Cloud Eye API Reference-25.2.0

Issue 01

Date 2025-10-29

HUAWEI

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1 Before You Start

Welcome to *Cloud Eye API Reference*. Cloud Eye is a multi-dimensional resource monitoring platform. Customers can use Cloud Eye to monitor the utilization of service resources, track the status of cloud services, configure alarm rules and notifications, and quickly respond to resource changes.

This document describes how to use application programming interfaces (APIs) to perform operations on metrics, alarm rules, and monitoring data, such as querying the metric list and the alarm rule list, creating alarm rules, and deleting alarm rules. For details about all supported operations, see **2 API Overview**.

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

API Calling

Cloud Eye supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS. For details about API calling, see **3 Calling APIs**.

Additionally, Cloud Eye offers software development kits (SDKs) of multiple programming languages. For details about how to use SDKs, see **Huawei Cloud SDKs**.

Endpoints

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

Constraints

- The number of alarm rules that you can create is determined by your quota. To view or increase the quota, see **Quota Adjustment**.
- For more constraints, see API description.

Concepts

- Account

  An account is created upon successful signing up. The account has full access permissions for all of its cloud services and resources. It can be used to reset

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

- User

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

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

- Region

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

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

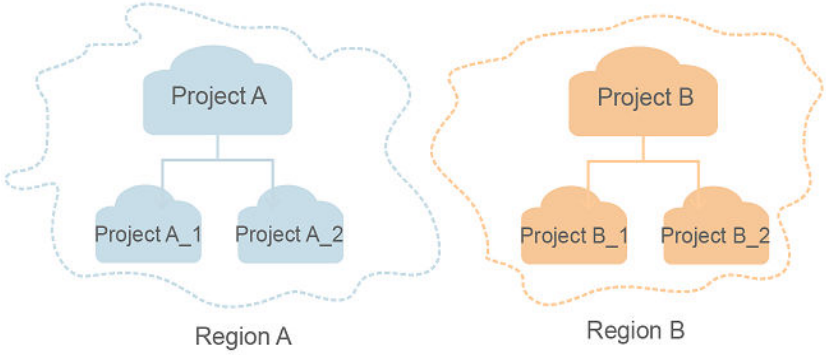
- AZ

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

- Project

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

  Figure 1-1 Project isolation model

- Enterprise Project

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

contain resources of multiple regions, and resources can be added to or removed from enterprise projects.

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

2 API Overview

Cloud Eye APIs allow you to use all Cloud Eye functions. For example, you can query the metric list and create alarm rules.

Table 2-1 API description

Type	Subtype	API	Description
API V1	API versions	**5.1.1 Querying All API Versions**	Query all API versions supported by Cloud Eye.
		5.1.2 Querying a Specified API Version	Query a specified API version of Cloud Eye.
	Metrics	**5.2.1 Querying Metrics**	Query metrics supported by Cloud Eye.
	Alarm rules	**5.3.1 Querying Alarm Rules**	Query alarm rules.
		5.3.2 Querying Details of an Alarm Rule	Query details of an alarm rule based on its ID.
		5.3.3 Enabling or Disabling an Alarm Rule	Enable or disable an alarm rule based on the alarm rule ID.
		5.3.4 Deleting an Alarm Rule	Delete an alarm rule based on its ID.
		5.3.5 Creating an Alarm Rule	Create an alarm rule.
		5.3.6 Creating a Custom Alarm Template	Create a custom alarm template to add alarm rules for one or more metrics.

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Type	Subtype	API	Description
		5.3.7 Deleting a Custom Alarm Template	Delete a custom alarm template.
		5.3.8 Querying the Alarm History of an Alarm Rule	Query the alarm history of an alarm rule based on the alarm rule ID.
		5.3.9 Querying Custom Alarm Templates	Query custom alarm templates.
		5.3.10 Updating a Custom Alarm Template	Update a custom alarm template.
		5.3.11 Modifying an Alarm Rule	Modify an alarm rule.
	Monitoring data	5.4.1 Querying Monitoring Data of a Metric	Query the monitoring data of a specified metric at a specified granularity in a specified time range.
		5.4.2 Adding Monitoring Data	Add one or more pieces of metric monitoring data.
		5.4.3 Querying Monitoring Data of Multiple Metrics	Query the monitoring data of specified metrics within a specified time range and at a specified granularity. You can query the monitoring data of up to 10 metrics in one batch.
		5.4.4 Querying the Host Configuration	Query the host configuration for a specified event type in a specified time range. You can specify the dimension of data to be queried.
	Quotas	5.5.1 Querying Quotas	Query the alarm rule quota.
	Resource groups	5.6.1 Querying Resources in a Resource Group	Query resources in a resource group.

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Type	Subtype	API	Description
		5.6.2 Creating a Resource Group	Create a resource group.
		5.6.3 Updating a Resource Group	Update a resource group.
		5.6.4 Deleting a Resource Group	Delete a resource group.
		5.6.5 Query Resource Groups	Query all resource groups you created.
	Event monitoring	5.7.1 Reporting Events	Report custom events.
		5.7.2 Querying Events	Query events, including system events and custom events.
		5.7.3 Querying Details of an Event	Query details of an event based on the event name.
API V2	Alarm rules	Creating an Alarm Rule	Create an alarm rule.
		Deleting Alarm Rules in Batches	Delete alarm rules in batches.
		Enabling or Disabling Alarm Rules in Batches	Enable or disable alarm rules in batches.
		Querying Alarm Rules	Query alarm rules.
	Monitored resources	Batch Adding Resources to an Alarm Rule	Batch add resources to an alarm rule. (Alarm rules for resources in resource groups are excluded.)
		Batch Deleting Resources from an Alarm Rule	Batch delete resources from an alarm rule. (Alarm rules for resources in resource groups are excluded.)
		Querying Resources in an Alarm Rule	Query alarm rules based on the alarm rule IDs.

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Type	Subtype	API	Description
	Alarm policies	Modifying All Fields in an Alarm Policy	Modify all fields in an alarm rule.
		Querying Alarm Policies	Query alarm policies based on the alarm rule ID.
	Alarm records	Querying Alarm Records	Query alarm records.
	Alarm templates	Creating a Custom Alarm Template	Create a custom template.
		Deleting Custom Alarm Templates in Batches	Delete custom templates in batches.
		Modifying a Custom Alarm Template	Modify a custom template.
		Querying Alarm Templates	Query alarm templates.
		Querying Details of an Alarm Template	Query details of an alarm template.
	Alarm rules associated with an alarm template	Querying Alarm Rules Associated with an Alarm Template	Query alarm rules associated with an alarm template.
	Resource groups	Creating a Resource Group	Create a resource group.
		Batch Deleting Resource Groups	Batch delete resource groups.
		Modifying a Resource Group	Modify a resource group.

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Type	Subtype	API	Description
		Querying Details of a Resource Group	Query details of a resource group.
		Querying Resource Groups	Query resource groups.
	Resources in a resource group	Querying Resources of a Specified Dimension and a Specified Service Type in a Resource Group	Query resources of a specified dimension and a specified service type in a resource group.
	One-click monitoring	Enabling One-Click Monitoring	Enable one-click monitoring.
		Querying Services and Resources That Support One-Click Monitoring	Query services and resources that support one-click monitoring.
		Querying Alarm Rules of One Service in One-Click Monitoring	Query alarm rules of one service in one-click monitoring.
		Batch Enabling or Disabling Alarm Rules of One Service in One-Click Monitoring	Batch enable or disable alarm rules for one service in one-click monitoring.
		Batch Disabling One-Click Motoring	Batch disable one-click motoring.

