bf09b52c2b96"
}
```

- name: custom event source name.
- description: description of a custom event source.
- channel_id: Obtain the channel ID from the response of [Step 1](#).

----End

5 APIs

5.1 Event Subscription Management

5.1.1 Creating an Event Subscription

Function

This API is used to create an event subscription.

URI

POST /v1/{project_id}/subscriptions

Table 5-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-2 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of an enterprise project used for creating a subscription.

Request Parameters

Table 5-3 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-4 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the event subscription. The value must be unique under a tenant. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit.
description	No	String	Description of the event subscription.
channel_id	Yes	String	ID of the event channel to which the event subscription belongs.
sources	Yes	Array of SubscriptionSource objects	List of event subscription sources. Currently, only one event source can be subscribed to.
targets	Yes	Array of SubscriptionTarget objects	List of event subscription targets. At least one event target must be subscribed to.

Table 5-5 SubscriptionSource

Parameter	Mandatory	Type	Description
id	No	String	ID of the subscription source, which must be globally unique. If the subscription source with the specified ID exists, the subscription source is updated. Otherwise, the subscription source is created. If no ID is specified, the system automatically generates an ID when creating the subscription source. Only lowercase letters, digits, and hyphens (-) are allowed. It must start with a letter or digit.
name	Yes	String	Name of the event subscription source.
provider_type	Yes	String	Provider type of the event subscription source.
detail	No	Object	List of event subscription source parameters. The total length of this field after serialization cannot exceed 1024 bytes.
filter	Yes	Object	Filtering rule of the event subscription source. The total length of this field after serialization cannot exceed 2048 bytes.

Table 5-6 SubscriptionTarget

Parameter	Mandatory	Type	Description
id	No	String	Subscription target ID. The value must be globally unique. Only lowercase letters, digits, and hyphens (-) are allowed. It must start with a letter or digit. In the subscription update scenario, if the subscription target with the specified ID exists, the subscription target is updated. Otherwise, the subscription target is created. If no ID is specified, the system automatically generates an ID when creating the subscription target. If an ID is specified, the ID is used as the subscription target ID. This field is ignored when the subscription target is updated.
name	Yes	String	Name of the event subscription target.
provider_type	Yes	String	Provider type of the event subscription target.
connection_id	No	String	Connection ID used by the event subscription target.
detail	No	Object	List of event target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for function (urn, invoke_type, and agency_name), function flow (workflow_id and agency_name), and webhook (url) targets. An agency name must be specified for a function or function flow.
kafka_detail	No	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.

Parameter	Mandatory	Type	Description
smn_detail	No	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.
eg_detail	No	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	No	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.
retry_times	No	Integer	Number of retries.
transform	Yes	Transform object	Transform rule of the event subscription target.
dead_letter_queue	No	DeadLetterQueue object	List of dead letter queue parameters for the subscription.

Table 5-7 KafkaTargetDetail

Parameter	Mandatory	Type	Description
topic	Yes	String	Topic.
keyTransform	No	keyTransform object	Key value rule.

Table 5-8 keyTransform

Parameter	Mandatory	Type	Description
type	No	String	Type of the key value rule.
value	No	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.

Parameter	Mandatory	Type	Description
template	No	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-9 SmnTargetDetail

Parameter	Mandatory	Type	Description
urn	Yes	String	Specifies the topic URN.
agency_name	Yes	String	Agency name.
subject_transform	No	subject_transform object	Title rule.

Table 5-10 subject_transform

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the title rule.
value	Yes	String	Title rule.
template	No	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-11 EgTargetDetail

Parameter	Mandatory	Type	Description
target_project_id	Yes	String	Target project ID.
target_channel_id	Yes	String	Target channel ID.
target_region	Yes	String	Target region.
cross_region	No	Boolean	Indicates whether cross-region feature is enabled.
cross_account	No	Boolean	Indicates whether cross-account feature is enabled.
agency_name	Yes	String	Agency name.

Table 5-12 ApigwTargetDetail

Parameter	Mandatory	Type	Description
url	Yes	String	Target URL.
invocation_http_parameters	No	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-13 InvocationHttpParameters

Parameter	Mandatory	Type	Description
header_parameters	No	Array of HeaderParameter objects	Object list.

Table 5-14 HeaderParameter

Parameter	Mandatory	Type	Description
is_value_secret	No	Boolean	Whether to encrypt the value.
key	No	String	Header key.
value	No	String	Header value.

Table 5-15 Transform

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the transform rule.

Parameter	Mandatory	Type	Description
value	No	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	No	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-16 DeadLetterQueue

Parameter	Mandatory	Type	Description
type	Yes	String	Queue type.
instance_id	Yes	String	Instance ID.
connection_id	Yes	String	Connection ID.
topic	Yes	String	Topic.

Response Parameters

Status code: 200

Table 5-17 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-18 Response body parameters

Parameter	Type	Description
id	String	Subscription ID.
name	String	Subscription name.
description	String	Description of the subscription.
type	String	Subscription type.
status	String	Status.
channel_id	String	ID of the event channel.
channel_name	String	Name of the event channel.
used	Array of SubscriptionUsedInfo objects	Label information.
sources	Array of SubscriptionSourceInfo objects	List of subscription sources.
targets	Array of SubscriptionTargetInfo objects	List of subscription targets.
created_time	String	Time when the trigger is created.
updated_time	String	Time when the trigger is updated.

Table 5-19 SubscriptionUsedInfo

Parameter	Type	Description
resource_id	String	Associated resource ID.
owner	String	Management tenant account.
description	String	Description.

Table 5-20 SubscriptionSourceInfo

Parameter	Type	Description
id	String	ID of the event subscription source.
name	String	Name of the event subscription source.
provider_type	String	Provider type of the event subscription source.
detail	Object	List of event subscription source parameters.
filter	Object	Filtering rule of the event subscription source.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-21 SubscriptionTargetInfo

Parameter	Type	Description
id	String	ID of the event subscription target.
name	String	Name of the event subscription target.
provider_type	String	Provider type of the event subscription target.
connection_id	String	Connection ID used by the event subscription target.
detail	Object	List of event subscription target parameters.
kafka_detail	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.
smn_detail	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.

Parameter	Type	Description
eg_detail	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.
retry_times	Integer	Number of retries.
transform	Transform object	Transform rule of the event subscription target.
dead_letter_queue	DeadLetterQueue object	List of dead letter queue parameters for the subscription.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-22 KafkaTargetDetail

Parameter	Type	Description
topic	String	Topic.
keyTransform	keyTransform object	Key value rule.

Table 5-23 keyTransform

Parameter	Type	Description
type	String	Type of the key value rule.
value	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.
template	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-24 SmnTargetDetail

Parameter	Type	Description
urn	String	Specifies the topic URN.
agency_name	String	Agency name.
subject_transform	subject_transform object	Title rule.

Table 5-25 subject_transform

Parameter	Type	Description
type	String	Type of the title rule.
value	String	Title rule.
template	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-26 EgTargetDetail

Parameter	Type	Description
target_project_id	String	Target project ID.
target_channel_id	String	Target channel ID.
target_region	String	Target region.
cross_region	Boolean	Indicates whether cross-region feature is enabled.
cross_account	Boolean	Indicates whether cross-account feature is enabled.
agency_name	String	Agency name.

Table 5-27 ApigwTargetDetail

Parameter	Type	Description
url	String	Target URL.
invocation_http_parameters	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-28 InvocationHttpParameters

Parameter	Type	Description
header_parameters	Array of HeaderParameter objects	Object list.

Table 5-29 HeaderParameter

Parameter	Type	Description
is_value_secret	Boolean	Whether to encrypt the value.
key	String	Header key.
value	String	Header value.

Table 5-30 Transform

Parameter	Type	Description
type	String	Type of the transform rule.
value	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-31 DeadLetterQueue

Parameter	Type	Description
type	String	Queue type.
instance_id	String	Instance ID.
connection_id	String	Connection ID.
topic	String	Topic.

Example Requests

Create an event subscription named test-subscription.

POST https://{endpoint}/v1/{project_id}/subscriptions

```
{
  "name" : "test-subscription",
  "description" : "this is a test subscription",
  "channel_id" : "05649f9a-b324-4920-9c49-156d4cd2e546",
  "sources" : [ {
    "id" : "3a0eeff2-78a4-4122-dfge-7ty5e37f64er",
    "name" : "HC.OBS",
    "provider_type" : "OFFICIAL",
    "detail" : {
      "name" : "name"
    }
  },
  "filter" : {
    "data" : {
      "count" : [ {
        "op" : "NumberIn",
        "values" : [ 1, 2 ]
      } ]
    }
  }
},
  "targets" : [ {
    "id" : "3a0eeff2-78a4-4122-dfge-7ty5e37f64er",
    "name" : "WEBHOOK",
    "provider_type" : "CUSTOM",
    "connection_id" : "456eekj3-778u-4tyu-dfrt-er55e37f667t",
    "detail" : {
      "url" : "http://10.213.96.90:8080/t/nodeapp/trigger-hello-nodejs",
      "agency_name" : "EG_TARGET_AGENCY",
      "urn" : "urn:fss:cn-north-7:bac852160cc743158936edaab6dda813:function:default:gxtestjava:latest",
      "invoke_type" : "ASYNCR",
      "workflow_id" : "86afc904-0019-46c8-baed-0225967c1b98"
    }
  },
  "kafka_detail" : {
    "topic" : "8516d278-268a-4a8b-8766-9bf9b3302f43",
    "keyTransform" : {
      "type" : "NONE",
      "value" : "string",
      "template" : "string"
    }
  },
  "smn_detail" : {
    "urn" : "urn:smn:cn-north-7:bac852160cc743158936edaab6dda813:122",
    "agency_name" : "EG_SMN_PUBLISHER_AGENCY",
    "subject_transform" : {
      "type" : "VARIABLE",
      "value" : "string",
      "template" : "string"
    }
  }
}
```

```
    },
    "eg_detail" : {
      "target_project_id" : "c5be311886934b7c8afb4f8970376130",
      "target_channel_id" : "10a79a30-bd4a-4955-a3ec-d62dc799347b",
      "target_region" : "cn-north-test",
      "cross_region" : false,
      "cross_account" : false,
      "agency_name" : "EG_TARGET_AGENCY"
    },
    "apigw_detail" : {
      "url" : "https://dms.cn-north-4.myhuaweicloud.com/testaaa",
      "invocation_http_parameters" : {
        "header_parameters" : [ {
          "is_value_secret" : false,
          "key" : "test-key",
          "value" : "test-value"
        } ]
      }
    },
    "retry_times" : 16,
    "transform" : {
      "type" : "VARIABLE",
      "value" : "{ \"contant_boolean\": true, \"contant_string\": \"constant\", \"variable_string\": \"$.data.string\", \"variable_json_object\": \"$.data.object\" }",
      "template" : "{ \"contant_boolean\": ${contant_boolean}, \"contant_string\": \"${contant_string!\\\\\"default\\\\\"}\" , \"variable_string\": \"${contant_boolean}\", \"variable_json_object\": \"${variable_json_object!\"null\"}\" }",
      "dead_letter_queue" : {
        "type" : "KAFKA",
        "instance_id" : "ff0e3f10-fcab-4c3a-84bb-cf5a8b6f7722",
        "connection_id" : "8516d278-268a-4a8b-8766-9bf9b3302f43",
        "topic" : "topic"
      }
    }
  }
}
```

Example Responses

Status code: 200

Demo Information

```
{
  "id" : "23709d68-54d5-423b-a6be-03302e893152",
  "name" : "test-subscription",
  "description" : "this is a test subscription",
  "type" : "EVENT",
  "status" : "CREATED",
  "channel_id" : "05649f9a-b324-4920-9c49-156d4cd2e546",
  "channel_name" : "channel006",
  "used" : [ { } ],
  "sources" : [ { } ],
  "targets" : [ { } ],
  "created_time" : "2021-12-09 09:00:00",
  "updated_time" : "2021-12-09 09:00:00"
}
```

Status Codes

Status Code	Description
200	Demo Information

Error Codes

See [Error Codes](#).

5.1.2 Obtaining the Event Subscription List

Function

This API is used to obtain the event subscription list. An event channel can be specified.

URI

GET /v1/{project_id}/subscriptions

Table 5-32 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-33 Query Parameters

Parameter	Mandatory	Type	Description
channel_id	No	String	ID of the event channel.
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
limit	No	Integer	Number of records displayed on each page. The value must be within the range [1, 1000].
sort	No	String	Sorting mode of the query results.
name	No	String	Name of the event subscription. It is used for exact match.
fuzzy_name	No	String	Name of the event subscription. It is used for fuzzy match.
connection_id	No	String	ID of the connection.
enterprise_project_id	No	String	ID of an enterprise project used for creating a subscription.

Request Parameters

Table 5-34 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-35 Response body parameters

Parameter	Type	Description
total	Integer	Total number of records.
size	Integer	Number of records displayed on the current page.
items	Array of SubscriptionInfo objects	Object list.

Table 5-36 SubscriptionInfo

Parameter	Type	Description
id	String	Subscription ID.
name	String	Subscription name.
description	String	Description of the subscription.
type	String	Subscription type.
status	String	Status.
channel_id	String	ID of the event channel.
channel_name	String	Name of the event channel.
used	Array of SubscriptionUse- dInfo objects	Label information.

Parameter	Type	Description
sources	Array of SubscriptionSourceInfo objects	List of subscription sources.
targets	Array of SubscriptionTargetInfo objects	List of subscription targets.
created_time	String	Time when the trigger is created.
updated_time	String	Time when the trigger is updated.

Table 5-37 SubscriptionUsedInfo

Parameter	Type	Description
resource_id	String	Associated resource ID.
owner	String	Management tenant account.
description	String	Description.

Table 5-38 SubscriptionSourceInfo

Parameter	Type	Description
id	String	ID of the event subscription source.
name	String	Name of the event subscription source.
provider_type	String	Provider type of the event subscription source.
detail	Object	List of event subscription source parameters.
filter	Object	Filtering rule of the event subscription source.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-39 SubscriptionTargetInfo

Parameter	Type	Description
id	String	ID of the event subscription target.
name	String	Name of the event subscription target.
provider_type	String	Provider type of the event subscription target.
connection_id	String	Connection ID used by the event subscription target.
detail	Object	List of event subscription target parameters.
kafka_detail	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.
smn_detail	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.
eg_detail	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.
retry_times	Integer	Number of retries.
transform	TransForm object	Transform rule of the event subscription target.
dead_letter_queue	DeadLetterQueue object	List of dead letter queue parameters for the subscription.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-40 KafkaTargetDetail

Parameter	Type	Description
topic	String	Topic.
keyTransform	keyTransform object	Key value rule.

Table 5-41 keyTransform

Parameter	Type	Description
type	String	Type of the key value rule.
value	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.
template	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-42 SmnTargetDetail

Parameter	Type	Description
urn	String	Specifies the topic URN.
agency_name	String	Agency name.
subject_transform	subject_transform object	Title rule.

Table 5-43 subject_transform

Parameter	Type	Description
type	String	Type of the title rule.
value	String	Title rule.
template	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-44 EgTargetDetail

Parameter	Type	Description
target_project_id	String	Target project ID.
target_channel_id	String	Target channel ID.
target_region	String	Target region.
cross_region	Boolean	Indicates whether cross-region feature is enabled.
cross_account	Boolean	Indicates whether cross-account feature is enabled.
agency_name	String	Agency name.

Table 5-45 ApigwTargetDetail

Parameter	Type	Description
url	String	Target URL.
invocation_http_parameters	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-46 InvocationHttpParameters

Parameter	Type	Description
header_parameters	Array of HeaderParameter objects	Object list.

Table 5-47 HeaderParameter

Parameter	Type	Description
is_value_secret	Boolean	Whether to encrypt the value.
key	String	Header key.
value	String	Header value.

Table 5-48 TransForm

Parameter	Type	Description
type	String	Type of the transform rule.
value	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-49 DeadLetterQueue

Parameter	Type	Description
type	String	Queue type.
instance_id	String	Instance ID.
connection_id	String	Connection ID.
topic	String	Topic.

Example Requests

Obtain the event subscription list.

```
GET https://{endpoint}/v1/{project_id}/subscriptions
```

Example Responses

Status code: 200

Operation successful.

```
{
  "total" : 1,
  "size" : 1,
  "items" : [ { } ]
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.1.3 Updating an Event Subscription

Function

This API is used to update an event subscription.

URI

PUT /v1/{project_id}/subscriptions/{subscription_id}

Table 5-50 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
subscription_id	Yes	String	ID of the event subscription.

Table 5-51 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of an enterprise project used for creating a subscription.

Request Parameters

Table 5-52 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-53 Request body parameters

Parameter	Mandatory	Type	Description
description	No	String	Description of the event subscription.
sources	No	Array of SubscriptionSource objects	List of event subscription sources. If this field exists, all subscription sources are updated.
targets	No	Array of SubscriptionTarget objects	List of event subscription targets. If this field exists, all subscription targets are updated.

Table 5-54 SubscriptionSource

Parameter	Mandatory	Type	Description
id	No	String	ID of the subscription source, which must be globally unique. If the subscription source with the specified ID exists, the subscription source is updated. Otherwise, the subscription source is created. If no ID is specified, the system automatically generates an ID when creating the subscription source. Only lowercase letters, digits, and hyphens (-) are allowed. It must start with a letter or digit.

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the event subscription source.
provider_type	Yes	String	Provider type of the event subscription source.
detail	No	Object	List of event subscription source parameters. The total length of this field after serialization cannot exceed 1024 bytes.
filter	Yes	Object	Filtering rule of the event subscription source. The total length of this field after serialization cannot exceed 2048 bytes.

Table 5-55 SubscriptionTarget

Parameter	Mandatory	Type	Description
id	No	String	Subscription target ID. The value must be globally unique. Only lowercase letters, digits, and hyphens (-) are allowed. It must start with a letter or digit. In the subscription update scenario, if the subscription target with the specified ID exists, the subscription target is updated. Otherwise, the subscription target is created. If no ID is specified, the system automatically generates an ID when creating the subscription target. If an ID is specified, the ID is used as the subscription target ID. This field is ignored when the subscription target is updated.
name	Yes	String	Name of the event subscription target.
provider_type	Yes	String	Provider type of the event subscription target.
connection_id	No	String	Connection ID used by the event subscription target.

Parameter	Mandatory	Type	Description
detail	No	Object	List of event target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for function (urn, invoke_type, and agency_name), function flow (workflow_id and agency_name), and webhook (url) targets. An agency name must be specified for a function or function flow.
kafka_detail	No	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.
smn_detail	No	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.
eg_detail	No	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	No	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.
retry_times	No	Integer	Number of retries.
transform	Yes	Transform object	Transform rule of the event subscription target.
dead_letter_queue	No	DeadLetterQueue object	List of dead letter queue parameters for the subscription.