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Type	Subtype	API	Description
		Batch Modifying Alarm Notifications in Alarm Rules for One Service That Has One-Click Monitoring Enabled	Batch modify alarm notifications in alarm rules for one service that has one-click monitoring enabled.
		Batch Enabling or Disabling Alarm Policies in Alarm Rules for One Service That Has One-Click Monitoring Enabled	Batch enable or disable alarm policies in alarm rules for one service that has one-click monitoring enabled.
	Alarm notification masking	Creating Alarm Notification Masking Rules in Batches	Create alarm notification masking rules in batches.
		Modifying the Masking Time of Alarm Notification Masking Rules in Batches	Modify the masking time of alarm notification masking rules in batches.
		Modifying an Alarm Notification Masking Rule	Modify an alarm notification masking rule.
		Deleting Alarm Notification Masking Rules in Batches	Delete alarm notification masking rules in batches.
		Querying Alarm Notification Masking Rules	Query notification masking rules of a specified type in batches.

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Type	Subtype	API	Description
		Querying Resources for Which Alarm Notifications Have Been Masked	Query resources for which alarm notifications have been masked.
	Dashboards	Creating or Copying a Dashboard	Create or copy a dashboard.
		Querying Dashboards	Query dashboards.
		Modifying a Dashboard	Modify a dashboard.
		Deleting Dashboards in Batches	Delete dashboards in batches.
	Graphs	Creating, Copying, or Batch Creating Graphs on a Dashboard	Create, copy, or batch create graphs on a dashboard.
		Querying Graphs Added to a Dashboard	Query graphs added to a dashboard.
		Querying Information About a Graph	Query information about a graph.
		Deleting a Graph	Delete a graph.
		Updating Graphs in Batches	Update graphs in batches.
	Resource tags	Querying Tags of a Type of Resources in a Cloud Eye Project	Query tags of a type of resources in a Cloud Eye project.

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3 Calling APIs

3.1 Making an API Request

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

Request URI

A request URI is in the following format:

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

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

Table 3-1 URI parameter description

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

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

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

Figure 3-1 Example URI

NOTE

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

Request Methods

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

Table 3-2 HTTP methods

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

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

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

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Request Header

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

Common request header fields are as follows.

Table 3-3 Common request header fields

Parameter	Description	Mandatory	Example Value
Host	Specifies the server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. The value is in the format of *Hostname:Port number*. If the port number is not specified, the default port is used. The default port number for **https** is **443**.	No This field is mandatory for AK/SK authentication.	code.test.com or code.test.com:443
Content-Type	Specifies the type (or format) of the message body. The default value **application/json** is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Specifies the length of the request body. The unit is byte.	No	3495
X-Project-Id	Specifies the project ID. Obtain the project ID by following the instructions in **9.3 Obtaining a Project ID**.	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cbaa340f9c0f4

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

NOTE

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

For more details, see "Authentication Using AK/SK" in **3.2 Authentication**.

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

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

(Optional) Request Body

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

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

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

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

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

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

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

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

3.2 Authentication

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

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

Token Authentication

NOTE

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

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to requests to get permissions for calling the API. You can obtain a token by calling the **Obtaining User Token** API.

Cloud Eye is a project-level service. When you call the API, set **auth.scope** in the request body to **project**.

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

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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:

```
https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFG....
```

AK/SK Authentication

NOTE

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

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

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

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

NOTE

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

3.3 Response

Status Code

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

A status code is a group of digits, ranging from 1xx to 5xx. It indicates the status of a request. For more information, see **9.1 Status Codes**.

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

Response Header

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

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

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NOTE

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

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


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


(Optional) Response Body

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

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


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


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


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


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

4 Getting Started

Overview

This topic describes how to call Cloud Eye APIs to create an alarm rule for the ECS CPU usage.

NOTE

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

Procedure

1. Obtain the token by referring to **3.2 Authentication**.
2. Query the list of metrics that can be monitored.

   Send **GET https://***Cloud Eye endpoint***/V1.0/{project_id}/metrics**.

   Add **X-Auth-Token** obtained in **1** to the request header.

   After the request is successfully responded, the **metrics** information is returned, such as **"metric_name": "cpu_util"** in the following figure.


```
{
    "metrics": [
        {
            "namespace": "SYS.ECS",
            "dimensions": [
                {
                    "name": "instance_id",
                    "value": "d9112af5-6913-4f3b-bd0a-3f96711e004d"
                }
            ],
            "metric_name": "cpu_util",
            "unit": "%"
        }
    ],
    "meta_data": {
        "count": 1,
        "marker": "SYS.ECS.cpu_util.instance_id:d9112af5-6913-4f3b-bd0a-3f96711e004d",
        "total": 7
    }
}
```


   If the request fails, an error code and error information are returned. For details, see **9.2 Error Codes**.

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3. Create an alarm rule.

   Send **POST https://*Cloud Eye endpoint*/V1.0/{project_id}/alarms**.

   Specify the following parameters in the request body:

```
{
   "alarm_name": "alarm-rp0E",  //Alarm rule name (mandatory, string)
   "alarm_description": "",
   "metric": {
      "namespace": "SYS.ECS",  //Namespace (mandatory, string)
      "dimensions": [
         {
            "name": "instance_id",
            "value": "33328f02-3814-422e-b688-bfdba93d4051"
         }
      ],
      "metric_name": "cpu_util"   //Metric name (mandatory, string)
   },
   "condition": {
      "period": 300,      //Monitoring period (mandatory, integer)
      "filter": "average",     //Data rollup method (mandatory, string)
      "comparison_operator": ">=",    //Operator of the alarm threshold (mandatory, string)
      "value": 80, //Threshold (mandatory, string)
      "unit": "%",  //Data unit (mandatory, string)
      "count": 1
   },
   "alarm_enabled": true,
   "alarm_action_enabled": true,
   "alarm_level": 2,
   "alarm_actions": [
      {
         "type": "notification",
         "notificationList": [ ]
      }
   ],
   "ok_actions": [
      {
         "type": "notification",
         "notificationList": [ ]
      }
   ]
}
```

   If the request is responded, the alarm rule ID is returned.

```
{
   "alarm_id":"al1450321795427dR8p5mQBo"
}
```

   If the request fails, an error code and error information are returned. For details, see **9.2 Error Codes**.

   You can query, enable, disable, or delete alarm rules based on the alarm rule ID obtained in **3**.

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5 API V1

5.1 API Version Management

5.1.1 Querying All API Versions

Function

This API is used to query all API versions supported by Cloud Eye.

URI

GET /

Request

Example request

```
GET https://{Cloud Eye endpoint}/
```

Response

- Response parameters

Table 5-1 Parameter description

Parameter	Type	Description
versions	Array of objects	Specifies the list of all versions. For details, see **Table 5-2**.