Table 5-56 KafkaTargetDetail

Parameter	Mandatory	Type	Description
topic	Yes	String	Topic.
keyTransform	No	keyTransform object	Key value rule.

Table 5-57 keyTransform

Parameter	Mandatory	Type	Description
type	No	String	Type of the key value rule.
value	No	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.
template	No	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-58 SmnTargetDetail

Parameter	Mandatory	Type	Description
urn	Yes	String	Specifies the topic URN.
agency_name	Yes	String	Agency name.
subject_transform	No	subject_transform object	Title rule.

Table 5-59 subject_transform

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the title rule.
value	Yes	String	Title rule.
template	No	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-60 EgTargetDetail

Parameter	Mandatory	Type	Description
target_project_id	Yes	String	Target project ID.
target_channel_id	Yes	String	Target channel ID.
target_region	Yes	String	Target region.
cross_region	No	Boolean	Indicates whether cross-region feature is enabled.
cross_account	No	Boolean	Indicates whether cross-account feature is enabled.
agency_name	Yes	String	Agency name.

Table 5-61 ApigwTargetDetail

Parameter	Mandatory	Type	Description
url	Yes	String	Target URL.
invocation_http_parameters	No	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-62 InvocationHttpParameters

Parameter	Mandatory	Type	Description
header_parameters	No	Array of HeaderParameter objects	Object list.

Table 5-63 HeaderParameter

Parameter	Mandatory	Type	Description
is_value_secret	No	Boolean	Whether to encrypt the value.
key	No	String	Header key.
value	No	String	Header value.

Table 5-64 TransForm

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the transform rule.
value	No	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	No	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-65 DeadLetterQueue

Parameter	Mandatory	Type	Description
type	Yes	String	Queue type.
instance_id	Yes	String	Instance ID.
connection_id	Yes	String	Connection ID.
topic	Yes	String	Topic.

Response Parameters

Status code: 200

Table 5-66 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-67 Response body parameters

Parameter	Type	Description
id	String	Subscription ID.
name	String	Subscription name.
description	String	Description of the subscription.
type	String	Subscription type.
status	String	Status.
channel_id	String	ID of the event channel.
channel_name	String	Name of the event channel.
used	Array of SubscriptionUsedInfo objects	Label information.
sources	Array of SubscriptionSourceInfo objects	List of subscription sources.
targets	Array of SubscriptionTargetInfo objects	List of subscription targets.
created_time	String	Time when the trigger is created.
updated_time	String	Time when the trigger is updated.

Table 5-68 SubscriptionUsedInfo

Parameter	Type	Description
resource_id	String	Associated resource ID.
owner	String	Management tenant account.
description	String	Description.

Table 5-69 SubscriptionSourceInfo

Parameter	Type	Description
id	String	ID of the event subscription source.
name	String	Name of the event subscription source.
provider_type	String	Provider type of the event subscription source.
detail	Object	List of event subscription source parameters.
filter	Object	Filtering rule of the event subscription source.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-70 SubscriptionTargetInfo

Parameter	Type	Description
id	String	ID of the event subscription target.
name	String	Name of the event subscription target.
provider_type	String	Provider type of the event subscription target.
connection_id	String	Connection ID used by the event subscription target.
detail	Object	List of event subscription target parameters.
kafka_detail	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.
smn_detail	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.

Parameter	Type	Description
eg_detail	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.
retry_times	Integer	Number of retries.
transform	TransForm object	Transform rule of the event subscription target.
dead_letter_queue	DeadLetterQueue object	List of dead letter queue parameters for the subscription.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-71 KafkaTargetDetail

Parameter	Type	Description
topic	String	Topic.
keyTransform	keyTransform object	Key value rule.

Table 5-72 keyTransform

Parameter	Type	Description
type	String	Type of the key value rule.
value	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.
template	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-73 SmnTargetDetail

Parameter	Type	Description
urn	String	Specifies the topic URN.
agency_name	String	Agency name.
subject_transform	subject_transform object	Title rule.

Table 5-74 subject_transform

Parameter	Type	Description
type	String	Type of the title rule.
value	String	Title rule.
template	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-75 EgTargetDetail

Parameter	Type	Description
target_project_id	String	Target project ID.
target_channel_id	String	Target channel ID.
target_region	String	Target region.
cross_region	Boolean	Indicates whether cross-region feature is enabled.
cross_account	Boolean	Indicates whether cross-account feature is enabled.
agency_name	String	Agency name.

Table 5-76 ApigwTargetDetail

Parameter	Type	Description
url	String	Target URL.
invocation_http_parameters	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-77 InvocationHttpParameters

Parameter	Type	Description
header_parameters	Array of HeaderParameter objects	Object list.

Table 5-78 HeaderParameter

Parameter	Type	Description
is_value_secret	Boolean	Whether to encrypt the value.
key	String	Header key.
value	String	Header value.

Table 5-79 Transform

Parameter	Type	Description
type	String	Type of the transform rule.
value	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-80 DeadLetterQueue

Parameter	Type	Description
type	String	Queue type.
instance_id	String	Instance ID.
connection_id	String	Connection ID.
topic	String	Topic.

Example Requests

Update an event subscription.

PUT https://{endpoint}/v1/{project_id}/subscriptions/{subscription_id}

```
{
  "description": "For development",
  "sources": [ {
    "detail": { },
    "filter": {
      "source": [ {
        "op": "StringIn",
        "values": [ "ghm" ]
      } ]
    },
    "id": "4fca4f29-917b-44d3-bb30-4310f89d08cb",
    "name": "ghm",
    "provider_type": "CUSTOM"
  } ],
  "targets": [ {
    "id": "4261f07e-975c-457f-aa91-0bd33d64baba",
    "name": "HC.SMN",
    "provider_type": "OFFICIAL",
    "retry_times": 16,
    "smn_detail": {
      "agency_name": "EG_TARGET_AGENCY",
      "urn": "urn:smn:cn-north-7:bac852160cc743158936edaab6dda813:CES_notification_group_xMXxPQ1ry"
    },
    "transform": {
      "type": "ORIGINAL",
      "value": ""
    }
  } ]
}
```

Example Responses

Status code: 200

Information

```
{
  "id": "23709d68-54d5-423b-a6be-03302e893152",
  "name": "test-subscription",
  "description": "this is a test subscription",
  "type": "EVENT",
  "status": "CREATED",
  "channel_id": "05649f9a-b324-4920-9c49-156d4cd2e546",
  "channel_name": "channel006",
  "used": [ { } ],
  "sources": [ { } ],
}
```

```
"targets" : [ { } ],  
"created_time" : "2021-12-09 09:00:00",  
"updated_time" : "2021-12-09 09:00:00"  
}
```

Status Codes

Status Code	Description
200	Information

Error Codes

See [Error Codes](#).

5.1.4 Obtaining Event Subscription Details

Function

This API is used to obtain the details of an event subscription.

URI

GET /v1/{project_id}/subscriptions/{subscription_id}

Table 5-81 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
subscription_id	Yes	String	ID of the event subscription.

Table 5-82 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of an enterprise project used for creating a subscription.

Request Parameters

Table 5-83 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200**Table 5-84** Response body parameters

Parameter	Type	Description
id	String	Subscription ID.
name	String	Subscription name.
description	String	Description of the subscription.
type	String	Subscription type.
status	String	Status.
channel_id	String	ID of the event channel.
channel_name	String	Name of the event channel.
used	Array of SubscriptionUse- dInfo objects	Label information.
sources	Array of SubscriptionSou- rceInfo objects	List of subscription sources.
targets	Array of SubscriptionTar- getInfo objects	List of subscription targets.
created_time	String	Time when the trigger is created.
updated_time	String	Time when the trigger is updated.

Table 5-85 SubscriptionUsedInfo

Parameter	Type	Description
resource_id	String	Associated resource ID.
owner	String	Management tenant account.
description	String	Description.

Table 5-86 SubscriptionSourceInfo

Parameter	Type	Description
id	String	ID of the event subscription source.
name	String	Name of the event subscription source.
provider_type	String	Provider type of the event subscription source.
detail	Object	List of event subscription source parameters.
filter	Object	Filtering rule of the event subscription source.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-87 SubscriptionTargetInfo

Parameter	Type	Description
id	String	ID of the event subscription target.
name	String	Name of the event subscription target.
provider_type	String	Provider type of the event subscription target.
connection_id	String	Connection ID used by the event subscription target.
detail	Object	List of event subscription target parameters.
kafka_detail	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.

Parameter	Type	Description
smn_detail	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.
eg_detail	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.
retry_times	Integer	Number of retries.
transform	Transform object	Transform rule of the event subscription target.
dead_letter_queue	DeadLetterQueue object	List of dead letter queue parameters for the subscription.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-88 KafkaTargetDetail

Parameter	Type	Description
topic	String	Topic.
keyTransform	keyTransform object	Key value rule.

Table 5-89 keyTransform

Parameter	Type	Description
type	String	Type of the key value rule.
value	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.

Parameter	Type	Description
template	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-90 SmnTargetDetail

Parameter	Type	Description
urn	String	Specifies the topic URN.
agency_name	String	Agency name.
subject_transform	subject_transform object	Title rule.

Table 5-91 subject_transform

Parameter	Type	Description
type	String	Type of the title rule.
value	String	Title rule.
template	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-92 EgTargetDetail

Parameter	Type	Description
target_project_id	String	Target project ID.
target_channel_id	String	Target channel ID.
target_region	String	Target region.
cross_region	Boolean	Indicates whether cross-region feature is enabled.
cross_account	Boolean	Indicates whether cross-account feature is enabled.
agency_name	String	Agency name.

Table 5-93 ApigwTargetDetail

Parameter	Type	Description
url	String	Target URL.
invocation_http_parameters	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-94 InvocationHttpParameters

Parameter	Type	Description
header_parameters	Array of HeaderParameter objects	Object list.

Table 5-95 HeaderParameter

Parameter	Type	Description
is_value_secret	Boolean	Whether to encrypt the value.
key	String	Header key.
value	String	Header value.

Table 5-96 Transform

Parameter	Type	Description
type	String	Type of the transform rule.

Parameter	Type	Description
value	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-97 DeadLetterQueue

Parameter	Type	Description
type	String	Queue type.
instance_id	String	Instance ID.
connection_id	String	Connection ID.
topic	String	Topic.

Example Requests

Obtain event subscription details.

```
GET https://{endpoint}/v1/{project_id}/subscriptions/{subscription_id}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "id" : "23709d68-54d5-423b-a6be-03302e893152",
  "name" : "test-subscription",
```

```
"description" : "this is a test subscription",
"type" : "EVENT",
"status" : "CREATED",
"channel_id" : "05649f9a-b324-4920-9c49-156d4cd2e546",
"channel_name" : "channel006",
"used" : [ { } ],
"sources" : [ { } ],
"targets" : [ { } ],
"created_time" : "2021-12-09 09:00:00",
"updated_time" : "2021-12-09 09:00:00"
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.1.5 Deleting an Event Subscription

Function

This API is used to delete an event subscription.

URI

DELETE /v1/{project_id}/subscriptions/{subscription_id}

Table 5-98 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
subscription_id	Yes	String	ID of the event subscription.

Table 5-99 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of an enterprise project used for creating a subscription.

Request Parameters

Table 5-100 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 204

Operation successful.

None

Example Requests

Delete an event subscription.

```
DELETE https://{endpoint}/v1/{project_id}/subscriptions/{subscription_id}
```

Example Responses

None

Status Codes

Status Code	Description
204	Operation successful.

Error Codes

See [Error Codes](#).

5.1.6 Updating an Event Subscription Source

Function

This API is used to update the source of an event subscription.

URI

```
PUT /v1/{project_id}/subscriptions/{subscription_id}/sources/{source_id}
```

Table 5-101 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
subscription_id	Yes	String	ID of the event subscription.
source_id	Yes	String	ID of the event source.

Table 5-102 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of an enterprise project used for creating a subscription.

Request Parameters

Table 5-103 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-104 Request body parameters

Parameter	Mandatory	Type	Description
id	No	String	ID of the subscription source, which must be globally unique. If the subscription source with the specified ID exists, the subscription source is updated. Otherwise, the subscription source is created. If no ID is specified, the system automatically generates an ID when creating the subscription source. Only lowercase letters, digits, and hyphens (-) are allowed. It must start with a letter or digit.
name	Yes	String	Name of the event subscription source.
provider_type	Yes	String	Provider type of the event subscription source.
detail	No	Object	List of event subscription source parameters. The total length of this field after serialization cannot exceed 1024 bytes.
filter	Yes	Object	Filtering rule of the event subscription source. The total length of this field after serialization cannot exceed 2048 bytes.

Response Parameters

Status code: 200

Table 5-105 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-106 Response body parameters

Parameter	Type	Description
id	String	ID of the event subscription source.
name	String	Name of the event subscription source.
provider_type	String	Provider type of the event subscription source.
detail	Object	List of event subscription source parameters.
filter	Object	Filtering rule of the event subscription source.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Example Requests

Update an event subscription source.

PUT https://{endpoint}/v1/{project_id}/subscriptions/{subscription_id}/sources/{source_id}

```
{
  "id" : "3a0eeff2-78a4-4122-dfge-7ty5e37f64er",
  "name" : "HC.OBS",
  "provider_type" : "OFFICIAL",
  "detail" : {
    "name" : "name"
  },
  "filter" : {
    "data" : {
      "count" : [ {
        "op" : "NumberIn",
        "values" : [ 1, 2 ]
      } ]
    }
  }
}
```

Example Responses

Status code: 200

Information

```
{
  "id" : "3a0eeff2-78a4-4122-dfge-7ty5e37f64er",
  "name" : "HC.OBS",
  "provider_type" : "OFFICIAL",
  "detail" : {
    "name" : "name"
  },
  "filter" : {
    "data" : {
```

```
{
  "count": [ {
    "op": "NumberIn",
    "values": [ 1, 2 ]
  } ]
},
"created_time": "2021-12-09 09:00:00",
"updated_time": "2021-12-09 09:00:00"
}
```

Status Codes

Status Code	Description
200	Information

Error Codes

See [Error Codes](#).

5.1.7 Creating an Event Subscription Target

Function

This API is used to create a target for an event subscription.

URI

POST /v1/{project_id}/subscriptions/{subscription_id}/targets

Table 5-107 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
subscription_id	Yes	String	ID of the event subscription.

Table 5-108 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of an enterprise project used for creating a subscription.

Request Parameters

Table 5-109 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-110 Request body parameters

Parameter	Mandatory	Type	Description
id	No	String	Subscription target ID. The value must be globally unique. Only lowercase letters, digits, and hyphens (-) are allowed. It must start with a letter or digit. In the subscription update scenario, if the subscription target with the specified ID exists, the subscription target is updated. Otherwise, the subscription target is created. If no ID is specified, the system automatically generates an ID when creating the subscription target. If an ID is specified, the ID is used as the subscription target ID. This field is ignored when the subscription target is updated.
name	Yes	String	Name of the event subscription target.
provider_type	Yes	String	Provider type of the event subscription target.
connection_id	No	String	Connection ID used by the event subscription target.

Parameter	Mandatory	Type	Description
detail	No	Object	List of event target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for function (urn, invoke_type, and agency_name), function flow (workflow_id and agency_name), and webhook (url) targets. An agency name must be specified for a function or function flow.
kafka_detail	No	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.
smn_detail	No	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.
eg_detail	No	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	No	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.
retry_times	No	Integer	Number of retries.
transform	Yes	Transform object	Transform rule of the event subscription target.
dead_letter_queue	No	DeadLetterQueue object	List of dead letter queue parameters for the subscription.

Table 5-111 KafkaTargetDetail

Parameter	Mandatory	Type	Description
topic	Yes	String	Topic.
keyTransform	No	keyTransform object	Key value rule.

Table 5-112 keyTransform

Parameter	Mandatory	Type	Description
type	No	String	Type of the key value rule.
value	No	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.
template	No	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-113 SmnTargetDetail

Parameter	Mandatory	Type	Description
urn	Yes	String	Specifies the topic URN.
agency_name	Yes	String	Agency name.
subject_transform	No	subject_transform object	Title rule.

Table 5-114 subject_transform

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the title rule.
value	Yes	String	Title rule.
template	No	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-115 EgTargetDetail

Parameter	Mandatory	Type	Description
target_project_id	Yes	String	Target project ID.
target_channel_id	Yes	String	Target channel ID.
target_region	Yes	String	Target region.
cross_region	No	Boolean	Indicates whether cross-region feature is enabled.
cross_account	No	Boolean	Indicates whether cross-account feature is enabled.
agency_name	Yes	String	Agency name.

Table 5-116 ApigwTargetDetail

Parameter	Mandatory	Type	Description
url	Yes	String	Target URL.
invocation_http_parameters	No	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-117 InvocationHttpParameters

Parameter	Mandatory	Type	Description
header_parameters	No	Array of HeaderParameter objects	Object list.

Table 5-118 HeaderParameter

Parameter	Mandatory	Type	Description
is_value_secret	No	Boolean	Whether to encrypt the value.
key	No	String	Header key.
value	No	String	Header value.

Table 5-119 TransForm

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the transform rule.
value	No	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	No	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-120 DeadLetterQueue

Parameter	Mandatory	Type	Description
type	Yes	String	Queue type.
instance_id	Yes	String	Instance ID.
connection_id	Yes	String	Connection ID.
topic	Yes	String	Topic.

Response Parameters

Status code: 200

Table 5-121 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-122 Response body parameters

Parameter	Type	Description
id	String	ID of the event subscription target.
name	String	Name of the event subscription target.
provider_type	String	Provider type of the event subscription target.
connection_id	String	Connection ID used by the event subscription target.
detail	Object	List of event subscription target parameters.
kafka_detail	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.
smn_detail	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.
eg_detail	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.
retry_times	Integer	Number of retries.
transform	TransForm object	Transform rule of the event subscription target.
dead_letter_queue	DeadLetterQueue object	List of dead letter queue parameters for the subscription.

Parameter	Type	Description
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-123 KafkaTargetDetail

Parameter	Type	Description
topic	String	Topic.
keyTransform	keyTransform object	Key value rule.

Table 5-124 keyTransform

Parameter	Type	Description
type	String	Type of the key value rule.
value	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.
template	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-125 SmnTargetDetail

Parameter	Type	Description
urn	String	Specifies the topic URN.
agency_name	String	Agency name.
subject_transform	subject_transform object	Title rule.

Table 5-126 subject_transform

Parameter	Type	Description
type	String	Type of the title rule.

Parameter	Type	Description
value	String	Title rule.
template	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-127 EgTargetDetail

Parameter	Type	Description
target_project_id	String	Target project ID.
target_channel_id	String	Target channel ID.
target_region	String	Target region.
cross_region	Boolean	Indicates whether cross-region feature is enabled.
cross_account	Boolean	Indicates whether cross-account feature is enabled.
agency_name	String	Agency name.

Table 5-128 ApigwTargetDetail

Parameter	Type	Description
url	String	Target URL.
invocation_http_parameters	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-129 InvocationHttpParameters

Parameter	Type	Description
header_parameters	Array of HeaderParameter objects	Object list.

Table 5-130 HeaderParameter

Parameter	Type	Description
is_value_secret	Boolean	Whether to encrypt the value.

Parameter	Type	Description
key	String	Header key.
value	String	Header value.

Table 5-131 Transform

Parameter	Type	Description
type	String	Type of the transform rule.
value	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-132 DeadLetterQueue

Parameter	Type	Description
type	String	Queue type.
instance_id	String	Instance ID.
connection_id	String	Connection ID.
topic	String	Topic.

Example Requests

Create an event subscription target.

POST https://{endpoint}/v1/{project_id}/subscriptions/{subscription_id}/targets

```
{
  "connection_id" : "456eekj3-778u-4tyu-dfrt-er55e37f667t",
  "detail" : {
    "agency_name" : "EG_TARGET_AGENCY",
    "invoke_type" : "ASYNC",
    "url" : "http://10.213.96.90:8080/t/nodeapp/trigger-hello-nodejs",
    "urn" : "urn:fss:cn-north-7:bac852160cc743158936edaab6dda813:function:default:gxtestjava:latest",
    "workflow_id" : "86afc904-0019-46c8-baed-0225967c1b98"
  },
  "id" : "3a0eeff2-78a4-4122-dfge-7ty5e37f64er",
  "name" : "WEBHOOK",
  "provider_type" : "CUSTOM",
  "retry_times" : 16,
  "transform" : {
    "type" : "VARIABLE"
  }
}
```

Example Responses

Status code: 200

Information

```
{
  "id" : "3a0eeff2-78a4-4122-dfge-7ty5e37f64er",
  "name" : "WEBHOOK",
  "provider_type" : "CUSTOM",
  "connection_id" : "456eekj3-778u-4tyu-dfrt-er55e37f667t",
  "detail" : {
    "url" : "http://10.213.96.90:8080/t/nodeapp/trigger-hello-nodejs"
  },
  "kafka_detail" : { },
  "smn_detail" : { },
  "eg_detail" : { },
  "apigw_detail" : { },
  "retry_times" : 16,
  "transform" : { },
  "dead_letter_queue" : { },
  "created_time" : "2021-12-09 09:00:00",
  "updated_time" : "2021-12-09 09:00:00"
}
```

Status Codes

Status Code	Description
200	Information

Error Codes

See [Error Codes](#).

5.1.8 Updating an Event Subscription Target

Function

This API is used to update the target of an event subscription.

URI

PUT /v1/{project_id}/subscriptions/{subscription_id}/targets/{target_id}

Table 5-133 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
subscription_id	Yes	String	ID of the event subscription.
target_id	Yes	String	ID of the event subscription target.

Table 5-134 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of an enterprise project used for creating a subscription.

Request Parameters

Table 5-135 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-136 Request body parameters

Parameter	Mandatory	Type	Description
id	No	String	Subscription target ID. The value must be globally unique. Only lowercase letters, digits, and hyphens (-) are allowed. It must start with a letter or digit. In the subscription update scenario, if the subscription target with the specified ID exists, the subscription target is updated. Otherwise, the subscription target is created. If no ID is specified, the system automatically generates an ID when creating the subscription target. If an ID is specified, the ID is used as the subscription target ID. This field is ignored when the subscription target is updated.
name	Yes	String	Name of the event subscription target.
provider_type	Yes	String	Provider type of the event subscription target.
connection_id	No	String	Connection ID used by the event subscription target.
detail	No	Object	List of event target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for function (urn, invoke_type, and agency_name), function flow (workflow_id and agency_name), and webhook (url) targets. An agency name must be specified for a function or function flow.
kafka_detail	No	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.

Parameter	Mandatory	Type	Description
smn_detail	No	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.
eg_detail	No	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	No	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.
retry_times	No	Integer	Number of retries.
transform	Yes	Transform object	Transform rule of the event subscription target.
dead_letter_queue	No	DeadLetterQueue object	List of dead letter queue parameters for the subscription.

Table 5-137 KafkaTargetDetail

Parameter	Mandatory	Type	Description
topic	Yes	String	Topic.
keyTransform	No	keyTransform object	Key value rule.

Table 5-138 keyTransform

Parameter	Mandatory	Type	Description
type	No	String	Type of the key value rule.
value	No	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.

Parameter	Mandatory	Type	Description
template	No	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-139 SmnTargetDetail

Parameter	Mandatory	Type	Description
urn	Yes	String	Specifies the topic URN.
agency_name	Yes	String	Agency name.
subject_transform	No	subject_transform object	Title rule.

Table 5-140 subject_transform

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the title rule.
value	Yes	String	Title rule.
template	No	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-141 EgTargetDetail

Parameter	Mandatory	Type	Description
target_project_id	Yes	String	Target project ID.
target_channel_id	Yes	String	Target channel ID.
target_region	Yes	String	Target region.
cross_region	No	Boolean	Indicates whether cross-region feature is enabled.
cross_account	No	Boolean	Indicates whether cross-account feature is enabled.
agency_name	Yes	String	Agency name.

Table 5-142 ApigwTargetDetail

Parameter	Mandatory	Type	Description
url	Yes	String	Target URL.
invocation_http_parameters	No	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-143 InvocationHttpParameters

Parameter	Mandatory	Type	Description
header_parameters	No	Array of HeaderParameter objects	Object list.

Table 5-144 HeaderParameter

Parameter	Mandatory	Type	Description
is_value_secret	No	Boolean	Whether to encrypt the value.
key	No	String	Header key.
value	No	String	Header value.

Table 5-145 TransForm

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the transform rule.

Parameter	Mandatory	Type	Description
value	No	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	No	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-146 DeadLetterQueue

Parameter	Mandatory	Type	Description
type	Yes	String	Queue type.
instance_id	Yes	String	Instance ID.
connection_id	Yes	String	Connection ID.
topic	Yes	String	Topic.

Response Parameters

Status code: 200

Table 5-147 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-148 Response body parameters

Parameter	Type	Description
id	String	ID of the event subscription target.
name	String	Name of the event subscription target.
provider_type	String	Provider type of the event subscription target.
connection_id	String	Connection ID used by the event subscription target.
detail	Object	List of event subscription target parameters.
kafka_detail	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.
smn_detail	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.
eg_detail	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.
retry_times	Integer	Number of retries.
transform	TransForm object	Transform rule of the event subscription target.
dead_letter_queue	DeadLetterQueue object	List of dead letter queue parameters for the subscription.

Parameter	Type	Description
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-149 KafkaTargetDetail

Parameter	Type	Description
topic	String	Topic.
keyTransform	keyTransform object	Key value rule.

Table 5-150 keyTransform

Parameter	Type	Description
type	String	Type of the key value rule.
value	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.
template	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-151 SmnTargetDetail

Parameter	Type	Description
urn	String	Specifies the topic URN.
agency_name	String	Agency name.
subject_transform	subject_transform object	Title rule.

Table 5-152 subject_transform

Parameter	Type	Description
type	String	Type of the title rule.

Parameter	Type	Description
value	String	Title rule.
template	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-153 EgTargetDetail

Parameter	Type	Description
target_project_id	String	Target project ID.
target_channel_id	String	Target channel ID.
target_region	String	Target region.
cross_region	Boolean	Indicates whether cross-region feature is enabled.
cross_account	Boolean	Indicates whether cross-account feature is enabled.
agency_name	String	Agency name.

Table 5-154 ApigwTargetDetail

Parameter	Type	Description
url	String	Target URL.
invocation_http_parameters	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-155 InvocationHttpParameters

Parameter	Type	Description
header_parameters	Array of HeaderParameter objects	Object list.

Table 5-156 HeaderParameter

Parameter	Type	Description
is_value_secret	Boolean	Whether to encrypt the value.

Parameter	Type	Description
key	String	Header key.
value	String	Header value.

Table 5-157 Transform

Parameter	Type	Description
type	String	Type of the transform rule.
value	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-158 DeadLetterQueue

Parameter	Type	Description
type	String	Queue type.
instance_id	String	Instance ID.
connection_id	String	Connection ID.
topic	String	Topic.

Example Requests

Update an event subscription target.

```
PUT https://{endpoint}/v1/{project_id}/subscriptions/{subscription_id}/targets/{target_id}

{
  "connection_id" : "456eekj3-778u-4tyu-dfrt-er55e37f667t",
  "detail" : {
    "agency_name" : "EG_TARGET_AGENCY",
    "invoke_type" : "ASYNC",
    "url" : "http://10.213.96.90:8080/t/nodeapp/trigger-hello-nodejs",
    "urn" : "urn:fss:cn-north-7:bac852160cc743158936edaab6dda813:function:default:gxtestjava:latest",
    "workflow_id" : "86afc904-0019-46c8-baed-0225967c1b98"
  },
  "id" : "3a0eeff2-78a4-4122-dfge-7ty5e37f64er",
  "name" : "WEBHOOK",
  "provider_type" : "CUSTOM",
  "retry_times" : 16,
  "transform" : {
    "type" : "VARIABLE"
  }
}
```

Example Responses

Status code: 200

Information

```
{
  "id" : "3a0eeff2-78a4-4122-dfge-7ty5e37f64er",
  "name" : "WEBHOOK",
  "provider_type" : "CUSTOM",
  "connection_id" : "456eekj3-778u-4tyu-dfrt-er55e37f667t",
  "detail" : {
    "url" : "http://10.213.96.90:8080/t/nodeapp/trigger-hello-nodejs"
  },
  "retry_times" : 16,
  "created_time" : "2021-12-09 09:00:00",
  "updated_time" : "2021-12-09 09:00:00"
}
```

Status Codes

Status Code	Description
200	Information

Error Codes

See [Error Codes](#).

5.1.9 Obtaining Event Subscription Target Details

Function

This API is used to obtain the details of an event subscription's target.

URI

GET /v1/{project_id}/subscriptions/{subscription_id}/targets/{target_id}

Table 5-159 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
subscription_id	Yes	String	ID of the event subscription.
target_id	Yes	String	ID of the event subscription target.

Table 5-160 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of an enterprise project used for creating a subscription.

Request Parameters

Table 5-161 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-162 Response body parameters

Parameter	Type	Description
id	String	ID of the event subscription target.
name	String	Name of the event subscription target.

Parameter	Type	Description
provider_type	String	Provider type of the event subscription target.
connection_id	String	Connection ID used by the event subscription target.
detail	Object	List of event subscription target parameters.
kafka_detail	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.
smn_detail	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.
eg_detail	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.
retry_times	Integer	Number of retries.
transform	Transform object	Transform rule of the event subscription target.
dead_letter_queue	DeadLetterQueue object	List of dead letter queue parameters for the subscription.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-163 KafkaTargetDetail

Parameter	Type	Description
topic	String	Topic.

Parameter	Type	Description
keyTransform	keyTransform object	Key value rule.

Table 5-164 keyTransform

Parameter	Type	Description
type	String	Type of the key value rule.
value	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.
template	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-165 SmnTargetDetail

Parameter	Type	Description
urn	String	Specifies the topic URN.
agency_name	String	Agency name.
subject_transform	subject_transform object	Title rule.

Table 5-166 subject_transform

Parameter	Type	Description
type	String	Type of the title rule.
value	String	Title rule.
template	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-167 EgTargetDetail

Parameter	Type	Description
target_project_id	String	Target project ID.

Parameter	Type	Description
target_channel_id	String	Target channel ID.
target_region	String	Target region.
cross_region	Boolean	Indicates whether cross-region feature is enabled.
cross_account	Boolean	Indicates whether cross-account feature is enabled.
agency_name	String	Agency name.

Table 5-168 ApigwTargetDetail

Parameter	Type	Description
url	String	Target URL.
invocation_http_parameters	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-169 InvocationHttpParameters

Parameter	Type	Description
header_parameters	Array of HeaderParameter objects	Object list.

Table 5-170 HeaderParameter

Parameter	Type	Description
is_value_secret	Boolean	Whether to encrypt the value.
key	String	Header key.
value	String	Header value.

Table 5-171 Transform

Parameter	Type	Description
type	String	Type of the transform rule.

Parameter	Type	Description
value	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-172 DeadLetterQueue

Parameter	Type	Description
type	String	Queue type.
instance_id	String	Instance ID.
connection_id	String	Connection ID.
topic	String	Topic.

Example Requests

Obtain event subscription target details.

```
GET https://{endpoint}/v1/{project_id}/subscriptions/{subscription_id}/targets/{target_id}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "id" : "3a0eeff2-78a4-4122-dfge-7ty5e37f64er",
  "name" : "WEBHOOK",
```

```
"provider_type" : "CUSTOM",
"connection_id" : "456eekj3-778u-4tyu-dfrt-er55e37f667t",
"detail" : {
  "url" : "http://10.213.96.90:8080/t/nodeapp/trigger-hello-nodejs"
},
"kafka_detail" : { },
"smn_detail" : { },
"eg_detail" : { },
"apigw_detail" : { },
"retry_times" : 16,
"transform" : { },
"dead_letter_queue" : { },
"created_time" : "2021-12-09 09:00:00",
"updated_time" : "2021-12-09 09:00:00"
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.1.10 Deleting an Event Subscription Target

Function

This API is used to delete the target of an event subscription.

URI

DELETE /v1/{project_id}/subscriptions/{subscription_id}/targets/{target_id}

Table 5-173 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
subscription_id	Yes	String	ID of the event subscription.
target_id	Yes	String	ID of the event subscription target.

Table 5-174 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of an enterprise project used for creating a subscription.

Request Parameters

Table 5-175 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 204

Operation successful.

None

Example Requests

Delete an event subscription target.

```
DELETE https://{endpoint}/v1/{project_id}/subscriptions/{subscription_id}/targets/{target_id}
```

Example Responses

None

Status Codes

Status Code	Description
204	Operation successful.

Error Codes

See [Error Codes](#).

5.1.11 Enabling or Disabling Event Subscriptions

Function

This API is used to enable or disable event subscriptions.

URI

POST /v1/{project_id}/subscriptions/operation

Table 5-176 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-177 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of an enterprise project used for creating a subscription.

Request Parameters

Table 5-178 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-179 Request body parameters

Parameter	Mandatory	Type	Description
subscription_ids	No	Array of strings	List of subscription IDs. A maximum of 10 subscriptions are supported in batch.
operation	No	String	Operation type.

Response Parameters

Status code: 200

Table 5-180 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-181 Response body parameters

Parameter	Type	Description
failed_count	Integer	Number of subscriptions that fail to be operated.
events	Array of events objects	Event list.

Table 5-182 events

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Failure cause.
subscription_id	String	Subscription ID.

Example Requests

Enable or disable event subscriptions.

```
POST https://{endpoint}/v1/{project_id}/subscriptions/operation
{
  "subscription_ids": [ "23709d68-54d5-423b-a6be-03302e893152" ],
  "operation": "DISABLE"
}
```

Example Responses

Status code: 200

Demo Information

```
{
  "failed_count": 0,
  "events": [ {
    "subscription_id": "23709d68-54d5-423b-a6be-03302e893152"
  }
]
```

```
}]  
}
```

Status Codes

Status Code	Description
200	Demo Information

Error Codes

See [Error Codes](#).

5.2 Event Channel Management

5.2.1 Creating a Custom Event Channel

Function

This API is used to create a custom event channel.

URI

POST /v1/{project_id}/channels

Table 5-183 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-184 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of an enterprise project used for creating a channel.

Request Parameters

Table 5-185 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-186 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the event channel. The value must be unique under a tenant. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot be default.
description	No	String	Description of the event channel.
enterprise_project_id	No	String	Enterprise project ID.
cross_account	No	Boolean	Indicates whether cross-account feature is enabled.
policy	No	Object	Policy.

Response Parameters

Status code: 200

Table 5-187 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-188 Response body parameters

Parameter	Type	Description
id	String	ID of the event channel.
name	String	Name of the event channel.
description	String	Description of the event channel.
provider_type	String	Event channel provider type, which can be OFFICIAL (official event channel), CUSTOM (custom event channel), or PARTNER (partner event channel).
created_time	String	UTC time when the event channel is created.
updated_time	String	UTC time when the event channel is updated.
enterprise_project_id	String	Enterprise project ID.

Example Requests

Create a custom event channel.

POST https://{endpoint}/v1/{project_id}/channels

```
{
  "name" : "channel",
  "description" : "first channel",
  "enterprise_project_id" : "string",
  "cross_account" : true,
  "policy" : {
    "additionalProp1" : {
      "Sid" : "allow_account_to_put_events",
      "Effect" : "Allow",
      "Principal" : {
        "additionalProp1" : {
          "IAM" : [ "domainID" ]
        },
        "additionalProp2" : {
          "IAM" : [ "domainID" ]
        },
        "additionalProp3" : {
          "IAM" : [ "domainID" ]
        }
      }
    },
    "Action" : "eg:channels:putEvents",
    "Resource" : "urn:eg:cn-east-2:07d52e5245000fef0f08c008b20dc5c0:channel:testChannel"
  },
  "additionalProp2" : {
    "Sid" : "allow_account_to_put_events",
    "Effect" : "Allow",
    "Principal" : {
      "additionalProp1" : {
        "IAM" : [ "domainID" ]
      },
      "additionalProp2" : {
        "IAM" : [ "domainID" ]
      }
    }
  }
}
```

```
    },
    "additionalProp3" : {
      "IAM" : [ "domainID" ]
    }
  },
  "Action" : "eg:channels:putEvents",
  "Resource" : "urn:eg:cn-east-2:07d52e5245000fef0f08c008b20dc5c0:channel:testChannel"
},
"additionalProp3" : {
  "Sid" : "allow_account_to_put_events",
  "Effect" : "Allow",
  "Principal" : {
    "additionalProp1" : {
      "IAM" : [ "domainID" ]
    }
  },
  "additionalProp2" : {
    "IAM" : [ "domainID" ]
  },
  "additionalProp3" : {
    "IAM" : [ "domainID" ]
  }
},
"Action" : "eg:channels:putEvents",
"Resource" : "urn:eg:cn-east-2:07d52e5245000fef0f08c008b20dc5c0:channel:testChannel"
}
}
```

Example Responses

Status code: 200

Demo Information

```
{
  "id" : "bd14144e-8f3c-43d6-bdfd-bf09b52c2b96",
  "name" : "channel",
  "description" : "first channel",
  "provider_type" : "CUSTOM",
  "created_time" : "2021-12-09 09:00:00",
  "updated_time" : "2021-12-09 09:00:00",
  "enterprise_project_id" : "string"
}
```

Status Codes

Status Code	Description
200	Demo Information

Error Codes

See [Error Codes](#).