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Table 5-2 versions data structure description

Parameter	Type	Description
id	String	Specifies the version ID, for example, v1.
links	Array of objects	Specifies the API URL. For details, see **Table 5-3**.
version	String	Specifies the API version. If the APIs of this version support microversions, set this parameter to the supported maximum microversion. If the microversion is not supported, leave this parameter blank.
status	String	Specifies the version status. **CURRENT**: indicates a primary version. **SUPPORTED**: indicates an old version but is still supported. **DEPRECATED**: indicates a deprecated version which may be deleted later.
updated	String	Specifies the version release time, which must be the UTC time. For example, the release time of v1 is **2014-06-28T12:20:21Z**.
min_version	String	If the APIs of this version support microversions, set this parameter to the supported minimum microversion. If not, leave this parameter blank.

Table 5-3 links data structure description

Parameter	Type	Description
href	String	Specifies the reference address of the current API version.
rel	String	Specifies the relationship between the current API version and the referenced address.

- Example response

```
{
 "versions": [
  {
   "id": "V1.0",
   "links": [
    {
     "href": "https://x.x.x.x/V1.0/",
     "rel": "self"
    }
   ],
   "min_version": "",
   "status": "CURRENT",
   "updated": "2018-09-30T00:00:00Z",
   "version": ""
  }
```

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```
 ]
}
```

Returned Values

- Normal

  200

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.1.2 Querying a Specified API Version

Function

This API is used to query a specified API version of Cloud Eye.

URI

GET /{api_version}

- Parameter description

  Table 5-4 Parameter description

Parameter	Mandatory	Description
api_version	Yes	**Definition** API version.

- Example

```
GET https://{Cloud Eye endpoint}/V1.0\
```

Request

None

Response

- Response parameters

Table 5-5 Parameter description

Parameter	Type	Description
version	Objects	**Definition** Version details. For details, see **Table 5-6**.

Table 5-6 versions data structure description

Parameter	Type	Description
id	String	**Definition** Version number, for example, **V1.0** **Range** 1 to 64 characters
links	Array of objects	**Definition** API URL. For details, see **Table 5-7**.
version	String	**Definition** API version. If the APIs of this version support micro versions, this parameter indicates the supported maximum micro version. If not, it is left blank. **Range** 1 to 64 characters
status	String	**Definition** Version status. **Range** **CURRENT**: widely used version **SUPPORTED**: earlier version which is still supported **DEPRECATED**: deprecated version which may be deleted later

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Parameter	Type	Description
updated	String	**Definition** Version release time in UTC. For example, the release time of v1 is **2014-06-28T12:20:21Z**. **Range** N/A
min_version	String	**Definition** API version. If the APIs of this version support micro versions, this parameter indicates the supported minimum micro version. If not, it is left blank. **Range** 1 to 64 characters

Table 5-7 links data structure description

Parameter	Type	Description
href	String	**Definition** Reference address of the current API version. **Range** N/A
rel	String	**Definition** Relationship between the current API version and the referenced address. **Range** N/A

- Example response

```
{
  "version": {
     "id": "V1.0",
     "links": [
       {
         "href": "https://x.x.x.x/V1.0/",
         "rel": "self"
       }
     ],
     "min_version": "",
     "status": "CURRENT",
     "updated": "2018-09-30T00:00:00Z",
     "version": ""
   }
}
```

Returned Values

- Normal

200

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.2 Metrics

5.2.1 Querying Metrics

Function

This API is used to query metrics supported by Cloud Eye. You can specify the namespace, metric, dimension, sorting order, start records, and the maximum number of records when using this API to query metrics.

NOTICE

After a cloud service resource is deleted, its data is cached for 3 hours, so metrics of the resource can still be queried within the 3 hours.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /V1.0/{project_id}/metrics

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- Parameter description

Table 5-8 Parameter description

Parameter	Mandatory	Description
project_id	Yes	**Definition** Project ID, which is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Table 5-9 Query parameter description

Parameter	Mandatory	Type	Description
namespace	No	String	**Definition** Service metric namespace. For details, see **A.1 Services Interconnected with Cloud Eye**. **Constraints** N/A **Range** The namespace must be in the service.item format. **service** and **item** must be strings, and each must start with a letter and contain only letters (case-insensitive), digits, and underscores (_). In addition, **service** cannot start with **SYS**, **AGT**, or **SRE**. **namespace** cannot be **SERVICE.BMS** because this namespace has been used by the system. The value can contain 3 to 32 characters. For example, the ECS namespace is **SYS.ECS**, and the DDS namespace is **SYS.DDS**. **Default Value** N/A

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Parameter	Mandatory	Type	Description
metric_name	No	String	**Definition** Metric ID. For example, **metric_name** of ECS CPU usage is **cpu_util**. For details about the metrics of each service, see **A.1 Services Interconnected with Cloud Eye**. **Constraints** N/A **Range** The value must start with a letter and can contain only digits, letters (case-insensitive), underscores (_), and hyphens (-). For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. The value can contain 1 to 96 characters. **Default Value** N/A

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Parameter	Mandatory	Type	Description
dim	No	String	**Definition** Dimension of a metric. If a metric's dimensions are hierarchically structured, you need to use multi-level dimension queries. **Constraints** Cloud Eye supports a maximum of four hierarchical dimensions that are numbered from 0 to 3. **Range** The dimension format is dim.{i}=key,value. *key* cannot exceed 32 characters and *value* cannot exceed 256 characters. The following dimensions are only examples. For details about whether multiple dimensions are supported, see **A.1 Services Interconnected with Cloud Eye**. • Single-level dimension: For example, the dimension of ECS cpu_util is **instance_id**, and **instance_id** is at layer 0, as shown in the following: dim.0=instance_id,i-1234 • Multi-level dimension: For example, the dimension of ECS disk_agt_read_bytes_rate is **disk**, whose upper-level dimension is **instance_id**. **instance_id** is at layer 0, and **disk** is at layer 1, as shown in the following: dim.0=instance_id,i-12345&dim.1=disk,i-1234 **Default Value** N/A

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Parameter	Mandatory	Type	Description
start	No	String	**Definition** Pagination start value. **Constraints** N/A **Range** The value is in the namespace.metric_name.key:value format. Example: **start=SYS.ECS.cpu_util.instance_id:d9112af5-6913-4f3b-bd0a-3f96711e004d**. **Default Value** N/A
limit	No	Integer	**Definition** Maximum number of records that can be queried at a time. **Constraints** N/A **Range** [1, 1,000] **Default Value** 1,000
order	No	String	**Definition** Result sorting method, which is sorted by timestamp. **Constraints** N/A **Range** The value can be: • **asc**: ascending order • **desc**: descending order **Default Value** asc

- Example requests

  Example request 1: Query all metrics that can be monitored.

  ```
  GET https://{Cloud Eye endpoint}/V1.0/{project_id}/metrics
  ```

  Example request 2: Query the CPU usage of the ECS whose ID is **6f3c6f91-4b24-4e1b-b7d1-a94ac1cb011d**. Retain 10 records in descending order by timestamp.