5.2.2 Obtaining the Event Channel List

Function

This API is used to obtain the list of event channels, including system and custom channels.

URI

GET /v1/{project_id}/channels

Table 5-189 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-190 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
limit	No	Integer	Number of records displayed on each page. The value must be within the range [1, 1000].
sort	No	String	Sorting mode of the query results.
provider_type	No	String	Type of the provider.
name	No	String	Name of the event channel. It is used for exact match.
fuzzy_name	No	String	Name of the event channel. It is used for fuzzy match.
enterprise_project_id	No	String	Enterprise project ID for exact match.

Request Parameters

Table 5-191 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-192 Response body parameters

Parameter	Type	Description
total	Integer	Total number of records.
size	Integer	Number of records displayed on the current page.
items	Array of ChannelInfo objects	Object list.

Table 5-193 ChannelInfo

Parameter	Type	Description
id	String	ID of the event channel.
name	String	Name of the event channel.
description	String	Description of the event channel.
provider_type	String	Event channel provider type, which can be OFFICIAL (official event channel), CUSTOM (custom event channel), or PARTNER (partner event channel).
created_time	String	UTC time when the event channel is created.
updated_time	String	UTC time when the event channel is updated.
enterprise_project_id	String	Enterprise project ID.

Example Requests

Obtain the event channel list.

```
GET https://{endpoint}/v1/{project_id}/channels
```

Example Responses

Status code: 200

Operation successful.

```
{  
  "total" : 1,
```

```
"size" : 1,  
"items" : [ {} ]  
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.2.3 Updating a Custom Event Channel

Function

This API is used to update a custom event channel.

URI

PUT /v1/{project_id}/channels/{channel_id}

Table 5-194 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
channel_id	Yes	String	ID of the event channel.

Table 5-195 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	Enterprise project ID.

Request Parameters

Table 5-196 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-197 Request body parameters

Parameter	Mandatory	Type	Description
description	No	String	Description of the event channel.
enterprise_project_id	No	String	Enterprise project ID.
cross_account	No	Boolean	Indicates whether cross-account feature is enabled.
policy	No	Object	Policy.

Response Parameters

Status code: 200

Table 5-198 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-199 Response body parameters

Parameter	Type	Description
id	String	ID of the event channel.
name	String	Name of the event channel.
description	String	Description of the event channel.

Parameter	Type	Description
provider_type	String	Event channel provider type, which can be OFFICIAL (official event channel), CUSTOM (custom event channel), or PARTNER (partner event channel).
created_time	String	UTC time when the event channel is created.
updated_time	String	UTC time when the event channel is updated.
enterprise_project_id	String	Enterprise project ID.

Example Requests

Update a custom event channel.

PUT https://{endpoint}/v1/{project_id}/channels/{channel_id}

```
{
  "description": "first channel",
  "enterprise_project_id": "string",
  "cross_account": true,
  "policy": {
    "additionalProp1": {
      "Sid": "allow_account_to_put_events",
      "Effect": "Allow",
      "Principal": {
        "additionalProp1": {
          "IAM": [ "domainID" ]
        },
        "additionalProp2": {
          "IAM": [ "domainID" ]
        },
        "additionalProp3": {
          "IAM": [ "domainID" ]
        }
      },
      "Action": "eg:channels:putEvents",
      "Resource": "urn:eg:cn-east-2:07d52e5245000fef0f08c008b20dc5c0:channel:testChannel"
    },
    "additionalProp2": {
      "Sid": "allow_account_to_put_events",
      "Effect": "Allow",
      "Principal": {
        "additionalProp1": {
          "IAM": [ "domainID" ]
        },
        "additionalProp2": {
          "IAM": [ "domainID" ]
        },
        "additionalProp3": {
          "IAM": [ "domainID" ]
        }
      },
      "Action": "eg:channels:putEvents",
      "Resource": "urn:eg:cn-east-2:07d52e5245000fef0f08c008b20dc5c0:channel:testChannel"
    },
    "additionalProp3": {
      "Sid": "allow_account_to_put_events",
```

```
{
  "Effect": "Allow",
  "Principal": {
    "additionalProp1": {
      "IAM": [ "domainID" ]
    },
    "additionalProp2": {
      "IAM": [ "domainID" ]
    },
    "additionalProp3": {
      "IAM": [ "domainID" ]
    }
  },
  "Action": "eg:channels:putEvents",
  "Resource": "urn:eg:cn-east-2:07d52e5245000fef0f08c008b20dc5c0:channel:testChannel"
}
```

Example Responses

Status code: 200

Information

```
{
  "id": "bd14144e-8f3c-43d6-bdfd-bf09b52c2b96",
  "name": "channel",
  "description": "first channel",
  "provider_type": "CUSTOM",
  "created_time": "2021-12-09 09:00:00",
  "updated_time": "2021-12-09 09:00:00",
  "enterprise_project_id": "string"
}
```

Status Codes

Status Code	Description
200	Information

Error Codes

See [Error Codes](#).

5.2.4 Obtaining Event Channel Details

Function

This API is used to obtain the details about an event channel.

URI

GET /v1/{project_id}/channels/{channel_id}

Table 5-200 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
channel_id	Yes	String	ID of the event channel.

Table 5-201 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	Enterprise project ID.

Request Parameters

Table 5-202 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-203 Response body parameters

Parameter	Type	Description
id	String	ID of the event channel.
name	String	Name of the event channel.
description	String	Description of the event channel.
provider_type	String	Event channel provider type, which can be OFFICIAL (official event channel), CUSTOM (custom event channel), or PARTNER (partner event channel).
created_time	String	UTC time when the event channel is created.

Parameter	Type	Description
updated_time	String	UTC time when the event channel is updated.
enterprise_project_id	String	Enterprise project ID.

Example Requests

Obtain event channel details.

```
GET https://{endpoint}/v1/{project_id}/channels/{channel_id}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "id" : "bd14144e-8f3c-43d6-bdfd-bf09b52c2b96",
  "name" : "channel",
  "description" : "first channel",
  "provider_type" : "CUSTOM",
  "created_time" : "2021-12-09 09:00:00",
  "updated_time" : "2021-12-09 09:00:00",
  "enterprise_project_id" : "string"
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.2.5 Deleting a Custom Event Channel

Function

This API is used to delete a custom event channel.

URI

```
DELETE /v1/{project_id}/channels/{channel_id}
```

Table 5-204 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
channel_id	Yes	String	ID of the event channel.

Table 5-205 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	Enterprise project ID.

Request Parameters

Table 5-206 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 204

Operation successful.

None

Example Requests

Delete a custom event channel.

```
DELETE https://{endpoint}/v1/{project_id}/channels/{channel_id}
```

Example Responses

None

Status Codes

Status Code	Description
204	Operation successful.

Error Codes

See [Error Codes](#).

5.3 Event Management

5.3.1 Viewing Event Trace Details

Function

This API is used to view details about delivering an event from the source to the target.

URI

GET /v1/{project_id}/events/trace/detail/{trace_id}

Table 5-207 Path Parameters

Parameter	Mandatory	Type	Description
trace_id	Yes	String	Unique event ID.
project_id	Yes	String	Tenant resource space ID.

Table 5-208 Query Parameters

Parameter	Mandatory	Type	Description
channel_id	Yes	String	Channel ID.

Request Parameters

Table 5-209 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-210 Response body parameters

Parameter	Type	Description
eventId	String	Event ID.
eventSource	String	Event source.
eventType	String	Event type.
receiveTime	String	Receiving time.
channelId	String	Channel ID.
channelName	String	Channel name.
deliverList	Array of DeliverItem objects	List of delivered events.

Table 5-211 DeliverItem

Parameter	Type	Description
subscriptionId	String	Subscription ID, which is globally unique.
subscriptionName	String	Subscription name.
successCounts	Integer	The number of successful deliveries.
failCounts	Integer	The number of failed deliveries.
allDeliverTimes	Integer	Total number of deliveries.

Parameter	Type	Description
deliverTargetList	Array of DeliverTarget objects	Delivery details.

Table 5-212 DeliverTarget

Parameter	Type	Description
deliverTargetId	String	Delivery target ID, that is, the event target ID.
deliverTargetName	String	Delivery target name, that is, the event target name.
deliverStatus	String	Delivery status. Options: SUCCESS or FAILED.
deliverDetailList	Array of DeliverDetail objects	Number of records to be displayed. For example, only the latest three records are displayed.

Table 5-213 DeliverDetail

Parameter	Type	Description
deliverTime	String	Delivery time. Format: yyyy/mm/dd xx:yy:zz
deliverStatus	String	Delivery status. Options: SUCCESS or FAILED.
deliverConsuming	String	Time spent in the delivery. Unit: ms.
deliverRspCode	String	Delivery response code.

Example Requests

View event trace details.

```
GET https://{endpoint}/v1/{project_id}/events/trace/detail/{trace_id}
```

Example Responses

Status code: 200

Event trace response body.

```
{
  "eventId" : "21637dd2-c4af-46e9-a4ba-f21b71deaa82",
  "eventSource" : null,
```

```
"eventType" : null,
"receiveTime" : 0,
"channelId" : "65688f41-81d4-479f-bd8f-9727e7595128",
"channelName" : "default",
"deliverList" : [ {
  "subscriptionId" : "83799a5c-4e3e-49e5-b2cf-a5aa38758ee0",
  "subscriptionName" : "subscription-03us",
  "successCounts" : 0,
  "failCounts" : 1,
  "allDeliverTimes" : 7,
  "deliverTargetList" : [ {
    "deliverTargetId" : "2ae78b38-46c5-4f64-a1d3-0fc6b0b9324e",
    "deliverTargetName" : "HC.FunctionGraph",
    "deliverStatus" : "fail",
    "deliverDetailList" : [ {
      "deliverTime" : "2023-03-17 18:37:38",
      "deliverStatus" : "FAILED",
      "deliverConsuming" : 1679049458706,
      "deliverRspCode" : ""
    }, {
      "deliverTime" : "2023-03-17 18:37:38",
      "deliverStatus" : "FAILED",
      "deliverConsuming" : 0,
      "deliverRspCode" : ""
    }, {
      "deliverTime" : "2023-03-17 18:37:38",
      "deliverStatus" : "FAILED",
      "deliverConsuming" : 0,
      "deliverRspCode" : ""
    }, {
      "deliverTime" : "2023-03-17 18:37:38",
      "deliverStatus" : "FAILED",
      "deliverConsuming" : 0,
      "deliverRspCode" : ""
    }, {
      "deliverTime" : "2023-03-17 18:37:38",
      "deliverStatus" : "FAILED",
      "deliverConsuming" : 0,
      "deliverRspCode" : ""
    }, {
      "deliverTime" : "2023-03-17 18:37:38",
      "deliverStatus" : "FAILED",
      "deliverConsuming" : 0,
      "deliverRspCode" : ""
    }
    ]
  }
]
}
```

Status Codes

Status Code	Description
200	Event trace response body.

Error Codes

See [Error Codes](#).

5.3.2 Obtaining Sent Message Content

Function

This API is used to obtain the details of an event based on the event ID.

URI

GET /v1/{project_id}/events/detail/{trace_id}

Table 5-214 Path Parameters

Parameter	Mandatory	Type	Description
trace_id	Yes	String	Unique ID of a trace.
project_id	Yes	String	Tenant resource space ID.

Request Parameters

Table 5-215 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-216 Response body parameters

Parameter	Type	Description
-	String	Operation successful.

Example Requests

Obtain sent message content.

GET https://{endpoint}/v1/{project_id}/events/detail/{trace_id}

Example Responses

Status code: 200

Event content.

string

Status Codes

Status Code	Description
200	Event content.

Error Codes

See [Error Codes](#).

5.3.3 Obtaining the Event Trace List

Function

This API is used to obtain the event trace list.

URI

GET /v1/{project_id}/traced-events

Table 5-217 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-218 Query Parameters

Parameter	Mandatory	Type	Description
start_time	Yes	Long	Start time for querying data.
end_time	Yes	Long	End time for querying data.
event_id	No	String	Event ID for query.
source_name	No	String	Event source name.
event_type	No	String	Event type for exact match.
subscription_name	No	String	Event subscription name.

Parameter	Mandatory	Type	Description
limit	No	String	Number of items displayed on each page. The value cannot be less than 0.
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
channel_id	Yes	String	Channel ID.

Request Parameters

Table 5-219 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-220 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-221 Response body parameters

Parameter	Type	Description
total	Integer	Total number.
size	Integer	Number of records displayed on the current page.

Parameter	Type	Description
result	Array of result objects	Event trace list.

Table 5-222 result

Parameter	Type	Description
subscription_name	String	Event subscription name.
source_name	String	Event source name.
source_provider	String	Event source provider.
event_type	String	Event type.
event_id	String	Event ID.
event_received_time	Integer	Event receiving time.

Example Requests

Obtain the event trace list.

GET https://{endpoint}/v1/{project_id}/traced-events

Example Responses

Status code: 200

Information

```
{
  "total": 1,
  "size": 1,
  "result": [ {
    "subscription_name": "subscription-xxxx",
    "source_name": "HC.SMN",
    "source_provider": "OFFICIAL",
    "event_type": "SMN:CloudTrace:ConsoleAction",
    "event_id": "ace774cb-d3f1-49c1-9d8b-9efd086ac9e00533366",
    "event_received_time": 1677651126823
  } ]
}
```

Status Codes

Status Code	Description
200	Information

Error Codes

See [Error Codes](#).

5.3.4 Publishing an Event to an Event Channel

Function

This API is used to publish an event to an event channel. The API is only used for debugging purposes.

URI

POST /v1/{project_id}/channels/{channel_id}/events

Table 5-223 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
channel_id	Yes	String	ID of the event channel.

Request Parameters

Table 5-224 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-225 Request body parameters

Parameter	Mandatory	Type	Description
events	No	Array of CloudEvents objects	CloudEvents event format definition. For details, see https://github.com/cloudevents/spec/blob/v1.0.1/spec.md .

Table 5-226 CloudEvents

Parameter	Mandatory	Type	Description
id	Yes	String	Event ID. The ID must be unique for the same event source.
source	Yes	String	Event source. The combination of source and id uniquely identifies an event. The URI-Reference format is used. For details, see https://tools.ietf.org/html/rfc3986#section-4.1 .
specversion	Yes	String	CloudEvents protocol version. The format is major.minor.
type	Yes	String	Event type.
datacontenttype	No	String	Event content format. Events use the MIME format and comply with RFC 2046. For details, see https://tools.ietf.org/html/rfc2046 .
dataschema	No	String	URI defined by the event content schema, which complies with RFC 3986. For details, see https://tools.ietf.org/html/rfc3986#section-4.3 .
data	No	Object	Event payload content, which uses the format specified by the datacontenttype field. The content field complies with the description of the dataschema field.
time	No	String	UTC time when the event occurs. Events from the same source have the same format, which complies with RFC 3339. An example format is 2018-04-05T17:31:00Z. For details, see https://tools.ietf.org/html/rfc3339 .
subject	No	String	Subject or object where the event occurs.

Response Parameters

Status code: 200

Table 5-227 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-228 Response body parameters

Parameter	Type	Description
failed_count	Integer	Number of events that fail to be published.
events	Array of events objects	Event list.

Table 5-229 events

Parameter	Type	Description
error_code	String	Error code displayed for the publishing failure.
error_msg	String	Cause of the publishing failure.
event_id	String	Unique ID of the event.

Example Requests

Publish events to an event channel.

POST https://{endpoint}/v1/{project_id}/channels/{channel_id}/events

```
{
  "events": [ {
    "id": "id",
    "source": "source",
    "specversion": "specversion",
    "type": "blob_created"
  } ]
}
```

Example Responses

Status code: 200

Information

```
{
  "failed_count" : 0,
  "events" : [ {
    "event_id" : "r652c3f4e52c4eab89265b7a09ae6196"
  } ]
}
```

Status Codes

Status Code	Description
200	Information

Error Codes

See [Error Codes](#).

5.3.5 Publishing an Official Event to an Event Channel

Function

This API is used to publish an official event to an event channel.

URI

POST /v1/{project_id}/official/sources/{source_name}/events

Table 5-230 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
source_name	Yes	String	Name of the event source.

Request Parameters

Table 5-231 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-232 Request body parameters

Parameter	Mandatory	Type	Description
events	No	Array of CloudEvents objects	CloudEvents event format definition. For details, see https://github.com/cloudevents/spec/blob/v1.0.1/spec.md .

Table 5-233 CloudEvents

Parameter	Mandatory	Type	Description
id	Yes	String	Event ID. The ID must be unique for the same event source.
source	Yes	String	Event source. The combination of source and id uniquely identifies an event. The URI-Reference format is used. For details, see https://tools.ietf.org/html/rfc3986#section-4.1 .
specversion	Yes	String	CloudEvents protocol version. The format is major.minor.
type	Yes	String	Event type.
datacontenttype	No	String	Event content format. Events use the MIME format and comply with RFC 2046. For details, see https://tools.ietf.org/html/rfc2046 .
dataschema	No	String	URI defined by the event content schema, which complies with RFC 3986. For details, see https://tools.ietf.org/html/rfc3986#section-4.3 .
data	No	Object	Event payload content, which uses the format specified by the datacontenttype field. The content field complies with the description of the dataschema field.

Parameter	Mandatory	Type	Description
time	No	String	UTC time when the event occurs. Events from the same source have the same format, which complies with RFC 3339. An example format is 2018-04-05T17:31:00Z. For details, see https://tools.ietf.org/html/rfc3339 .
subject	No	String	Subject or object where the event occurs.

Response Parameters

Status code: 200

Table 5-234 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-235 Response body parameters

Parameter	Type	Description
failed_count	Integer	Number of events that fail to be published.
events	Array of events objects	Event list.

Table 5-236 events

Parameter	Type	Description
error_code	String	Error code displayed for the publishing failure.
error_msg	String	Cause of the publishing failure.
event_id	String	Unique ID of the event.

Example Requests

Publish an official event to an event channel.

```
POST https://{endpoint}/v1/{project_id}/official/sources/{source_name}/events
{
  "events": [ {
    "id": "id",
    "source": "source",
    "specversion": "specversion",
    "type": "blob_created"
  } ]
}
```

Example Responses

Status code: 200

Information

```
{
  "failed_count": 0,
  "events": [ {
    "event_id": "r652c3f4e52c4eab89265b7a09ae6196"
  } ]
}
```

Status Codes

Status Code	Description
200	Information

Error Codes

See [Error Codes](#).

5.3.6 Prechecking Event Publishing Status

Function

This API is used to precheck whether the events from an event source can be published successfully. For example, an event can be published successfully only if there is a subscription to the event source.

URI

POST /v1/{project_id}/events/check

Table 5-237 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Request Parameters

Table 5-238 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-239 Request body parameters

Parameter	Mandatory	Type	Description
sources	No	Array of sources objects	Event source parameters.

Table 5-240 sources

Parameter	Mandatory	Type	Description
channel_id	No	String	ID of the event channel.
source_name	No	String	Name of the event source.

Response Parameters

Status code: 200

Table 5-241 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-242 Response body parameters

Parameter	Type	Description
failed_count	Integer	Number of events that fail the precheck.
sources	Array of CheckPutEventsResult objects	Event source parameters.

Table 5-243 CheckPutEventsResult

Parameter	Type	Description
channel_id	String	ID of the event channel.
source_name	String	Name of the event source.
check_result	Boolean	Result indicating whether the event will be successfully published.
check_detail	String	Details about the precheck result.

Example Requests

Precheck event publishing status.

```
POST https://{endpoint}/v1/{project_id}/events/check
```

```
{
  "sources": [ {
    "channel_id": "092e1243e88146768798b0e8c9933192",
    "source_name": "source-demo"
  } ]
}
```

Example Responses

Status code: 200

Information

```
{
  "failed_count": 0,
  "sources": [ { } ]
}
```

Status Codes

Status Code	Description
200	Information

Error Codes

See [Error Codes](#).

5.4 Event Source Management

5.4.1 Creating a Custom Event Source

Function

This API is used to create a custom event source, which must use a custom event channel.

URI

POST /v1/{project_id}/sources

Table 5-244 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Request Parameters

Table 5-245 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-246 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the custom event source. The value must be unique under a tenant. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with hc..
description	No	String	Description of the event source.
channel_id	No	String	ID of the event channel to which the event source belongs.
type	No	String	Type of the event source.
detail	No	RocketMqDetail object	Message instance connection information encapsulated in JSON format.

Table 5-247 RocketMqDetail

Parameter	Mandatory	Type	Description
instance_id	No	String	RocketMQ instance ID.
group	Yes	String	Consumer group.
topic	Yes	String	Topic
access_key	Yes	String	Username.
secret_key	Yes	String	Secret key.
vpc_id	No	String	VPC ID.
subnet_id	No	String	Subnet ID.
namesrv_address	No	String	Connection address.
ssl_enable	No	Boolean	SSL
enable_acl	No	Boolean	Indicates whether to enable ACL.

Response Parameters

Status code: 200

Table 5-248 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-249 Response body parameters

Parameter	Type	Description
id	String	ID of the event source.
name	String	Name of the event source.
label	String	Label of the event source.
description	String	Description of the event source.
provider_type	String	Type of the event source provider, which can be OFFICIAL (official cloud service event source), CUSTOM (custom event source), or PARTNER (partner event source).
event_types	Array of event_types objects	List of event types provided by the event source. Only the official cloud service event source provides event types.
created_time	String	UTC time when the event source is created.
updated_time	String	UTC time when the event source is updated.
channel_id	String	ID of the event channel to which the event source belongs.
channel_name	String	Name of the event channel to which the event source belongs.
type	String	Type of the event source.
detail	Object	Connection information encapsulated in JSON format in the message instance, such as the instance_id field of the RabbitMQ instance, vhost field of the virtual host, queue field, username, and password.
status	String	Status of the custom event source.
error_info	ErrorInfo object	Error message.

Table 5-250 event_types

Parameter	Type	Description
name	String	Name of the event type.
description	String	Description of the event type.

Table 5-251 ErrorInfo

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

Example Requests

Create a custom event source.

```
POST https://{endpoint}/v1/{project_id}/sources
{
  "name" : "first-source",
  "description" : "first event source",
  "channel_id" : "bd14144e-8f3c-43d6-bdfd-bf09b52c2b96",
  "type" : "RABBITMQ"
}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "id" : "90e0b962-c6c1-438c-ba8a-3024fe592bda",
  "name" : "first-source",
  "label" : "first-source",
  "description" : "first event source",
  "provider_type" : "CUSTOM",
  "event_types" : [ {
    "name" : "OBS:CloudTrace:ApiCall",
    "description" : "Service API call type event."
  } ],
  "created_time" : "2021-12-09 09:00:00",
  "updated_time" : "2021-12-09 09:00:00",
  "channel_id" : "bd14144e-8f3c-43d6-bdfd-bf09b52c2b96",
  "channel_name" : "channel",
  "type" : "RABBITMQ",
  "detail" : "{ \"instance_id\": \"ac14144e-9v3c-43d6-acfd-bf09b52c98uy\", \"user_name\": \"rabbitmq_user\", \"password\": \"changeme\", \"vhost_name\": \"vhost_name\", \"queue_name\": \"queue_name\" }",
  "status" : "RUNNING",
  "error_info" : { }
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.4.2 Obtaining the Event Source List

Function

This API is used to obtain the list of event sources that meet certain conditions. For example, you can specify an event channel ID to obtain all event sources in this channel.

URI

GET /v1/{project_id}/sources

Table 5-252 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-253 Query Parameters

Parameter	Mandatory	Type	Description
channel_id	No	String	ID of the event channel.
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
limit	No	Integer	Number of records displayed on each page. The value must be within the range [1, 1000].
sort	No	String	Sorting mode of the query results.
provider_type	No	String	Type of the provider.
name	No	String	Name of the event source. It is used for exact match.

Parameter	Mandatory	Type	Description
fuzzy_name	No	String	Name of the event source. It is used for fuzzy match.
fuzzy_label	No	String	Label of the event source. It is used for fuzzy match.

Request Parameters

Table 5-254 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-255 Response body parameters

Parameter	Type	Description
total	Integer	Total number of records.
size	Integer	Number of records displayed on the current page.
items	Array of CustomizeSourceInfo objects	Object list.

Table 5-256 CustomizeSourceInfo

Parameter	Type	Description
id	String	ID of the event source.
name	String	Name of the event source.
label	String	Label of the event source.
description	String	Description of the event source.

Parameter	Type	Description
provider_type	String	Type of the event source provider, which can be OFFICIAL (official cloud service event source), CUSTOM (custom event source), or PARTNER (partner event source).
event_types	Array of event_types objects	List of event types provided by the event source. Only the official cloud service event source provides event types.
created_time	String	UTC time when the event source is created.
updated_time	String	UTC time when the event source is updated.
channel_id	String	ID of the event channel to which the event source belongs.
channel_name	String	Name of the event channel to which the event source belongs.
type	String	Type of the event source.
detail	Object	Connection information encapsulated in JSON format in the message instance, such as the instance_id field of the RabbitMQ instance, vhost field of the virtual host, queue field, username, and password.
status	String	Status of the custom event source.
error_info	ErrorInfo object	Error message.

Table 5-257 event_types

Parameter	Type	Description
name	String	Name of the event type.
description	String	Description of the event type.

Table 5-258 ErrorInfo

Parameter	Type	Description
error_code	String	Error code.
error_detail	String	Error details.

Parameter	Type	Description
error_msg	String	Error message.

Example Requests

Obtain the event source list.

```
GET https://{endpoint}/v1/{project_id}/sources
```

Example Responses

Status code: 200

Operation successful.

```
{
  "total" : 1,
  "size" : 1,
  "items" : [ {} ]
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.4.3 Updating a Custom Event Source

Function

This API is used to update a custom event source.

URI

```
PUT /v1/{project_id}/sources/{source_id}
```

Table 5-259 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
source_id	Yes	String	ID of the event source.

Request Parameters

Table 5-260 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-261 Request body parameters

Parameter	Mandatory	Type	Description
description	No	String	Description of the event source.
detail	No	RocketMqDetail object	Message instance connection information encapsulated in JSON format.

Table 5-262 RocketMqDetail

Parameter	Mandatory	Type	Description
instance_id	No	String	RocketMQ instance ID.
group	Yes	String	Consumer group.
topic	Yes	String	Topic
access_key	Yes	String	Username.
secret_key	Yes	String	Secret key.
vpc_id	No	String	VPC ID.
subnet_id	No	String	Subnet ID.
namesrv_address	No	String	Connection address.
ssl_enable	No	Boolean	SSL
enable_acl	No	Boolean	Indicates whether to enable ACL.

Response Parameters

Status code: 200

Table 5-263 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-264 Response body parameters

Parameter	Type	Description
id	String	ID of the event source.
name	String	Name of the event source.
label	String	Label of the event source.
description	String	Description of the event source.
provider_type	String	Type of the event source provider, which can be OFFICIAL (official cloud service event source), CUSTOM (custom event source), or PARTNER (partner event source).
event_types	Array of event_types objects	List of event types provided by the event source. Only the official cloud service event source provides event types.
created_time	String	UTC time when the event source is created.
updated_time	String	UTC time when the event source is updated.
channel_id	String	ID of the event channel to which the event source belongs.
channel_name	String	Name of the event channel to which the event source belongs.
type	String	Type of the event source.
detail	Object	Connection information encapsulated in JSON format in the message instance, such as the instance_id field of the RabbitMQ instance, vhost field of the virtual host, queue field, username, and password.

Parameter	Type	Description
status	String	Status of the custom event source.
error_info	ErrorInfo object	Error message.

Table 5-265 event_types

Parameter	Type	Description
name	String	Name of the event type.
description	String	Description of the event type.

Table 5-266 ErrorInfo

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

Example Requests

Update a custom event source.

```
PUT https://{endpoint}/v1/{project_id}/sources/{source_id}
{
  "description" : "first event source"
}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "id" : "90e0b962-c6c1-438c-ba8a-3024fe592bda",
  "name" : "first-source",
  "label" : "first-source",
  "description" : "first event source",
  "provider_type" : "CUSTOM",
  "event_types" : [ {
    "name" : "OBS:CloudTrace:ApiCall",
    "description" : "Service API call type event."
  } ],
  "created_time" : "2021-12-09 09:00:00",
  "updated_time" : "2021-12-09 09:00:00",
  "channel_id" : "bd14144e-8f3c-43d6-bdfd-bf09b52c2b96",
  "channel_name" : "channel",
  "type" : "RABBITMQ",
}
```

```
"detail" : "{ \"instance_id\": \"ac14144e-9v3c-43d6-acfd-bf09b52c98uy\", \"user_name\": \"rabbitmq_user\", \"password\": \"changeme\", \"vhost_name\": \"vhost_name\", \"queue_name\": \"queue_name\" }\", \"status\" : \"RUNNING\", \"error_info\" : { } }
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.4.4 Obtaining Event Source Details

Function

This API is used to obtain the details of an event source.

URI

GET /v1/{project_id}/sources/{source_id}

Table 5-267 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
source_id	Yes	String	ID of the event source.

Request Parameters

Table 5-268 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-269 Response body parameters

Parameter	Type	Description
id	String	ID of the event source.
name	String	Name of the event source.
label	String	Label of the event source.
description	String	Description of the event source.
provider_type	String	Type of the event source provider, which can be OFFICIAL (official cloud service event source), CUSTOM (custom event source), or PARTNER (partner event source).
event_types	Array of event_types objects	List of event types provided by the event source. Only the official cloud service event source provides event types.
created_time	String	UTC time when the event source is created.
updated_time	String	UTC time when the event source is updated.
channel_id	String	ID of the event channel to which the event source belongs.
channel_name	String	Name of the event channel to which the event source belongs.
type	String	Type of the event source.
detail	Object	Connection information encapsulated in JSON format in the message instance, such as the instance_id field of the RabbitMQ instance, vhost field of the virtual host, queue field, username, and password.
status	String	Status of the custom event source.
error_info	ErrorInfo object	Error message.

Table 5-270 event_types

Parameter	Type	Description
name	String	Name of the event type.
description	String	Description of the event type.

Table 5-271 ErrorInfo

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

Example Requests

Obtain event source details.

```
GET https://{endpoint}/v1/{project_id}/sources/{source_id}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "id": "90e0b962-c6c1-438c-ba8a-3024fe592bda",
  "name": "first-source",
  "label": "first-source",
  "description": "first event source",
  "provider_type": "CUSTOM",
  "event_types": [ {
    "name": "OBS:CloudTrace:ApiCall",
    "description": "Service API call type event."
  } ],
  "created_time": "2021-12-09 09:00:00",
  "updated_time": "2021-12-09 09:00:00",
  "channel_id": "bd14144e-8f3c-43d6-bdfd-bf09b52c2b96",
  "channel_name": "channel",
  "type": "RABBITMQ",
  "detail": "{ \"instance_id\": \"ac14144e-9v3c-43d6-acfd-bf09b52c98uy\", \"user_name\": \"rabbitmq_user\", \"password\": \"changeme\", \"vhost_name\": \"vhost_name\", \"queue_name\": \"queue_name\" }",
  "status": "RUNNING",
  "error_info": { }
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.4.5 Deleting a Custom Event Source

Function

This API is used to delete a custom event source.

URI

DELETE /v1/{project_id}/sources/{source_id}

Table 5-272 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
source_id	Yes	String	ID of the event source.

Request Parameters

Table 5-273 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 204

Operation successful.

None

Example Requests

Delete a custom event source.

```
DELETE https://{endpoint}/v1/{project_id}/sources/{source_id}
```

Example Responses

None

Status Codes

Status Code	Description
204	Operation successful.

Error Codes

See [Error Codes](#).

5.5 Event Target Catalog Management

5.5.1 Obtaining the Event Target Catalog

Function

This API is used to obtain the predefined target catalog of an event.

URI

GET /v1/{project_id}/target-catalogs

Table 5-274 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-275 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
limit	No	Integer	Number of records displayed on each page. The value must be within the range [1, 1000].
sort	No	String	Sorting mode of the query results.

Parameter	Mandatory	Type	Description
fuzzy_label	No	String	Label of the event target. It is used for fuzzy match.
support_types	No	Array of strings	Supported type of the event target, which can be SUBSCRIPTION (event subscription) or FLOW (event flow).

Request Parameters

Table 5-276 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-277 Response body parameters

Parameter	Type	Description
total	Integer	Total number of records.
size	Integer	Number of records displayed on the current page.
items	Array of CatalogTargetInfo objects	Object list.

Table 5-278 CatalogTargetInfo

Parameter	Type	Description
id	String	ID of the event target catalog.
name	String	Name of the event target catalog.

Parameter	Type	Description
label	String	Label of the event target catalog.
description	String	Description of the event target catalog.
provider_type	String	Provider type, which can be OFFICIAL (official cloud service event target) and CUSTOM (third-party event target).
parameters	Array of CatalogTargetParameters objects	Event target category parameters.
created_time	String	UTC time when the catalog is created.
updated_time	String	UTC time when the catalog is updated.

Table 5-279 CatalogTargetParameters

Parameter	Type	Description
name	String	Name of the target parameter.
label	String	Label of the target parameter.
metadata	Object	Metadata of the target parameter, for example, whether the parameter is mandatory and which text box type is used.

Example Requests

Obtain the event target catalog.

```
GET https://{endpoint}/v1/{project_id}/target-catalogs
```

Example Responses

Status code: 200

Operation successful.

```
{
  "total" : 1,
  "size" : 1,
  "items" : [ { } ]
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.6 Connection Management

5.6.1 Creating a Connection

Function

This API is used to create a connection.

URI

POST /v1/{project_id}/connections

Table 5-280 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Request Parameters

Table 5-281 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-282 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the connection. The value must be unique under a tenant. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot be default.
description	No	String	Description of the connection.
vpc_id	Yes	String	ID of the VPC to be connected.
subnet_id	Yes	String	ID of the subnet to be connected.
type	No	String	Connection type, which can be webhook (HTTP connection) or kafka (Huawei Cloud Kafka instance).
kafka_detail	No	KafkaConnectionDetail object	Kafka connection parameters.

Table 5-283 KafkaConnectionDetail

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Kafka instance ID.
addr	Yes	String	Kafka connection address.
security_protocol	No	String	Security protocol.
enable_sasl_ssl	Yes	Boolean	Whether SASL_SSL is enabled for the Kafka instance.
user_name	No	String	Username of the Kafka instance. This parameter is mandatory when SASL_SSL is enabled for the instance.
password	No	String	Password of the Kafka instance. This parameter is mandatory when SASL_SSL is enabled for the instance.

Parameter	Mandatory	Type	Description
acks	No	String	Number of acknowledgments that the producer requires the server to return before considering a request complete. This controls the durability of records that are sent. Supported options: 0: The producer will not wait for any acknowledgment from the server at all. The record will be immediately added to the socket buffer and considered sent. No guarantee can be made that the server has received the record, and the retries configuration will not take effect (as the client generally does not know of any failures). The offset given back for each record will always be set to -1. 1: The leader will write the record to its local log but will respond without waiting until receiving full acknowledgement from all followers. If the leader fails immediately after acknowledging the record but before the followers have replicated it, the record will be lost. all: The leader will wait for the full set of replicas to acknowledge the record. This is the strongest available guarantee because the record will not be lost even if there is just one replica that works. min.insync.replicas specifies the minimum number of replicas that must acknowledge a write for the write to be considered successful.

Response Parameters

Status code: 200

Table 5-284 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-285 Response body parameters

Parameter	Type	Description
id	String	ID of the event source.
name	String	Name of the connection. The value must be unique under a tenant. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot be default.
description	String	Description of the connection.
status	String	Status of the connection.
error_info	ErrorInfo object	Error message.
vpc_id	String	ID of the VPC to be connected.
subnet_id	String	ID of the subnet to be connected.
agency	String	Name of the user agency used by the target private network connection.
flavor	flavor object	Flavor.
type	String	Connection type, which can be webhook (HTTP connection) or kafka (Huawei Cloud Kafka instance).
kafka_detail	KafkaConnectionDetail object	Kafka connection parameters.
created_time	String	UTC time when the connection is created.
updated_time	String	UTC time when the connection is updated.

Table 5-286 ErrorInfo

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_detail	String	Error details.
error_msg	String	Error message.

Table 5-287 flavor

Parameter	Type	Description
name	String	Flavor name.
concurrency_type	String	Concurrent flavor type.
concurrency	Integer	Number of concurrent requests.
bandwidth_type	String	Bandwidth type.

Table 5-288 KafkaConnectionDetail

Parameter	Type	Description
instance_id	String	Kafka instance ID.
addr	String	Kafka connection address.
security_protocol	String	Security protocol.
enable_sasl_ssl	Boolean	Whether SASL_SSL is enabled for the Kafka instance.
user_name	String	Username of the Kafka instance. This parameter is mandatory when SASL_SSL is enabled for the instance.
password	String	Password of the Kafka instance. This parameter is mandatory when SASL_SSL is enabled for the instance.

Parameter	Type	Description
acks	String	Number of acknowledgments that the producer requires the server to return before considering a request complete. This controls the durability of records that are sent. Supported options: 0: The producer will not wait for any acknowledgment from the server at all. The record will be immediately added to the socket buffer and considered sent. No guarantee can be made that the server has received the record, and the retries configuration will not take effect (as the client generally does not know of any failures). The offset given back for each record will always be set to -1. 1: The leader will write the record to its local log but will respond without waiting until receiving full acknowledgement from all followers. If the leader fails immediately after acknowledging the record but before the followers have replicated it, the record will be lost. all: The leader will wait for the full set of replicas to acknowledge the record. This is the strongest available guarantee because the record will not be lost even if there is just one replica that works. min.insync.replicas specifies the minimum number of replicas that must acknowledge a write for the write to be considered successful.

Example Requests

Create a connection.