```
GET https://{Cloud Eye endpoint}/V1.0/{project_id}/metrics?
namespace=SYS.ECS&metric_name=cpu_util&dim.0=instance_id,6f3c6f91-4b24-4e1b-b7d1-
a94ac1cb011d&limit=10&order=desc
```

Request

None

Response

- Response parameters

Table 5-10 Parameter description

Parameter	Type	Description
metrics	Array of objects	**Definition** List of metric objects. For details, see **Table 5-11**.
meta_data	Object	**Definition** Metadata of query results, including the pagination information. For details, see **Table 5-13**.

Table 5-11 metrics data structure description

Parameter	Type	Description
namespace	String	**Definition** Namespace of the metric. **Range** N/A
dimensions	Array of objects	**Definition** List of metric dimensions. For details, see **Table 5-12**.
metric_name	String	**Definition** Metric name, such as **cpu_util**. **Range** N/A
unit	String	**Definition** Metric unit. **Range** N/A

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Table 5-12 dimensions data structure description

Parameter	Type	Description
name	String	**Definition** Monitoring dimension name. For example, the ECS dimension is **instance_id**. For details about the dimension of each service, see the **key** field in **A.1 Services Interconnected with Cloud Eye**. **Range** N/A
value	String	**Definition** Dimension value, for example, an ECS ID. **Range** N/A

Table 5-13 meta_data data structure description

Parameter	Type	Description
count	Integer	**Definition** Number of returned records. **Range** N/A
marker	String	**Definition** Start of the next page, which is used for pagination. For example, you have queried 10 records this time and the tenth record is about **cpu_util**. In your next query, if **start** is set to **cpu_util**, you can start your query from the next metric of **cpu_util**. **Range** N/A
total	Integer	**Definition** Total number of metrics. **Range** N/A

- Example response

```
{
  "metrics": [
    {
      "namespace": "SYS.ECS",
      "dimensions": [
```

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```
            {
                "name": "instance_id",
                "value": "d9112af5-6913-4f3b-bd0a-3f96711e004d"
            }
        ],
        "metric_name": "cpu_util",
        "unit": "%"
    }
  ],
  "meta_data": {
    "count": 1,
    "marker": "SYS.ECS.cpu_util.instance_id:d9112af5-6913-4f3b-bd0a-3f96711e004d",
    "total": 7
  }
}
```


Returned Values

- Normal

  200
- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.3 Alarm Rules

5.3.1 Querying Alarm Rules

Function

This API is used to query alarm rules. You can specify the paging parameters to limit the number of query results displayed on a page. You can also set the sorting order of query results.

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NOTE

For API V1, only an alarm rule can be configured for a single resource. You are advised to use **6.1.4 Querying Alarm Rules (Recommended)** to work with the console.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /V1.0/{project_id}/alarms

- Parameter description

Table 5-14 Parameter description

Parameter	Mandatory	Description
project_id	Yes	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

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Table 5-15 Query parameter description

Parameter	Mandatory	Type	Description
start	No	String	**Definition** Pagination start value. The value is **alarm_id**. **Constraints** N/A **Range** The value starts with **al** and is followed by 22 characters of letters, digits, or a combination of both. The value can contain a total of 24 characters. **Default Value** N/A
limit	No	Integer	**Definition** Number of records that can be returned. **Constraints** N/A **Range** (0,100] **Default Value** **100**
order	No	String	**Definition** Result sorting method, which is sorted by timestamp. **Constraints** N/A **Range** The value can be: • **asc**: The query results are displayed in the ascending order. • **desc**: The query results are displayed in the descending order. **Default Value** desc

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- Example

  Request example 1: Query the current alarm rule list.

```
GET https://{Cloud Eye endpoint}/V1.0/{project_id}/alarms
```

  Request example 2: Query the alarm rule list. Start by setting **alarm_id** to **al1441967036681YkazZ0deN** and retain 10 records in the descending order of time stamps.

```
GET https://{Cloud Eye endpoint}/V1.0/{project_id}/alarms?
start=al1441967036681YkazZ0deN&limit=10&order=desc
```

Request

None

Response

- Response parameters

Table 5-16 Parameter description

Parameter	Type	Description
metric_alarms	Array of objects	**Definition** List of alarm objects. For details, see **Table 5-17**.
meta_data	Object	**Definition** Metadata of query results, including the pagination information. For details, see **Table 5-24**.

Table 5-17 metric_alarms data structure description

Parameter	Type	Description
alarm_name	String	**Definition** Alarm name. **Range** N/A
alarm_description	String	**Definition** Provides supplementary information about the alarm rule. **Range** N/A
metric	Object	**Definition** Alarm metric. For details, see **Table 5-18**.

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Parameter	Type	Description
condition	Object	**Definition** Alarm triggering condition. For details, see **Table 5-23**.
alarm_enabled	Boolean	**Definition** Whether to enable the alarm rule. **Range** A boolean value. • **true**: enable • **false**: disable
alarm_level	Integer	**Definition** Alarm severity. **Range** The value can be **1** (critical), **2** (major), **3** (minor), or **4** (informational).
alarm_action_enabled	Boolean	**Definition** Whether to enable the action triggered by the alarm. **Range** A boolean value. • **true**: enable • **false**: disable
alarm_actions	Array of objects	**Definition** Action to be triggered by the alarm. For details, see **Table 5-20**.
ok_actions	Array of objects	**Definition** Action to be triggered after an alarm is cleared. For details, see **Table 5-21**.
insufficientdata_actions	Array of objects	**Definition** Specifies the action triggered due to insufficient data. For details, see **Table 5-22**.

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Parameter	Type	Description
alarm_action_begin_time	String	**Definition** Time when an alarm rule is applied. Notifications are sent only within the validity period of the alarm rule. For example, if **alarm_action_begin_time** is set to **08:00** and **alarm_action_end_time** is set to **20:00**, notifications are sent only from 08:00 to 20:00. **Range** The value allows 1 to 64 characters and can contain only digits and colons (:).
alarm_action_end_time	String	**Definition** Time when an alarm rule becomes invalid. For example, if **alarm_action_begin_time** is set to **08:00** and **alarm_action_end_time** is set to **20:00**, notifications are sent only from 08:00 to 20:00. **Range** The value allows 1 to 64 characters and can contain only digits and colons (:).
alarm_type	String	**Definition** Alarm rule type. **Range** • **EVENT.SYS**: The alarm rule is created for system events. **EVENT.CUSTOM**: The alarm rule is created for custom events. • **RESOURCE_GROUP**: The alarm rule is created for resource groups. • **MULTI_INSTANCE**: The alarm rule is created for specific resources.
alarm_id	String	**Definition** Alarm rule ID. **Range** The value starts with **al** and is followed by 22 characters of letters, digits, or a combination of both.
update_time	Long	**Definition** Time when the alarm status changed. The value is a UNIX timestamp, in ms. **Range** N/A

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Parameter	Type	Description
alarm_state	String	**Definition** Alarm status. **Range** • **ok**: The alarm status is normal. • **alarm**: An alarm is generated. • **insufficient_data**: The required data is insufficient.
enterprise_project_id	String	**Definition** Enterprise project ID. **Range** The value can only contain lowercase letters, digits, hyphens (-), and underscores (_). It allows 36 characters. The value can be **0** (default enterprise project ID) or **all_granted_eps** (all enterprise project IDs).

Table 5-18 metric data structure description

Parameter	Type	Description
namespace	String	**Definition** Namespace of the queried service. For details, see **A.1 Services Interconnected with Cloud Eye**. **Range** N/A
dimensions	Array of objects	**Definition** List of metric dimensions. For details, see **Table 5-19**.
metric_name	String	**Definition** Metric ID. For example, **metric_name** of ECS CPU usage is **cpu_util**. For details about the metrics of each service, see **A.1 Services Interconnected with Cloud Eye**. **Range** N/A

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Parameter	Type	Description
resource_group_id	String	**Definition** ID of the resource group selected during the alarm rule creation, for example, **rg1603786526428bWbVmk4rP**. **Range** N/A
resource_group_name	String	**Definition** Name of the resource group selected during the alarm rule creation, for example, **Resource-Group-ECS-01**. **Range** N/A

Table 5-19 dimensions data structure description

Parameter	Type	Description
name	String	**Definition** Monitoring dimension name. For example, the ECS dimension is **instance_id**. For details about the dimension of each service, see the **key** field in **A.1 Services Interconnected with Cloud Eye**. **Range** N/A
value	String	**Definition** Dimension value, for example, an ECS ID. **Range** Enter 1 to 256 characters.

Table 5-20 alarm_actions data structure description

Parameter	Type	Description
type	String	**Definition** Alarm notification type. **Range** • **notification**: A notification will be sent. • **autoscaling**: A scaling action will be triggered.

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Parameter	Type	Description
notificationList	Array of strings	**Definition** List of objects to be notified of alarm status changes. **NOTE** The IDs in the list are strings.

Table 5-21 ok_actions data structure description

Parameter	Type	Description
type	String	**Definition** Notification type when an alarm is cleared. **Range** • **notification**: A notification will be sent. • **autoscaling**: A scaling action will be triggered.
notificationList	Array of strings	**Definition** List of IDs of objects to be notified of alarm status changes. **NOTE** The IDs in the list are strings.

Table 5-22 insufficientdata_actions data structure description

Parameter	Type	Description
type	String	**Definition** Type of the alarm notification triggered by insufficient data. **Range** **notification**
notificationList	Array of strings	**Definition** IDs of the notified objects when an alarm notification is triggered due to insufficient data.

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Table 5-23 condition data structure description

Parameter	Type	Description
period	Integer	**Definition** Interval (seconds) for checking whether the alarm rule conditions are met. **Range** The value can be: • **0**: triggered immediately (only for event scenarios). • **1**: original metric period. For example, if the original period of an RDS metric is 60s, the metric data is collected and calculated every 60s. • **300**: The metric data is collected and calculated every 5 minutes. • **1200**: The metric data is collected and calculated every 20 minutes. • **3600**: The metric data is collected and calculated every hour. • **14400**: The metric data is collected and calculated every 4 hours. • **86400**: The metric data is collected and calculated every day.
filter	String	**Definition** Data aggregation method. **Range** • **average**: average value of metric data within an aggregation period. • **max**: maximum value of metric data in an aggregation period. • **min**: Cloud Eye calculates the minimum value of metric data within a rollup period. • **sum**: sum of metric data within an aggregation period. • **variance**: variance value of metric data within an aggregation period.
comparison_operator	String	**Definition** Operator of an alarm threshold. **Range** >, =, <, >=, <=, or **!=**

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Parameter	Type	Description
value	Double	**Definition** Alarm threshold. For detailed thresholds, see the value range of each metric in the appendix. For example, you can set ECS **cpu_util** in **A.1 Services Interconnected with Cloud Eye** to **80**. **Range** [0, Number.MAX_VALUE], where **Number.MAX_VALUE** indicates **1.7976931348623157e+108**
unit	String	**Definition** Data unit. **Range** 0 to 32 characters
count	Integer	**Definition** Number of consecutive times that an alarm is triggered. **Range** [1, 5]
suppress_duration	Integer	**Definition** Interval for triggering an alarm if the alarm persists. **Range** The value can be: • **0**: The alarm is triggered only once. • **300**: An alarm is triggered every 5 minutes. • **600**: An alarm is triggered every 10 minutes. • **900**: An alarm is triggered every 15 minutes. • **1800**: An alarm is triggered every 30 minutes. • **3600**: An alarm is triggered every hour. • **10800**: An alarm is triggered every 3 hours. • **21600**: An alarm is triggered every 6 hours. • **43200**: An alarm is triggered every 12 hours. • **86400**: An alarm is triggered every day.

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Table 5-24 meta_data data structure description

Parameter	Type	Description
count	Integer	**Definition** Number of returned records. **Range** N/A
marker	String	**Definition** Start of the next page, which is used for pagination. For example, you have queried 10 records this time and **alarm_id** of the tenth record is **1441967036681YkazZ0deN**. In your next query, if **start** is set to **al1441967036681YkazZ0deN**, you can start your query from the next alarm rule ID of **al1441967036681YkazZ0deN**. **Range** N/A
total	Integer	**Definition** Total number of query results. **Range** N/A

- Example response

```
{
   "metric_alarms": [
      {
         "alarm_name": "alarm-ttttttt",
         "alarm_description": "",
         "metric": {
            "namespace": "SYS.ECS",
            "dimensions": [
               {
                  "name": "instance_id",
                  "value": "07814c0e-59a1-4fcd-a6fb-56f2f6923046"
               }
            ],
            "metric_name": "cpu_util"
         },
         "condition": {
            "period": 300,
            "filter": "average",
            "comparison_operator": ">=",
            "value": 0,
            "unit": "%",
            "count": 3
         },
         "alarm_enabled": true,
         "alarm_level": 2,
         "alarm_action_enabled": false,
         "alarm_id": "al15330507498596W7vmlGKL",
         "update_time": 1533050749992,
         "alarm_state": "alarm"
```

```
    },
    {
        "alarm_name": "alarm-m5rwxxxxxxx",
        "alarm_description": "",
        "metric": {
            "namespace": "SYS.ECS",
            "dimensions": [
                {
                    "name": "instance_id",
                    "value": "30f3858d-4377-4514-9081-be5bdbf1392e"
                }
            ],
            "metric_name": "network_incoming_bytes_aggregate_rate"
        },
        "condition": {
            "period": 300,
            "filter": "average",
            "comparison_operator": ">=",
            "value": 12,
            "unit": "Byte/s",
            "count": 3,
            "suppress_duration": 1800
        },
        "alarm_enabled": true,
        "alarm_level": 2,
        "alarm_action_enabled": true,
        "alarm_actions": [
            {
                "type": "notification",
                "notificationList": [
                    "urn:smn:region:68438a86d98e427e907e0097b7e35d48:test0315"
                ]
            }
        ],
        "ok_actions": [
            {
                "type": "notification",
                "notificationList": [
                    "urn:smn:region:68438a86d98e427e907e0097b7e35d48:test0315"
                ]
            }
        ],
        "alarm_id": "al1533031226533nKJexAlbq",
        "update_time": 1533204036276,
        "alarm_state": "ok"
    }
  ],
  "meta_data": {
    "count": 2,
    "marker": "al1533031226533nKJexAlbq",
    "total": 389
  }
}
```


Returned Values

- Normal

  200

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.

Returned Value	Description
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.3.2 Querying Details of an Alarm Rule

Function

This API is used to query details of an alarm rule based on its ID.

NOTE

For API V1, only an alarm rule can be configured for a single resource. You are advised to use **6.1.4 Querying Alarm Rules (Recommended)** and **6.2.3 Querying Resources in an Alarm Rule** to work with the console.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /V1.0/{project_id}/alarms/{alarm_id}

- Parameter description

Table 5-25 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.
alarm_id	Yes	Alarm rule ID.