```
POST https://{endpoint}/v1/{project_id}/connections
```

```
{
  "name" : "private-link",
  "description" : "",
  "vpc_id" : "ac14144e-8fec-53d6-bdfd-8f09b52c09iu",
  "subnet_id" : "bf14153e-5fec-67d6-b89d-5409b52c0op8",
  "type" : { }
}
```

Example Responses

Status code: 200

Demo Information

```
{
  "id": "90e0b962-c6c1-438c-ba8a-3024fe592bda",
  "name": "private-link",
  "description": "",
  "status": "CREATING",
  "error_info": { },
  "vpc_id": "ac14144e-8fec-53d6-bdfd-8f09b52c09iu",
  "subnet_id": "bf14153e-5fec-67d6-b89d-5409b52c0op8",
  "agency": "EG_TRUST",
  "flavor": {
    "name": "default",
    "concurrency_type": "exclusive",
    "concurrency": 500,
    "bandwidth_type": "exclusive"
  },
  "type": { },
  "kafka_detail": { },
  "created_time": "2021-12-09 09:00:00",
  "updated_time": "2021-12-09 09:00:00"
}
```

Status Codes

Status Code	Description
200	Demo Information

Error Codes

See [Error Codes](#).

5.6.2 Obtaining the Connection List

Function

This API is used to obtain the list of connections.

URI

GET /v1/{project_id}/connections

Table 5-289 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-290 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
limit	No	Integer	Number of records displayed on each page. The value must be within the range [1, 1000].
sort	No	String	Sorting mode of the query results.
name	No	String	Name of the connection. It is used for exact match.
fuzzy_name	No	String	Name of the connection. It is used for fuzzy match.
instance_id	No	String	Queue instance ID of the connection.

Request Parameters

Table 5-291 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-292 Response body parameters

Parameter	Type	Description
total	Integer	Total number of records.
size	Integer	Number of records displayed on the current page.

Parameter	Type	Description
items	Array of ConnectionInfo objects	Object list.

Table 5-293 ConnectionInfo

Parameter	Type	Description
id	String	ID of the event source.
name	String	Name of the connection. The value must be unique under a tenant. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot be default.
description	String	Description of the connection.
status	String	Status of the connection.
error_info	ErrorInfo object	Error message.
vpc_id	String	ID of the VPC to be connected.
subnet_id	String	ID of the subnet to be connected.
agency	String	Name of the user agency used by the target private network connection.
flavor	flavor object	Flavor.
type	String	Connection type, which can be webhook (HTTP connection) or kafka (Huawei Cloud Kafka instance).
kafka_detail	KafkaConnectionDetail object	Kafka connection parameters.
created_time	String	UTC time when the connection is created.
updated_time	String	UTC time when the connection is updated.

Table 5-294 ErrorInfo

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_detail	String	Error details.
error_msg	String	Error message.

Table 5-295 flavor

Parameter	Type	Description
name	String	Flavor name.
concurrency_type	String	Concurrent flavor type.
concurrency	Integer	Number of concurrent requests.
bandwidth_type	String	Bandwidth type.

Table 5-296 KafkaConnectionDetail

Parameter	Type	Description
instance_id	String	Kafka instance ID.
addr	String	Kafka connection address.
security_protocol	String	Security protocol.
enable_sasl_ssl	Boolean	Whether SASL_SSL is enabled for the Kafka instance.
user_name	String	Username of the Kafka instance. This parameter is mandatory when SASL_SSL is enabled for the instance.
password	String	Password of the Kafka instance. This parameter is mandatory when SASL_SSL is enabled for the instance.

Parameter	Type	Description
acks	String	Number of acknowledgments that the producer requires the server to return before considering a request complete. This controls the durability of records that are sent. Supported options: 0: The producer will not wait for any acknowledgment from the server at all. The record will be immediately added to the socket buffer and considered sent. No guarantee can be made that the server has received the record, and the retries configuration will not take effect (as the client generally does not know of any failures). The offset given back for each record will always be set to -1. 1: The leader will write the record to its local log but will respond without waiting until receiving full acknowledgement from all followers. If the leader fails immediately after acknowledging the record but before the followers have replicated it, the record will be lost. all: The leader will wait for the full set of replicas to acknowledge the record. This is the strongest available guarantee because the record will not be lost even if there is just one replica that works. min.insync.replicas specifies the minimum number of replicas that must acknowledge a write for the write to be considered successful.

Example Requests

Obtain the connection list.

```
GET https://{endpoint}/v1/{project_id}/connections
```

Example Responses

Status code: 200

Operation successful.

```
{  
  "total" : 1,  
  "size" : 1,
```

```
"items" : [ {} ]  
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.6.3 Updating a Connection

Function

This API is used to update a connection.

URI

PUT /v1/{project_id}/connections/{connection_id}

Table 5-297 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
connection_id	Yes	String	ID of the connection.

Request Parameters

Table 5-298 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-299 Request body parameters

Parameter	Mandatory	Type	Description
description	No	String	Description of the connection.

Response Parameters

Status code: 200

Table 5-300 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-301 Response body parameters

Parameter	Type	Description
id	String	ID of the event source.
name	String	Name of the connection. The value must be unique under a tenant. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot be default.
description	String	Description of the connection.
status	String	Status of the connection.
error_info	ErrorInfo object	Error message.
vpc_id	String	ID of the VPC to be connected.
subnet_id	String	ID of the subnet to be connected.
agency	String	Name of the user agency used by the target private network connection.
flavor	flavor object	Flavor.
type	String	Connection type, which can be webhook (HTTP connection) or kafka (Huawei Cloud Kafka instance).
kafka_detail	KafkaConnectionDetail object	Kafka connection parameters.

Parameter	Type	Description
created_time	String	UTC time when the connection is created.
updated_time	String	UTC time when the connection is updated.

Table 5-302 ErrorInfo

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

Table 5-303 flavor

Parameter	Type	Description
name	String	Flavor name.
concurrency_type	String	Concurrent flavor type.
concurrency	Integer	Number of concurrent requests.
bandwidth_type	String	Bandwidth type.

Table 5-304 KafkaConnectionDetail

Parameter	Type	Description
instance_id	String	Kafka instance ID.
addr	String	Kafka connection address.
security_protocol	String	Security protocol.
enable_sasl_ssl	Boolean	Whether SASL_SSL is enabled for the Kafka instance.
user_name	String	Username of the Kafka instance. This parameter is mandatory when SASL_SSL is enabled for the instance.
password	String	Password of the Kafka instance. This parameter is mandatory when SASL_SSL is enabled for the instance.

Parameter	Type	Description
acks	String	Number of acknowledgments that the producer requires the server to return before considering a request complete. This controls the durability of records that are sent. Supported options: 0: The producer will not wait for any acknowledgment from the server at all. The record will be immediately added to the socket buffer and considered sent. No guarantee can be made that the server has received the record, and the retries configuration will not take effect (as the client generally does not know of any failures). The offset given back for each record will always be set to -1. 1: The leader will write the record to its local log but will respond without waiting until receiving full acknowledgement from all followers. If the leader fails immediately after acknowledging the record but before the followers have replicated it, the record will be lost. all: The leader will wait for the full set of replicas to acknowledge the record. This is the strongest available guarantee because the record will not be lost even if there is just one replica that works. min.insync.replicas specifies the minimum number of replicas that must acknowledge a write for the write to be considered successful.

Example Requests

Update a connection.

```
PUT https://{endpoint}/v1/{project_id}/connections/{connection_id}
{
  "description" : ""
}
```

Example Responses

Status code: 200

Information

```
{
  "id" : "90e0b962-c6c1-438c-ba8a-3024fe592bda",
  "name" : "private-link",
  "description" : "",
  "status" : "CREATING",
  "error_info" : { },
  "vpc_id" : "ac14144e-8fec-53d6-bdfd-8f09b52c09iu",
  "subnet_id" : "bf14153e-5fec-67d6-b89d-5409b52c0op8",
  "agency" : "EG_TRUST",
  "flavor" : {
    "name" : "default",
    "concurrency_type" : "exclusive",
    "concurrency" : 500,
    "bandwidth_type" : "exclusive"
  },
  "type" : { },
  "kafka_detail" : { },
  "created_time" : "2021-12-09 09:00:00",
  "updated_time" : "2021-12-09 09:00:00"
}
```

Status Codes

Status Code	Description
200	Information

Error Codes

See [Error Codes](#).

5.6.4 Obtaining Connection Details

Function

This API is used to obtain the details about a connection.

URI

GET /v1/{project_id}/connections/{connection_id}

Table 5-305 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
connection_id	Yes	String	ID of the connection.

Request Parameters

Table 5-306 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200**Table 5-307** Response body parameters

Parameter	Type	Description
id	String	ID of the event source.
name	String	Name of the connection. The value must be unique under a tenant. Only lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot be default.
description	String	Description of the connection.
status	String	Status of the connection.
error_info	ErrorInfo object	Error message.
vpc_id	String	ID of the VPC to be connected.
subnet_id	String	ID of the subnet to be connected.
agency	String	Name of the user agency used by the target private network connection.
flavor	flavor object	Flavor.
type	String	Connection type, which can be webhook (HTTP connection) or kafka (Huawei Cloud Kafka instance).
kafka_detail	KafkaConnectionDetail object	Kafka connection parameters.
created_time	String	UTC time when the connection is created.

Parameter	Type	Description
updated_time	String	UTC time when the connection is updated.

Table 5-308 ErrorInfo

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

Table 5-309 flavor

Parameter	Type	Description
name	String	Flavor name.
concurrency_type	String	Concurrent flavor type.
concurrency	Integer	Number of concurrent requests.
bandwidth_type	String	Bandwidth type.

Table 5-310 KafkaConnectionDetail

Parameter	Type	Description
instance_id	String	Kafka instance ID.
addr	String	Kafka connection address.
security_protocol	String	Security protocol.
enable_sasl_ssl	Boolean	Whether SASL_SSL is enabled for the Kafka instance.
user_name	String	Username of the Kafka instance. This parameter is mandatory when SASL_SSL is enabled for the instance.
password	String	Password of the Kafka instance. This parameter is mandatory when SASL_SSL is enabled for the instance.

Parameter	Type	Description
acks	String	Number of acknowledgments that the producer requires the server to return before considering a request complete. This controls the durability of records that are sent. Supported options: 0: The producer will not wait for any acknowledgment from the server at all. The record will be immediately added to the socket buffer and considered sent. No guarantee can be made that the server has received the record, and the retries configuration will not take effect (as the client generally does not know of any failures). The offset given back for each record will always be set to -1. 1: The leader will write the record to its local log but will respond without waiting until receiving full acknowledgement from all followers. If the leader fails immediately after acknowledging the record but before the followers have replicated it, the record will be lost. all: The leader will wait for the full set of replicas to acknowledge the record. This is the strongest available guarantee because the record will not be lost even if there is just one replica that works. min.insync.replicas specifies the minimum number of replicas that must acknowledge a write for the write to be considered successful.

Example Requests

Obtain the connection details.

```
GET https://{endpoint}/v1/{project_id}/connections/{connection_id}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "id" : "90e0b962-c6c1-438c-ba8a-3024fe592bda",
  "name" : "private-link",
```

```
"description" : "",
"status" : "CREATING",
"error_info" : { },
"vpc_id" : "ac14144e-8fec-53d6-bdfd-8f09b52c09iu",
"subnet_id" : "bf14153e-5fec-67d6-b89d-5409b52c0op8",
"agency" : "EG_TRUST",
"flavor" : {
  "name" : "default",
  "concurrency_type" : "exclusive",
  "concurrency" : 500,
  "bandwidth_type" : "exclusive"
},
"type" : { },
"kafka_detail" : { },
"created_time" : "2021-12-09 09:00:00",
"updated_time" : "2021-12-09 09:00:00"
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.6.5 Deleting a Connection

Function

This API is used to delete a connection.

URI

DELETE /v1/{project_id}/connections/{connection_id}

Table 5-311 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
connection_id	Yes	String	ID of the connection.

Request Parameters

Table 5-312 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 204

Operation successful.

None

Example Requests

Delete a connection.

```
DELETE https://{endpoint}/v1/{project_id}/connections/{connection_id}
```

Example Responses

None

Status Codes

Status Code	Description
204	Operation successful.

Error Codes

See [Error Codes](#).

5.7 Service Agency Management

5.7.1 Obtaining the Service Agency List

Function

This API is used to obtain the list of service agencies.

URI

GET /v1/{project_id}/service-agencies

Table 5-313 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-314 Query Parameters

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the scenario of service agency authorization.

Request Parameters

Table 5-315 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-316 Response body parameters

Parameter	Type	Description
agencies	Array of strings	Service agency authorization record.

Example Requests

Obtain the service agency list.

GET https://{endpoint}/v1/{project_id}/service-agencies

Example Responses

Status code: 200

Operation successful.

```
{  
  "agencies" : [ "EG_DELEGATE_FG_AGENCY" ]  
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.7.2 Creating a Service Agency

Function

This API is used to create a service agency with just a few clicks.

URI

POST /v1/{project_id}/service-agencies

Table 5-317 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Request Parameters

Table 5-318 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-319 Request body parameters

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the service agency scenario.

Response Parameters

Status code: 200

Table 5-320 Response body parameters

Parameter	Type	Description
agencies	Array of strings	Service agency authorization record.

Example Requests

Create a service agency.

POST https://{endpoint}/v1/{project_id}/service-agencies

```
{
  "type" : "TARGET_CONNECTION"
}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "agencies" : [ "EG_DELEGATE_FG_AGENCY" ]
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.8 Quota Management

5.8.1 Obtaining the Quota

Function

This API is used to obtain the quota of the current tenant. If no quota is configured, the default one is returned.

URI

GET /v1/{project_id}/quotas

Table 5-321 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-322 Query Parameters

Parameter	Mandatory	Type	Description
type	No	String	Type of the resources for which the quota is to be queried.

Request Parameters

Table 5-323 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-324 Response body parameters

Parameter	Type	Description
quotas	QuotaResourceResp object	Description about the quota.

Table 5-325 QuotaResourceResp

Parameter	Type	Description
resources	Array of QuotaItemInfo objects	Error description.

Table 5-326 QuotaItemInfo

Parameter	Type	Description
name	String	Name.
type	String	Quota type.
max	Integer	Maximum quota.
min	Integer	Minimum quota.
quota	Integer	Current quota.
used	Integer	Used quota.

Example Requests

Query the resource quotas.

```
GET https://{endpoint}/v1/{project_id}/quotas
```

Example Responses

Status code: 200

Operation successful.

```
{  
  "quotas" : { }  
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.9 API Version Management

5.9.1 Obtaining the API Version List

Function

This API is used to obtain the list of API versions supported by the service.

URI

GET /

Request Parameters

Table 5-327 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-328 Response body parameters

Parameter	Type	Description
versions	Array of versions objects	Versions.

Table 5-329 versions

Parameter	Type	Description
id	String	Version number, for example, v1
links	Array of links objects	URL.
version	String	If the APIs of the given version support micro-versions, set this parameter to the supported maximum micro-version. If not, leave this parameter blank.
min_version	String	If the APIs of the given version support micro-versions, set this parameter to the supported minimum micro-version. If not, leave this parameter blank.
status	String	Version status, which can be CURRENT (recommended), SUPPORTED (earlier version that is still supported), or DEPRECATED (deprecated version, which may be deleted later).
updated	String	UTC time when the version is released.

Table 5-330 links

Parameter	Type	Description
href	String	href property.
rel	String	rel property.

Example Requests

Obtain the API version list.

```
/
```

Example Responses

Status code: 200

Operation successful.

```
{
  "versions": [ {
    "id": "v1",
    "links": [ {
      "href": "https://eg.cn-north-4.myhuaweicloud.com/v1",
      "rel": "self"
    } ],
  } ],
}
```

```
"version" : "",  
"min_version" : "",  
"status" : "CURRENT",  
"updated" : "2022-04-19T12:20:10Z"  
}]  
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.10 Trigger Management

5.10.1 Obtaining the EG Trigger of a Function

Function

This API is used to obtain the trigger of a function specified by URN. A trigger is a subscription with a function URN as the target.

URI

GET /v1/{project_id}/subscription-triggers/{func_urn}

Table 5-331 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
func_urn	Yes	String	URN of the function.

Table 5-332 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records displayed on each page. The value must be within the range [1, 1000].
sort	No	String	Sorting mode of the query results.

Request Parameters

Table 5-333 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-334 Response body parameters

Parameter	Type	Description
total	Integer	Total number of records.
size	Integer	Number of records displayed on the current page.
items	Array of SubscriptionInfo objects	Object list.

Table 5-335 SubscriptionInfo

Parameter	Type	Description
id	String	Subscription ID.
name	String	Subscription name.
description	String	Description of the subscription.

Parameter	Type	Description
type	String	Subscription type.
status	String	Status.
channel_id	String	ID of the event channel.
channel_name	String	Name of the event channel.
used	Array of SubscriptionUsedInfo objects	Label information.
sources	Array of SubscriptionSourceInfo objects	List of subscription sources.
targets	Array of SubscriptionTargetInfo objects	List of subscription targets.
created_time	String	Time when the trigger is created.
updated_time	String	Time when the trigger is updated.

Table 5-336 SubscriptionUsedInfo

Parameter	Type	Description
resource_id	String	Associated resource ID.
owner	String	Management tenant account.
description	String	Description.

Table 5-337 SubscriptionSourceInfo

Parameter	Type	Description
id	String	ID of the event subscription source.
name	String	Name of the event subscription source.
provider_type	String	Provider type of the event subscription source.
detail	Object	List of event subscription source parameters.
filter	Object	Filtering rule of the event subscription source.

Parameter	Type	Description
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-338 SubscriptionTargetInfo

Parameter	Type	Description
id	String	ID of the event subscription target.
name	String	Name of the event subscription target.
provider_type	String	Provider type of the event subscription target.
connection_id	String	Connection ID used by the event subscription target.
detail	Object	List of event subscription target parameters.
kafka_detail	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.
smn_detail	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.
eg_detail	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.
retry_times	Integer	Number of retries.
transform	TransForm object	Transform rule of the event subscription target.

Parameter	Type	Description
dead_letter_queue	DeadLetterQueue object	List of dead letter queue parameters for the subscription.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-339 KafkaTargetDetail

Parameter	Type	Description
topic	String	Topic.
keyTransform	keyTransform object	Key value rule.

Table 5-340 keyTransform

Parameter	Type	Description
type	String	Type of the key value rule.
value	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.
template	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-341 SmnTargetDetail

Parameter	Type	Description
urn	String	Specifies the topic URN.
agency_name	String	Agency name.
subject_transform	subject_transform object	Title rule.

Table 5-342 subject_transform

Parameter	Type	Description
type	String	Type of the title rule.
value	String	Title rule.
template	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-343 EgTargetDetail

Parameter	Type	Description
target_project_id	String	Target project ID.
target_channel_id	String	Target channel ID.
target_region	String	Target region.
cross_region	Boolean	Indicates whether cross-region feature is enabled.
cross_account	Boolean	Indicates whether cross-account feature is enabled.
agency_name	String	Agency name.

Table 5-344 ApigwTargetDetail

Parameter	Type	Description
url	String	Target URL.
invocation_http_parameters	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-345 InvocationHttpParameters

Parameter	Type	Description
header_parameters	Array of HeaderParameter objects	Object list.

Table 5-346 HeaderParameter

Parameter	Type	Description
is_value_secret	Boolean	Whether to encrypt the value.
key	String	Header key.
value	String	Header value.

Table 5-347 Transform

Parameter	Type	Description
type	String	Type of the transform rule.
value	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-348 DeadLetterQueue

Parameter	Type	Description
type	String	Queue type.
instance_id	String	Instance ID.
connection_id	String	Connection ID.
topic	String	Topic.

Example Requests

Obtain the EG trigger of a function.