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- Example
  GET https://{Cloud Eye endpoint}/V1.0/{project_id}/alarms/al1441967036681YkazZ0deN

Request

None

Response

- Response parameters

Parameter	Type	Description
metric_alarms	Array of objects	List of alarm objects. For details, see **Table 5-26**.

Table 5-26 metric_alarms data structure description

Parameter	Type	Description
alarm_name	String	Alarm name.
alarm_description	String	Provides supplementary information about the alarm rule.
metric	Object	Alarm metric. For details, see **Table 5-27**.
condition	Object	Alarm triggering condition. For details, see **Table 5-32**.
alarm_enabled	Boolean	Whether to enable the alarm rule.
alarm_level	Integer	Alarm severity, which can be **1** (critical), **2** (major), **3** (minor) or **4** (informational). The default value is **2**.
alarm_type	String	Alarm rule type. • **EVENT.SYS**: The alarm rule is created for system events. **EVENT.CUSTOM**: The alarm rule is created for custom events. • **RESOURCE_GROUP**: The alarm rule is created for resource groups. • **MULTI_INSTANCE**: The alarm rule is created for specific resources.
alarm_action_enabled	Boolean	Whether to enable the action triggered by the alarm.
alarm_actions	Array of objects	Action to be triggered by the alarm. For details, see **Table 5-29**.

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Parameter	Type	Description
ok_actions	Array of objects	Action to be triggered after an alarm is cleared. For details, see **Table 5-30**.
insufficientdata_actions	Array of objects	Specifies the action triggered due to insufficient data. For details, see **Table 5-31**.
alarm_action_begin_time	String	Time when an alarm rule is applied. Notifications are sent only within the validity period of the alarm rule. For example, if **alarm_action_begin_time** is set to **08:00** and **alarm_action_end_time** is set to **20:00**, notifications are sent only from 08:00 to 20:00.
alarm_action_end_time	String	Time when an alarm rule becomes invalid. For example, if **alarm_action_begin_time** is set to **08:00** and **alarm_action_end_time** is set to **20:00**, notifications are sent only from 08:00 to 20:00.
alarm_id	String	Alarm rule ID.
update_time	Long	Time when the alarm status changed. The value is a UNIX timestamp, in milliseconds.
alarm_state	String	Alarm status. The value can be: • **ok**: The alarm status is normal. • **alarm**: An alarm is generated. • **insufficient_data**: The required data is insufficient.
enterprise_project_id	String	Enterprise project ID. • Value **all_granted_eps** indicates all enterprise projects. • Value **0** indicates the default enterprise project **default**.

Table 5-27 metric data structure description

Parameter	Type	Description
namespace	String	Namespace of the queried service. For details, see **A.1 Services Interconnected with Cloud Eye**.

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Parameter	Type	Description
dimensions	Array of objects	List of metric dimensions. For details, see **Table 5-28**.
metric_name	String	Metric ID. For example, **metric_name** of ECS CPU usage is **cpu_util**. For details about the metrics of each service, see **A.1 Services Interconnected with Cloud Eye**.
resource_group_id	String	ID of the resource group selected during the alarm rule creation, for example, **rg1603786526428bWbVmk4rP**.
resource_group_name	String	Name of the resource group selected during the alarm rule creation, for example, **Resource-Group-ECS-01**.

Table 5-28 dimensions data structure description

Parameter	Type	Description
name	String	Monitoring dimension name. For example, the ECS dimension is **instance_id**. For details about the dimension of each service, see the **key** field in **A.1 Services Interconnected with Cloud Eye**.
value	String	Dimension value, for example, an ECS ID. Enter 1 to 256 characters.

Table 5-29 alarm_actions data structure description

Parameter	Type	Description
type	String	Alarm notification type. The value can be: • **notification**: indicates that a notification will be sent. • **autoscaling**: indicates that a scaling action will be triggered.
notificationList	Array of strings	List of objects to be notified of alarm status changes. **NOTE** The IDs in the list are strings.

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Table 5-30 ok_actions data structure description

Parameter	Type	Description
type	String	Notification type when an alarm is triggered. • **notification**: A notification will be sent. • **autoscaling**: A scaling action will be triggered.
notificationList	Array of strings	List of objects to be notified of alarm status changes. **NOTE** The IDs in the list are strings.

Table 5-31 insufficientdata_actions data structure description

Parameter	Type	Description
type	String	Notification type when an alarm is cleared. The value is **notification**.
notificationList	Array of strings	List of objects to be notified of alarm status changes. **NOTE** The IDs in the list are strings.

Table 5-32 condition data structure description

Parameter	Type	Description
period	Integer	Interval (seconds) for checking whether the alarm rule conditions are met.
filter	String	Data aggregation method. The value can be: • **average**: average value of metric data within an aggregation period. • **max**: maximum value of metric data in an aggregation period. • **min**: minimum value of metric data within an aggregation period. • **sum**: sum of metric data within an aggregation period. • **variance**: variance value of metric data within an aggregation period.
comparison_operator	String	Operator of alarm thresholds, which can be **>**, **=**, **<**, **>=**, or **<=**.

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Parameter	Type	Description
value	Double	Alarm threshold. Supported range: **0** to **Number. MAX_VALUE (1.7976931348623157e+108)** For detailed thresholds, see the value range of each metric in the appendix. For example, you can set ECS **cpu_util** in **A.1 Services Interconnected with Cloud Eye** to **80**.
unit	String	Data unit. The value contains a maximum of 32 characters.
count	Integer	Number of consecutive times that the alarm policy was met. Supported range: **1** to **5**
suppress_duration	Integer	Interval for triggering an alarm if the alarm persists. The value can be: **0**: alarm triggered only once. **300**: alarm triggered every 5 minutes. **600**: alarm triggered every 10 minutes. **900**: alarm triggered every 15 minutes. **1800**: alarm triggered every 30 minutes. **3600**: alarm triggered every 1 hour. **10800**: alarm triggered every 3 hours. **21600**: alarm triggered every 6 hours. **43200**: alarm triggered every 12 hours. **86400**: alarm triggered every day.

- Example response

```
{
"metric_alarms":
 [
  {
   "alarm_name":"alarm-ipwx",
   "alarm_description":"",
   "metric":
    {
     "namespace":"SYS.ELB",
     "dimensions":
     [
      {
       "name":"lb_instance_id",
       "value":"44d06d10-bce0-4237-86b9-7b4d1e7d5621"
      }
     ],
     "metric_name":"m8_out_Bps"
    },
   "condition":
    {
     "period":300,
     "filter":"sum",
     "comparison_operator":">=",
     "value":0,
     "unit":"",
     "count":1,
     "suppress_duration":1800
    },
   "alarm_enabled":true,
   "alarm_level": 2,
   "alarm_action_enabled":true,
```

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```
  "alarm_actions":
   [
    {
     "type":"notification",
     "notificationList":["urn:smn:region:68438a86d98e427e907e0097b7e35d48:sd"]
    }
   ],
  "ok_actions":
   [
    {
     "type":"notification",
     "notificationList":["urn:smn:region:68438a86d98e427e907e0097b7e35d48:sd"]
    }
   ],
  "alarm_id":"al1498096535573r8DNy7Gyk",
  "update_time":1498100100000,
  "alarm_state":"alarm"
 }
]
}
```

Returned Values

- Normal

  200

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.3.3 Enabling or Disabling an Alarm Rule

Function

This API is used to enable or disable an alarm rule.

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NOTE

For API V1, only an alarm rule can be configured for a single resource. You are advised to use **6.1.3 Enabling or Disabling Alarm Rules in Batches** to work with the console.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

PUT /V1.0/{project_id}/alarms/{alarm_id}/action

- Parameter description

Table 5-33 Parameter description

Parameter	Mandatory	Description
project_id	Yes	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
alarm_id	Yes	**Definition** Alarm rule ID. **Constraints** N/A **Range** The value starts with **al** and is followed by 22 characters of letters, digits, or a combination of both. The value can contain a maximum of 24 characters. **Default Value** N/A

- Example

```
PUT https://{Cloud Eye endpoint}/V1.0/{project_id}/alarms/al1441967036681YkazZ0deN/action
```

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Request

- Request parameters

  Table 5-34 Request parameters

Parameter	Mandatory	Type	Description
alarm_enabled	Yes	Boolean	**Definition** Whether to enable the alarm rule. **Constraints** N/A **Range** A boolean value. The value can be **true** (enabled) or **false** (disabled). **Default Value** N/A

- Example request

```
{
   "alarm_enabled":true
}
```

Response

The response has no message body.

Returned Values

- Normal

  204

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

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Error Codes

See **9.2 Error Codes**.

5.3.4 Deleting an Alarm Rule

Function

This API is used to delete an alarm rule.

NOTE

For API V1, only an alarm rule can be configured for a single resource. You are advised to use **6.1.2 Batch Deleting Alarm Rules** to work with the console.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

DELETE /V1.0/{project_id}/alarms/{alarm_id}

- Parameter description

  Table 5-35 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.
alarm_id	Yes	Specifies the alarm rule ID.

- Example

```
DELETE https://{Cloud Eye endpoint}/V1.0/{project_id}/alarms/al1441967036681YkazZ0deN
```

Request

The request has no message body.

Response

The response has no message body.

Returned Values

- Normal

  204

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.3.5 Creating an Alarm Rule

Function

This API is used to create an alarm rule.

NOTE

For API V1, only an alarm rule can be configured for a single resource. You are advised to use **6.1.1 Creating an Alarm Rule (Recommended)** to work with the console.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /V1.0/{project_id}/alarms

- Parameter description

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Table 5-36 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.

- Example
  POST https://{Cloud Eye endpoint}/V1.0/{project_id}/alarms

Request

- Request parameters

Table 5-37 Request parameters

Parameter	Mandatory	Type	Description
alarm_name	Yes	String	Specifies the alarm rule name. Enter 1 to 128 characters. Only letters, digits, underscores (_), and hyphens (-) are allowed.
alarm_description	No	String	Provides supplementary information about the alarm rule. Enter 0 to 256 characters.
metric	Yes	Object	Specifies the alarm metric. For details, see **Table 5-38**.
condition	Yes	Object	Specifies the alarm triggering condition. For details, see **Table 5-43**.
alarm_enabled	No	Boolean	Specifies whether to enable the alarm. The default value is **true**.

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Parameter	Mandatory	Type	Description
alarm_action_enabled	No	Boolean	Specifies whether to enable the action to be triggered by an alarm. The default value is **true**. **NOTE** If you set **alarm_action_enabled** to **true**, you must specify either **alarm_actions** or **ok_actions**. (You do not need to configure the deprecated parameter **insufficientdata_actions**.) If **alarm_actions** and **ok_actions** coexist, their **notificationList** must be the same. (You do not need to configure the deprecated parameter **insufficientdata_actions**.)
enterprise_project_id	No	String	Specifies the enterprise project ID. Value **0** indicates the default enterprise project **default**.
alarm_level	No	Integer	Specifies the alarm severity, which can be **1** (critical), **2** (major), **3** (minor) or **4** (informational). The default value is **2**.
alarm_type	No	String	Specifies the alarm rule type. **EVENT.SYS**: The alarm rule is created for system events. **EVENT.CUSTOM**: The alarm rule is created for custom events.

alarm_actions	No	Array of objects	Specifies the action to be triggered by an alarm.
			An example structure is as follows:
			{
			"type": "notification","notificationList": ["urn:smn:region:68438a86d98e427e907e0097b7e35d47:sd"]
			}
			For details, see **Table 5-40**.

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Parameter	Mandatory	Type	Description
ok_actions	No	Array of objects	Specifies the action to be triggered after the alarm is cleared. Its structure is: { "type": "notification","notificationList": ["urn:smn:region:68438a86d98e427e907e0097b7e35d47:sd"] } For details, see **Table 5-41**.
insufficientdata_actions	No	Array of objects	Specifies the action to be triggered by the alarm of insufficient data. (You do not need to configure this deprecated parameter.) Its structure is: { "type": "notification","notificationList": ["urn:smn:region:68438a86d98e427e907e0097b7e35d47:sd"] } For details, see **Table 5-42**.

Table 5-38 metric data structure description

Parameter	Mandatory	Type	Description
namespace	Yes	String	Specifies the namespace of a service. For details, see **A.1 Services Interconnected with Cloud Eye**. The namespace must be in the **service.item** format and contain 3 to 32 characters. **service** and **item** each must start with a letter and contain only letters, digits, and underscores (_).
dimensions	No	Array of objects	Specifies the metric dimension list. When **resource_group_id** is not used, **dimensions** is mandatory. For details, see **Table 5-39**.

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Parameter	Mandatory	Type	Description
metric_name	Yes	String	Specifies the metric name. Start with a letter. Enter 1 to 64 characters. Only letters, digits, and underscores (_) are allowed. For details, see the metric name queried in **5.2.1 Querying Metrics**.
resource_group_id	No	String	Specifies the resource group ID selected during the alarm rule creation, for example, **rg1603786526428bWbVmk4rP**. **NOTE** If you create alarm rules for resource groups, you must specify **resource_group_id** and **name**, enter at least one dimension for **dimensions**, and set **alarm_type** to **RESOURCE_GROUP**.

Table 5-39 dimensions data structure description

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the dimension. For example, the ECS dimension is **instance_id**. For details about the dimension of each service, see the **key** field in **A.1 Services Interconnected with Cloud Eye**. The value must start with a letter. It allows 1 to 32 characters and can only contain letters, digits, underscores (_), and hyphens (-).
value	Yes	String	Specifies the dimension value, for example, an ECS ID. Specifies the dimension value, for example, an ECS ID. The value must start with a letter or digit. It allows 1 to 256 characters and can only contain letters, digits, underscores (_), and hyphens (-).

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Table 5-40 alarm_actions data structure description

Parameter	Mandatory	Type	Description
type	Yes	String	Specifies the alarm notification type. • **notification**: A notification will be sent. • **autoscaling**: A scaling action will be triggered.
notificationList	Yes	Array of strings	Specifies the list of objects to be notified if the alarm status changes. You can add up to 5 object IDs. **topicUrn** can be obtained from SMN. For details, see **Querying Topics**. If you set **type** to **notification**, you must specify **notificationList**. If you set **type** to **autoscaling**, you must set **notificationList** to **[]**. **NOTE** • To apply the Auto Scaling (AS) alarm rule, you must bind the scaling policy. For details, see **Creating an AS Policy**. • If you set **alarm_action_enabled** to **true**, you must specify either **alarm_actions** or **ok_actions**. (You do not need to configure the deprecated parameter **insufficientdata_actions**.) • If **alarm_actions** and **ok_actions** coexist, their **notificationList** must be the same. (You do not need to configure the deprecated parameter **insufficientdata_actions**.) • The IDs in the list are strings.

Table 5-41 ok_actions data structure description

Parameter	Mandatory	Type	Description
type	Yes	String	Specifies the notification type when an alarm is triggered. • **notification**: indicates that a notification will be sent. • **autoscaling**: indicates that a scaling action will be triggered.

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Parameter	Mandatory	Type	Description
notificationList	Yes	Array of objects	Specifies the list of objects to be notified if the alarm status changes. The list contains a maximum of 5 object IDs. **topicUrn** can be obtained from SMN. For details, see **Querying Topics**. **NOTE** If you set **alarm_action_enabled** to **true**, you must specify either **alarm_actions** or **ok_actions**. (You do not need to configure the deprecated parameter **insufficientdata_actions**.) If **alarm_actions** and **ok_actions** coexist, their **notificationList** must be the same. (You do not need to configure the deprecated parameter **insufficientdata_actions**.)

Table 5-42 insufficientdata_actions data structure description

Parameter	Mandatory	Type	Description
type	Yes	String	Specifies the notification type when an alarm is triggered. • **notification**: indicates that a notification will be sent. • **autoscaling**: indicates that a scaling action will be triggered.
notificationList	Yes	Array of objects	Specifies the list of objects to be notified if the alarm status changes. You can add up to 5 object IDs. **topicUrn** can be obtained from SMN. For details, see **Querying Topics**. **NOTE** • If you set **alarm_action_enabled** to **true**, you must specify either **alarm_actions** or **ok_actions**. (You do not need to configure the deprecated parameter **insufficientdata_actions**.) • If **alarm_actions** and **ok_actions** coexist, their **notificationList** must be the same. (You do not need to configure the deprecated parameter **insufficientdata_actions**.) • The IDs in the list are strings.

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Table 5-43 condition data structure description

Parameter	Mandatory	Type	Description
period	Yes	Integer	Specifies the period during which Cloud Eye determines whether to trigger an alarm. Unit: second Possible periods are **1**, **300**, **1200**, **3600**, **14400**, and **86400**. **NOTE** • If you set **period** to **1**, Cloud Eye uses raw data to determine whether to trigger an alarm.
filter	Yes	String	Specifies the data rollup method. Possible methods are **max**, **min**, **average**, **sum**, or **variance**.
comparison_operator	Yes	String	Specifies the alarm threshold operator. Possible operators are >, =, <, >=, and <=.
value	Yes	Double	Specifies the alarm threshold. Supported range: **0** to **Number. MAX_VALUE (1.7976931348623157e+108)** For detailed thresholds, see the value range of each metric in the appendix. For example, you can set ECS **cpu_util** in **A.1 Services Interconnected with Cloud Eye** to **80**.
unit	No	String	Specifies the data unit. Enter up to 32 characters.
count	Yes	Integer	Specifies the number of consecutive occurrence times that the alarm policy was met. Supported range: **1** to **5**

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Parameter	Mandatory	Type	Description
suppress_duration	No	Integer	Specifies the interval for triggering an alarm if the alarm persists. Possible intervals are as follows: **0**: Cloud Eye triggers the alarm only once. **300**: Cloud Eye triggers the alarm every 5 minutes. **600**: Cloud Eye triggers the alarm every 10 minutes. **900**: Cloud Eye triggers the alarm every 15 minutes. **1800**: Cloud Eye triggers the alarm every 30 minutes. **3600**: Cloud Eye triggers the alarm every hour. **10800**: Cloud Eye triggers the alarm every 3 hours. **21600**: Cloud Eye triggers the alarm every 6 hours. **43200**: Cloud Eye triggers the alarm every 12 hours. **86400**: Cloud Eye triggers the alarm every day.

- Example request 1

  Creating an alarm rule to monitor a metric