```
GET https://{endpoint}/v1/{project_id}/subscription-triggers/{func_urn}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "total" : 1,
  "size" : 1,
  "items" : [ { } ]
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.10.2 Obtaining the EG Trigger of a Function Flow

Function

This API is used to obtain the trigger of a function flow specified by ID. A trigger is a subscription with a function flow ID as the target.

URI

```
GET /v1/{project_id}/subscription-triggers/workflow/{workflow_id}
```

Table 5-349 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
workflow_id	Yes	String	ID of the function flow.

Table 5-350 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
limit	No	Integer	Number of records displayed on each page. The value must be within the range [1, 1000].
sort	No	String	Sorting mode of the query results.

Request Parameters

Table 5-351 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-352 Response body parameters

Parameter	Type	Description
total	Integer	Total number of records.
size	Integer	Number of records displayed on the current page.
items	Array of SubscriptionInfo objects	Object list.

Table 5-353 SubscriptionInfo

Parameter	Type	Description
id	String	Subscription ID.
name	String	Subscription name.
description	String	Description of the subscription.
type	String	Subscription type.
status	String	Status.
channel_id	String	ID of the event channel.
channel_name	String	Name of the event channel.
used	Array of SubscriptionUse- dInfo objects	Label information.
sources	Array of SubscriptionSour- ceInfo objects	List of subscription sources.
targets	Array of SubscriptionTar- getInfo objects	List of subscription targets.
created_time	String	Time when the trigger is created.
updated_time	String	Time when the trigger is updated.

Table 5-354 SubscriptionUsedInfo

Parameter	Type	Description
resource_id	String	Associated resource ID.
owner	String	Management tenant account.
description	String	Description.

Table 5-355 SubscriptionSourceInfo

Parameter	Type	Description
id	String	ID of the event subscription source.
name	String	Name of the event subscription source.
provider_type	String	Provider type of the event subscription source.

Parameter	Type	Description
detail	Object	List of event subscription source parameters.
filter	Object	Filtering rule of the event subscription source.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-356 SubscriptionTargetInfo

Parameter	Type	Description
id	String	ID of the event subscription target.
name	String	Name of the event subscription target.
provider_type	String	Provider type of the event subscription target.
connection_id	String	Connection ID used by the event subscription target.
detail	Object	List of event subscription target parameters.
kafka_detail	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.
smn_detail	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.
eg_detail	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.

Parameter	Type	Description
retry_times	Integer	Number of retries.
transform	Transform object	Transform rule of the event subscription target.
dead_letter_queue	DeadLetterQueue object	List of dead letter queue parameters for the subscription.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-357 KafkaTargetDetail

Parameter	Type	Description
topic	String	Topic.
keyTransform	keyTransform object	Key value rule.

Table 5-358 keyTransform

Parameter	Type	Description
type	String	Type of the key value rule.
value	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.
template	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-359 SmnTargetDetail

Parameter	Type	Description
urn	String	Specifies the topic URN.
agency_name	String	Agency name.
subject_transform	subject transform object	Title rule.

Table 5-360 subject_transform

Parameter	Type	Description
type	String	Type of the title rule.
value	String	Title rule.
template	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-361 EgTargetDetail

Parameter	Type	Description
target_project_id	String	Target project ID.
target_channel_id	String	Target channel ID.
target_region	String	Target region.
cross_region	Boolean	Indicates whether cross-region feature is enabled.
cross_account	Boolean	Indicates whether cross-account feature is enabled.
agency_name	String	Agency name.

Table 5-362 ApigwTargetDetail

Parameter	Type	Description
url	String	Target URL.
invocation_http_parameters	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-363 InvocationHttpParameters

Parameter	Type	Description
header_parameters	Array of HeaderParameter objects	Object list.

Table 5-364 HeaderParameter

Parameter	Type	Description
is_value_secret	Boolean	Whether to encrypt the value.
key	String	Header key.
value	String	Header value.

Table 5-365 Transform

Parameter	Type	Description
type	String	Type of the transform rule.
value	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-366 DeadLetterQueue

Parameter	Type	Description
type	String	Queue type.
instance_id	String	Instance ID.
connection_id	String	Connection ID.
topic	String	Topic.

Example Requests

Obtain the EG trigger of a function flow.

GET https://{endpoint}/v1/{project_id}/subscription-triggers/workflow/{workflow_id}

Example Responses

Status code: 200

Operation successful.

```
{
  "total" : 1,
  "size" : 1,
  "items" : [ { } ]
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.11 Endpoint Management

5.11.1 Updating an Endpoint

Function

This API is used to update an endpoint.

URI

PUT /v1/{project_id}/endpoints/{endpoint_id}

Table 5-367 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
endpoint_id	Yes	String	ID of the endpoint.

Request Parameters

Table 5-368 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-369 Request body parameters

Parameter	Mandatory	Type	Description
description	No	String	Description.

Response Parameters

Status code: 200

Table 5-370 Response body parameters

Parameter	Type	Description
id	String	ID of the endpoint.
name	String	Name of the endpoint.
vpc_id	String	ID of the VPC to which the endpoint belongs.
subnet_id	String	ID of the subnet to which the endpoint belongs.
domain	String	Access domain name.
description	String	Description.
status	String	Status of the endpoint.
error_info	ErrorInfo object	Error message.
type	String	Type of the endpoint.
scalable	Boolean	Whether the endpoint is accessible.
created_time	String	UTC time when the endpoint is created.

Parameter	Type	Description
updated_time	String	UTC time when the endpoint is updated.
endpoints	Array of EndpointConnection objects	List of endpoints.

Table 5-371 ErrorInfo

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

Table 5-372 EndpointConnection

Parameter	Type	Description
endpoint_service_id	String	Service ID of the endpoint.
endpoint_service_name	String	Service name of the endpoint.
marker_id	String	Packet ID of the endpoint.
id	String	Node ID of the endpoint.
ip	String	Node IP address of the endpoint.
created_time	String	Time when the endpoint is created.

Example Requests

Update an endpoint.

```
PUT https://{eg_endpoint}/v1/{project_id}/endpoints/{endpoint_id}
{
  "description" : "string"
}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "id" : "23709d68-54d5-423b-a6be-03302e893152",
  "name" : "endpoint",
  "vpc_id" : "68bfbcc1-dff2-47e4-a9d4-332b9bc1b8de",
  "subnet_id" : "84758cf5-9c62-43ae-a778-3dbd8370c0a4",
  "domain" : "events.cn-north-4.myhuaweicloud.com",
  "description" : "Endpoint.",
  "status" : "CREATED",
  "error_info" : { },
  "type" : "PRIVATE",
  "scalable" : false,
  "created_time" : "2021-12-09 09:00:00",
  "updated_time" : "2021-12-09 09:00:00",
  "endpoints" : [ { } ]
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.11.2 Deleting an Endpoint

Function

This API is used to delete an endpoint.

URI

DELETE /v1/{project_id}/endpoints/{endpoint_id}

Table 5-373 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.
endpoint_id	Yes	String	ID of the endpoint.

Request Parameters

Table 5-374 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 204

Operation successful.

None

Example Requests

Delete an endpoint.

```
DELETE https://{eg_endpoint}/v1/{project_id}/endpoints/{endpoint_id}
```

Example Responses

None

Status Codes

Status Code	Description
204	Operation successful.

Error Codes

See [Error Codes](#).

5.11.3 Creating an Endpoint

Function

This API is used to create an endpoint.

URI

POST /v1/{project_id}/endpoints

Table 5-375 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Request Parameters

Table 5-376 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-377 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the endpoint. The value must be unique under a tenant. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit.
vpc_id	Yes	String	ID of the VPC to which the endpoint belongs.
subnet_id	Yes	String	ID of the subnet to which the endpoint belongs.
description	No	String	Description.

Response Parameters

Status code: 200

Table 5-378 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-379 Response body parameters

Parameter	Type	Description
id	String	ID of the endpoint.
name	String	Name of the endpoint.
vpc_id	String	ID of the VPC to which the endpoint belongs.
subnet_id	String	ID of the subnet to which the endpoint belongs.
domain	String	Access domain name.
description	String	Description.
status	String	Status of the endpoint.
error_info	ErrorInfo object	Error message.
type	String	Type of the endpoint.
scalable	Boolean	Whether the endpoint is accessible.
created_time	String	UTC time when the endpoint is created.
updated_time	String	UTC time when the endpoint is updated.
endpoints	Array of EndpointConnection objects	List of endpoints.

Table 5-380 ErrorInfo

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

Table 5-381 EndpointConnection

Parameter	Type	Description
endpoint_service_id	String	Service ID of the endpoint.
endpoint_service_name	String	Service name of the endpoint.
marker_id	String	Packet ID of the endpoint.
id	String	Node ID of the endpoint.
ip	String	Node IP address of the endpoint.
created_time	String	Time when the endpoint is created.

Example Requests

Create an endpoint.

GET https://{eg_endpoint}/v1/{project_id}/endpoints

```
{
  "name" : "endpoint",
  "vpc_id" : "68bfbcc1-dff2-47e4-a9d4-332b9bc1b8de",
  "subnet_id" : "84758cf5-9c62-43ae-a778-3dbd8370c0a4",
  "description" : "string"
}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "id" : "23709d68-54d5-423b-a6be-03302e893152",
  "name" : "endpoint",
  "vpc_id" : "68bfbcc1-dff2-47e4-a9d4-332b9bc1b8de",
  "subnet_id" : "84758cf5-9c62-43ae-a778-3dbd8370c0a4",
  "domain" : "events.cn-north-4.myhuaweicloud.com",
  "description" : "Endpoint.",
  "status" : "CREATED",
  "error_info" : { },
  "type" : "PRIVATE",
  "scalable" : false,
  "created_time" : "2021-12-09 09:00:00",
  "updated_time" : "2021-12-09 09:00:00",
  "endpoints" : [ { } ]
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.11.4 Obtaining the Endpoint List

Function

This API is used to obtain the list of endpoints.

URI

GET /v1/{project_id}/endpoints

Table 5-382 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-383 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
limit	No	Integer	Number of records displayed on each page. The value must be within the range [1, 1000].
sort	No	String	Sorting mode of the query results.
type	No	String	Type of the endpoint.
name	No	String	Name of the endpoint.
vpc_id	No	String	VPC ID of the endpoint.
fuzzy_name	No	String	Name of the endpoint. It is used for fuzzy match.
subnet_id	No	String	Subnet ID for endpoint query.

Request Parameters

Table 5-384 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-385 Response header parameters

Parameter	Type	Description
X-Request-Id	String	This field is the request ID number for task tracking. Format is request_uuid-timestamp-hostname.

Table 5-386 Response body parameters

Parameter	Type	Description
total	Integer	Total number of records.
size	Integer	Number of records displayed on the current page.
items	Array of EndpointInfo objects	Object list.

Table 5-387 EndpointInfo

Parameter	Type	Description
id	String	ID of the endpoint.
name	String	Name of the endpoint.
vpc_id	String	ID of the VPC to which the endpoint belongs.

Parameter	Type	Description
subnet_id	String	ID of the subnet to which the endpoint belongs.
domain	String	Access domain name.
description	String	Description.
status	String	Status of the endpoint.
error_info	ErrorInfo object	Error message.
type	String	Type of the endpoint.
scalable	Boolean	Whether the endpoint is accessible.
created_time	String	UTC time when the endpoint is created.
updated_time	String	UTC time when the endpoint is updated.
endpoints	Array of EndpointConnection objects	List of endpoints.

Table 5-388 ErrorInfo

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

Table 5-389 EndpointConnection

Parameter	Type	Description
endpoint_service_id	String	Service ID of the endpoint.
endpoint_service_name	String	Service name of the endpoint.
marker_id	String	Packet ID of the endpoint.
id	String	Node ID of the endpoint.
ip	String	Node IP address of the endpoint.
created_time	String	Time when the endpoint is created.

Example Requests

Obtain the endpoint list.

```
GET https://{eg_endpoint}/v1/{project_id}/endpoints
```

Example Responses

Status code: 200

Operation successful.

```
{
  "total" : 1,
  "size" : 1,
  "items" : [ { } ]
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.12 OBS Bucket Management

5.12.1 Obtaining the OBS Bucket List

Function

This API is used to obtain the list of OBS buckets.

URI

```
GET /v1/{project_id}/subscriptions/obsbuckets
```

Table 5-390 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-391 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
limit	No	Integer	Number of records displayed on each page. The value must be within the range [1, 1000].
sort	No	String	Sorting mode of the query results.

Request Parameters

Table 5-392 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-393 Response body parameters

Parameter	Type	Description
total	Integer	Total number of records.
size	Integer	Number of records displayed on the current page.
items	Array of ObsBucketInfo objects	Object list.

Table 5-394 ObsBucketInfo

Parameter	Type	Description
responseHeaders	Object	Response header.
originalHeaders	Object	Request header.
statusCode	Integer	Status.
bucketName	String	Bucket name.
owner	owner object	Owner of the bucket.
creationDate	String	Time when the bucket is created.
location	String	Location of the bucket.
storageClass	Object	Storage class of the object.
metadata	Object	Bucket metadata.
acl	Object	Bucket ACL.
bucketStorageClasses	Object	Storage class of the bucket.
bucketType	String	Bucket type.
requestId	String	Request ID.

Table 5-395 owner

Parameter	Type	Description
displayName	String	Label of the bucket.
id	String	Domain ID (account ID).

Example Requests

Obtain the OBS bucket list.

```
GET https://{eg_endpoint}/v1/{project_id}/subscriptions/obsbuckets
```

Example Responses

Status code: 200

Operation successful.

```
{
  "total" : 1,
  "size" : 1,
  "items" : [ { } ]
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.12.2 Refurbishing OBS

Function

This API is used to refurbish the FunctionGraph OBS trigger for EG subscription.

URI

POST /v1/{project_id}/subscriptions/obsbuckets/{bucket_name}/refurbishobs

Table 5-396 Path Parameters

Parameter	Mandatory	Type	Description
bucket_name	Yes	String	Bucket name.
project_id	Yes	String	Tenant resource space ID.

Request Parameters

Table 5-397 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 5-398 Request body parameters

Parameter	Mandatory	Type	Description
agency_name	Yes	String	Agency name.

Parameter	Mandatory	Type	Description
id	Yes	String	ID of the trigger to be refurbished.
transform	Yes	TransForm object	Transform rule of the event subscription target.

Table 5-399 TransForm

Parameter	Mandatory	Type	Description
type	Yes	String	Type of the transform rule.
value	No	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	No	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Response Parameters

Status code: 200

Table 5-400 Response body parameters

Parameter	Type	Description
id	String	Subscription ID.
name	String	Subscription name.
description	String	Description of the subscription.
type	String	Subscription type.
status	String	Status.
channel_id	String	ID of the event channel.
channel_name	String	Name of the event channel.
used	Array of SubscriptionUsedInfo objects	Label information.
sources	Array of SubscriptionSourceInfo objects	List of subscription sources.
targets	Array of SubscriptionTargetInfo objects	List of subscription targets.
created_time	String	Time when the trigger is created.
updated_time	String	Time when the trigger is updated.

Table 5-401 SubscriptionUsedInfo

Parameter	Type	Description
resource_id	String	Associated resource ID.
owner	String	Management tenant account.
description	String	Description.

Table 5-402 SubscriptionSourceInfo

Parameter	Type	Description
id	String	ID of the event subscription source.
name	String	Name of the event subscription source.
provider_type	String	Provider type of the event subscription source.

Parameter	Type	Description
detail	Object	List of event subscription source parameters.
filter	Object	Filtering rule of the event subscription source.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-403 SubscriptionTargetInfo

Parameter	Type	Description
id	String	ID of the event subscription target.
name	String	Name of the event subscription target.
provider_type	String	Provider type of the event subscription target.
connection_id	String	Connection ID used by the event subscription target.
detail	Object	List of event subscription target parameters.
kafka_detail	KafkaTargetDetail object	List of Kafka event subscription target parameters. The total length of this field after serialization cannot exceed 1024 bytes.
smn_detail	SmnTargetDetail object	List of SMN event target parameters for the subscription. The total length cannot exceed 1024 bytes after serialization.
eg_detail	EgTargetDetail object	List of EG event channel target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for EG channel event targets.
apigw_detail	ApigwTargetDetail object	List of APIGW URL target parameters for the subscription. The total length cannot exceed 1,024 bytes after serialization. This field is mandatory for APIGW event targets.

Parameter	Type	Description
retry_times	Integer	Number of retries.
transform	Transform object	Transform rule of the event subscription target.
dead_letter_queue	DeadLetterQueue object	List of dead letter queue parameters for the subscription.
created_time	String	Time when the event subscription is created.
updated_time	String	Time when the event subscription is updated.

Table 5-404 KafkaTargetDetail

Parameter	Type	Description
topic	String	Topic.
keyTransform	keyTransform object	Key value rule.

Table 5-405 keyTransform

Parameter	Type	Description
type	String	Type of the key value rule.
value	String	Key value rule. This parameter is mandatory when type is VARIABLE or CONSTANT.
template	String	Key value rule template. This parameter is mandatory when type is VARIABLE.

Table 5-406 SmnTargetDetail

Parameter	Type	Description
urn	String	Specifies the topic URN.
agency_name	String	Agency name.
subject_transform	subject transform object	Title rule.

Table 5-407 subject_transform

Parameter	Type	Description
type	String	Type of the title rule.
value	String	Title rule.
template	String	Title rule template. This parameter is mandatory when type is set to VARIABLE.

Table 5-408 EgTargetDetail

Parameter	Type	Description
target_project_id	String	Target project ID.
target_channel_id	String	Target channel ID.
target_region	String	Target region.
cross_region	Boolean	Indicates whether cross-region feature is enabled.
cross_account	Boolean	Indicates whether cross-account feature is enabled.
agency_name	String	Agency name.

Table 5-409 ApigwTargetDetail

Parameter	Type	Description
url	String	Target URL.
invocation_http_parameters	InvocationHttpParameters object	Parameters for invoking HTTP.

Table 5-410 InvocationHttpParameters

Parameter	Type	Description
header_parameters	Array of HeaderParameter objects	Object list.

Table 5-411 HeaderParameter

Parameter	Type	Description
is_value_secret	Boolean	Whether to encrypt the value.
key	String	Header key.
value	String	Header value.

Table 5-412 Transform

Parameter	Type	Description
type	String	Type of the transform rule.
value	String	For a constant type rule, the field is the constant content definition. For a variable type rule, the field is a variable definition and the content must be a JSON object string. A maximum of 100 variables are supported, and nested structures are not supported. The variable name can contain a maximum of 64 characters. Only letters, digits, periods (.), underscores (_), and hyphens (-) are allowed. It must start with a letter or digit and cannot start with HC.. The variable value expression can be a constant or JSONPath expression. The string length cannot exceed 1024 characters.
template	String	Template definition of the rule content when the rule is of the variable type. Defined variables can be referenced.

Table 5-413 DeadLetterQueue

Parameter	Type	Description
type	String	Queue type.
instance_id	String	Instance ID.
connection_id	String	Connection ID.
topic	String	Topic.

Example Requests

Refurbish the FunctionGraph trigger of OBS bucket obs1 for EG subscription.

POST https://{eg_endpoint}/v1/{project_id}/subscriptions/obsbuckets/obs1/refurbishobs

```
{
  "agency_name" : "string",
  "id" : "string",
  "transform" : {
    "type" : "VARIABLE",
    "value" : "{ \"contant_boolean\": true, \"contant_string\": \"constant\", \"variable_string\": \"${data.string}\", \"variable_json_object\": \"${data.object}\"",
    "template" : "{ \"contant_boolean\": ${contant_boolean}, \"contant_string\": \"${contant_string!\\\"default\\\"}\"",
    \"\"} \"variable_string\": \"${contant_boolean}\", \"variable_json_object\": \"${variable_json_object!\"null\"}\""}"
  }
}
```

Example Responses

Status code: 200

Operation successful.

```
{
  "id" : "23709d68-54d5-423b-a6be-03302e893152",
  "name" : "test-subscription",
  "description" : "this is a test subscription",
  "type" : "EVENT",
  "status" : "CREATED",
  "channel_id" : "05649f9a-b324-4920-9c49-156d4cd2e546",
  "channel_name" : "channel006",
  "used" : [ { } ],
  "sources" : [ { } ],
  "targets" : [ { } ],
  "created_time" : "2021-12-09 09:00:00",
  "updated_time" : "2021-12-09 09:00:00"
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

5.13 Event Example Management

5.13.1 Obtaining the Event Example List

Function

This API is used to obtain the event example list.

URI

GET /v1/{project_id}/samples

Table 5-414 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant resource space ID.

Table 5-415 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
limit	No	Integer	Number of records displayed on each page. The value must be within the range [1, 1000].
sort	No	String	Sorting mode of the query results.
name	No	String	Name of the event example. It is used for fuzzy match.
event_type_name	No	String	Event type name of the event example.
event_source_id	No	String	Event source of the event example.

Request Parameters

Table 5-416 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. The token can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-417 Response body parameters

Parameter	Type	Description
total	Integer	Total number.
size	Integer	Number of records displayed on the current page.
items	Array of EventSampleItemInfo objects	Object list.

Table 5-418 EventSampleItemInfo

Parameter	Type	Description
id	String	Event example ID.
name	String	Event example name.
content	String	Event example content.
event_type_id	String	Event type ID corresponding to the event example.
event_type_name	String	Event type name corresponding to the event example.
event_source_id	String	Event source ID corresponding to the event example.
event_source_name	String	Name of the event source corresponding to the event example.
created_time	String	Creation time.
updated_time	String	Update time.
deleted_time	String	Deletion time.

Example Requests

Obtain the event example list.

```
GET https://{eg_endpoint}/v1/{project_id}/samples
```

Example Responses

Status code: 200

Operation successful.

```
{  
  "total" : 1,  
  "size" : 1,  
  "items" : [ { } ]  
}
```

Status Codes

Status Code	Description
200	Operation successful.

Error Codes

See [Error Codes](#).

6 Permissions Policies and Supported Actions

This chapter describes fine-grained permissions management for your EG. If your account does not require individual IAM users, you can skip this chapter.

New IAM users do not have any permissions assigned by default. You need to first add them to one or more groups and attach policies or roles to these groups. After authorization, the user can perform specified operations on cloud services based on the permissions.

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

NOTE

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

An account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions can call the API successfully. For example, if an IAM user creates event sources using an API, the user must have been granted permissions that allow the **eg:sources:create** action.

Supported Actions

EG provides system-defined policies that can be directly used in IAM. You can also create custom policies to supplement system-defined policies for more refined access control. Operations supported by policies are specific to APIs. The following are common concepts related to policies:

- Permissions: statements in a policy that allow or deny certain operations
- APIs: APIs that will be called for performing certain operations
- Actions: specific operations that are allowed or denied
- IAM projects or enterprise projects: A custom policy can be applied to IAM projects or enterprise projects or both. Policies that contain actions supporting

both IAM and enterprise projects can be assigned to user groups and take effect in both IAM and Enterprise Management. Policies that only contain actions supporting IAM projects can be assigned to user groups and only take effect for IAM. Such policies will not take effect if they are assigned to user groups in Enterprise Management.

EG supports the following actions that can be defined in custom policies. Permissions must be obtained before calling APIs. For details on how to obtain permissions, visit the [Identity and Access Management help center](#).

Table 6-1 EG permissions

Permission	API	Action	IAM Project	Enterprise Project
Create event channels	POST /v1/{project_id}/channels	eg:channels:create	√	x
View the event channel list	GET /v1/{project_id}/channels	eg:channels:list	√	x
Update event channels	PUT /v1/{project_id}/channels/{channel_id}	eg:channels:update	√	x
Delete event channels	DELETE /v1/{project_id}/channels/{channel_id}	eg:channels:delete	√	x
View event channel details	GET /v1/{project_id}/channels/{channel_id}	eg:channels:get	√	x
Publish events to event channels	POST /v1/{project_id}/channels/{channel_id}/events	eg:channels:putEvents	√	x
Create event sources	POST /v1/{project_id}/sources	eg:sources:create	√	x
View the event source list	GET /v1/{project_id}/sources	eg:sources:list	√	x
Update event sources	PUT /v1/{project_id}/sources/{source_id}	eg:sources:update	√	x
Delete event sources	DELETE /v1/{project_id}/sources/{source_id}	eg:sources:delete	√	x

Permission	API	Action	IAM Project	Enterprise Project
View event source details	GET /v1/{project_id}/sources/{source_id}	eg:sources:get	√	x
View the event target catalog list	GET /v1/{project_id}/target-catalogs	eg:targetCatalogs:list	√	x
Create event subscriptions	POST /v1/{project_id}/subscriptions	eg:subscriptions:create	√	x
View the event subscription list	GET /v1/{project_id}/subscriptions	eg:subscriptions:list	√	x
Update event subscriptions	PUT /v1/{project_id}/subscriptions/{subscription_id}	eg:subscriptions:update	√	x
Delete event subscriptions	DELETE /v1/{project_id}/subscriptions/{subscription_id}	eg:subscriptions:delete	√	x
View event subscription details	GET /v1/{project_id}/subscriptions/{subscription_id}	eg:subscriptions:get	√	x
Enable or disable event subscriptions	POST /v1/{project_id}/subscriptions/operation	eg:subscriptions:update	√	x
Create schemas	POST /v1/{project_id}/schemas	eg:schemas:create	√	x
View the schema list	GET /v1/{project_id}/schemas	eg:schemas:list	√	x
Update schemas	PUT /v1/{project_id}/schemas/{schema_id}	eg:schemas:update	√	x
Delete schemas	DELETE /v1/{project_id}/schemas/{schema_id}	eg:schemas:delete	√	x

Permission	API	Action	IAM Project	Enterprise Project
View schema details	GET /v1/{project_id}/schemas/{schema_id}	eg:schemas:get	√	x
View the schema version list	GET /v1/{project_id}/schemas/{schema_id}/versions	eg:schemas:listVersions	√	x
View schema version details	GET /v1/{project_id}/schemas/{schema_id}/versions/{version}	eg:schemas:getVersion	√	x
Delete schema versions	DELETE /v1/{project_id}/schemas/{schema_id}/versions/{version}	eg:schemas:deleteVersion	√	x
Discover schemas	POST /v1/{project_id}/schema-discover	eg:schemas:getDiscovered	√	x
Query quotas	GET /v1/{project_id}/quotas	eg:quotas:list	√	x

7 Appendix

7.1 Status Codes

Table 7-1 lists status codes.

Table 7-1 Status codes

Status Code	Name	Description
100	Continue	The client should continue with its request. This interim response is used to inform the client that some requests have been received and have not been rejected by the server.
101	Switching Protocols	The protocol should be switched. The protocol can only be switched to a more advanced protocol. For example, the current HTTP protocol is switched to a later version of HTTP.
200	OK	Request sent successfully.
201	Created	The request for creating resources has been fulfilled.
202	Accepted	The request has been accepted, but the processing has not been completed.
203	Non-Authoritative Information	The request has been fulfilled.
204	NoContent	The server has successfully processed the request, but is not returning any response body. The status code is returned in response to an HTTP OPTIONS request.

Status Code	Name	Description
205	Reset Content	The server has fulfilled the request, but the requester is required to reset the content.
206	Partial Content	The server has successfully processed a part of the request.
300	Multiple Choices	There are multiple options for the requested resource. For example, this code could be used to present a list of resource characteristics and addresses from which the client such as a browser may choose.
301	Moved Permanently	This and all future requests have been permanently moved to the given URI indicated in this response.
302	Found	The requested resource was temporarily moved.
303	See Other	Retrieve another URL using a GET or POST method.
304	Not Modified	The requested resource has not been modified. When the server returns this status code, it does not return any resources.
305	Use Proxy	The requested resource is available only through a proxy.
306	Unused	This HTTP status code is no longer used.
400	BadRequest	Invalid request. The client should modify the request instead of re-initiating it.
401	Unauthorized	The authorization information provided by the client is incorrect or invalid.
402	Payment Required	Reserved for future use.
403	Forbidden	The request is rejected. The server has received the request and understood it, but the server is refusing to respond to it. The client should not repeat the request without modifications.
404	NotFound	The requested resource cannot be found. The client should modify the request instead of re-initiating it.

Status Code	Name	Description
405	MethodNotAllowed	A request method is not supported for the requested resource. The client should modify the request instead of re-initiating it.
406	Not Acceptable	The server cannot fulfill the request based on the content characteristics of the request.
407	Proxy Authentication Required	This code is similar to 401, but indicates that the client must first authenticate itself with the proxy.
408	Request Time-out	The server timed out when waiting for the request. The client may re-initiate the request without any modification at any time.
409	Conflict	The request could not be processed due to a conflict. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
410	Gone	The requested resource cannot be found. The requested resource has been deleted permanently.
411	Length Required	The server refused to process the request because the request does not specify the length of its content.
412	Precondition Failed	The server does not meet one of the preconditions that the requester puts on the request.
413	Request Entity Too Large	The server refuses to process a request because the request is too large. The server may close the connection to prevent the client from continuing the request. If the server cannot process the request temporarily, the response will contain a Retry-After field.
414	Request-URI Too Large	The URI provided was too long for the server to process.
415	Unsupported Media Type	The server does not support the media type in the request.
416	Requested range not satisfiable	The requested range is invalid.

Status Code	Name	Description
417	Expectation Failed	The server fails to meet the requirements of the Expect request-header field.
422	UnprocessableEntity	The request is well-formed but unable to be processed due to semantic errors.
429	TooManyRequests	The client has sent more requests than its rate limit is allowed within a given amount of time, or the server has received more requests than it is able to process within a given amount of time. In this case, the client should re-initiate requests after the time specified in the Retry-After header of the response expires.
500	InternalServerError	The server is able to receive the request but it could not understand the request.
501	Not Implemented	The server does not support the requested function.
502	Bad Gateway	The server acting as a gateway or proxy receives an invalid response from a remote server.
503	ServiceUnavailable	The requested service is invalid. The client should modify the request instead of re-initiating it.
504	ServerTimeout	The request cannot be fulfilled within a given time. This status code is returned to the client only when the duration specified by Timeout in the request timed out.
505	HTTP Version not supported	The server does not support the HTTP protocol version used in the request.

7.2 Error Codes

Status Code	Error Codes	Error Message	Description	Solution
400	EG.00513000	Parameter error	Parameter error	Check parameters in the request body
400	EG.00513001	Duplicate name.	Duplicate name.	Enter a unique name.

Status Code	Error Codes	Error Message	Description	Solution
400	EG.00513002	Enabled subscriptions cannot be edited.	Enabled subscriptions cannot be edited.	Try again later.
400	EG.00513003	Invalid target URL.	Invalid target URL.	Check the event target URL.
400	EG.00513004	Invalid filter parameter.	Invalid filter parameter.	Check that the filter rule is correctly set for the event source.
400	EG.00513005	Event channel unavailable.	Event channel unavailable.	Select another event channel.
400	EG.00513006	This VPC already has a private endpoint.	This VPC already has a private endpoint.	Do not create it again.
400	EGS.00516010	Must be in ZIP format.	Must be in ZIP format.	Check the package format
400	EGS.00516011	Invalid download URL.	Invalid download URL.	Check the download URL
400	EGS.00516012	Download OBS file failed.	Download OBS file failed.	Contact your administrator.
400	EGS.00516013	Upload file to OBS failed.	Upload file to OBS failed.	Contact your administrator.
400	EGS.00516015	Create OBS bucket failed.	Create OBS bucket failed.	Contact your administrator.
400	EGS.00516016	The certificate does not exist in the compressed package.	The certificate does not exist in the compressed package.	Verify that the certificate file exists in the package.
400	EGS.00516017	Too many files.	Too many files.	Check the number of files in the package.
400	EGS.00516018	File too large.	File too large.	Check the file size in the compressed package.

Status Code	Error Codes	Error Message	Description	Solution
403	EG.00512000	Permission denied.	Permission denied.	Contact your administrator.
403	EG.00512001	The operation is not allowed because the account is frozen.	The operation is not allowed because the account is frozen.	Top up your account or contact the administrator to unfreeze your account.
403	EG.00512002	Your account does not have the permission to create an agency.	Your account does not have the permission to create an agency.	Contact the administrator to obtain the required permission.
403	EG.00512003	The agency does not exist.	The agency does not exist.	Create an agency first.
403	EG.00514003	Insufficient resource quota.	Insufficient resource quota.	Increase the resource quota.
403	EG.00514004	The resource cannot be modified.	The resource cannot be modified.	The resources created by other services cannot be modified.
404	EG.00514001	The resource is not found.	The resource is not found.	Contact you administrator.
409	EG.00514002	The resource is bound to another resource and cannot be deleted.	The resource is bound to another resource and cannot be deleted.	Delete the resource bound to this resource first.
409	EG.00514005	The connection is being created and cannot be deleted.	The connection is being created and cannot be deleted.	Try again later.
500	EG.00511000	Internal service error.	Internal service error.	Contact your administrator.

Status Code	Error Codes	Error Message	Description	Solution
500	EG.00515001	The resource does not exist when the event is published.	The resource does not exist when the event is published.	Contact your administrator.
503	EG.00511001	The service is unavailable.	The service is unavailable.	Contact your administrator.

7.3 Obtaining a Project ID

Scenario

A project ID is required for some URLs when an API is called. Obtain a project ID using either of the following methods:

- [Obtaining a Project ID by Calling an API](#)
- [Obtaining a Project ID on the Console](#)

Obtaining a 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**, where *{Endpoint}* indicates the IAM endpoint. You can obtain the IAM endpoint from Regions and Endpoints. For details on API calling authentication, see [Performing Authentication](#).

In the following example, **id** indicates the project ID.

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

Obtaining a Project ID on the Console

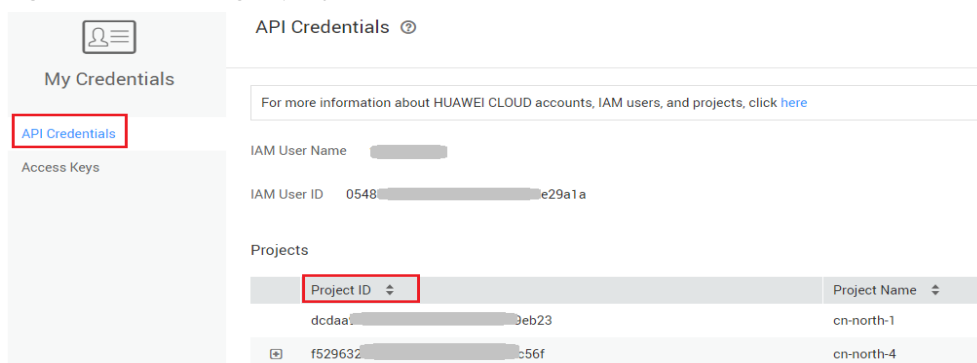
A project ID is required for some URLs when an API is called. You can obtain a project ID on the console.

The following procedure describes how to obtain a project ID:

- Step 1** Log in to the management console.
- Step 2** Hover the pointer over the username in the upper right corner and choose **My Credentials** from the drop-down list.

On the **API Credentials** page, view the project ID in the project list.

Figure 7-1 Viewing a project ID



----End

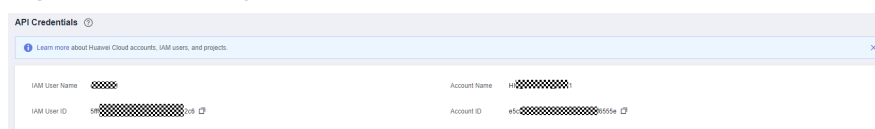
7.4 Obtaining the Account Name and Account ID

When calling APIs, you need to specify your domain name and domain ID in certain URLs. To do so, you need to obtain domain name and domain ID on the console first. The following procedure describes how to obtain the domain and domain ID:

- Log in to the management console.
- Hover the pointer over the username in the upper right corner and choose **My Credentials** from the drop-down list.

View the account name and account ID.

Figure 7-2 Viewing the account name and account ID



8 Description

Released On	Description
2023-03-31	This issue is the first official release.