```
{
   "alarm_name": "alarm-rp0E",
   "alarm_description": "",
   "metric": {
      "namespace": "SYS.ECS",
      "dimensions": [
         {
            "name": "instance_id",
            "value": "33328f02-3814-422e-b688-bfdba93d4051"
         }
      ],
      "metric_name": "network_outgoing_bytes_rate_inband"
   },
   "condition": {
      "period": 300,
      "filter": "average",
      "comparison_operator": ">=",
      "value": 6,
      "unit": "Byte/s",
      "count": 1
   },
   "alarm_enabled": true,
   "alarm_action_enabled": true,
   "alarm_level": 2,
   "alarm_actions": [
      {
         "type": "notification",
```

```
            "notificationList": ["urn:smn:region:68438a86d98e427e907e0097b7e35d48:sd"]
        }
    ],
    "ok_actions": [
        {
            "type": "notification",
            "notificationList": ["urn:smn:region:68438a86d98e427e907e0097b7e35d48:sd"]
        }
    ],
    "insufficientdata_actions": [
        {
            "type": "notification",
            "notificationList": ["urn:smn:region:68438a86d98e427e907e0097b7e35d48:sd"]
        }
    ]
}
```

- Example request 2

  Creating an alarm rule to monitor an event

```
{
 "alarm_name": "alarm-test",
 "metric": {
  "namespace": "SYS.ECS",
  "metric_name": "instance_resize_scheduled",
  "dimensions": [
   {
    "name": "instance_id",
    "value": "d53692e5-828b-495b-a5e2-a1b227f6034c"
   }
  ]
 },
 "condition": {
  "comparison_operator": ">=",
  "count": 1,
  "filter": "average",
  "period": 0,
  "unit": "count",
  "value": 1
 },
 "alarm_enabled": true,
 "alarm_action_enabled": true,
 "alarm_level": 2,
 "alarm_type": "EVENT.SYS",
 "alarm_actions": [
  {
   "type": "notification",
   "notificationList": ["urn:smn:region:ce8476c174f94c6991ea7885e3380d99:sd"]
  }
 ],
 "ok_actions": [
  {
   "type": "notification",
   "notificationList": ["urn:smn:region:ce8476c174f94c6991ea7885e3380d99:sd"]
  }
 ]
}
```

Response

- Response parameter

  Table 5-44 Parameter description

Parameter	Type	Description
alarm_id	String	Specifies the alarm rule ID.

- Example response

```
{
   "alarm_id":"al1450321795427dR8p5mQBo"
}
```

Returned Values

- Normal

  201

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.3.6 Creating a Custom Alarm Template

Function

This API is used to create a custom alarm template to add alarm rules for one or more metrics.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /V1.0/{project_id}/alarm-template

- Parameter description

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Table 5-45 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.

- Example
  POST https://{Cloud Eye endpoint}/V1.0/{project_id}/alarm-template

Request

- Request parameters

Table 5-46 Request parameters

Parameter	Mandatory	Type	Description
template_name	Yes	String	Specifies the name of the custom alarm template. The name can contain 1 to 128 characters. Only letters, digits, underscores (_), and hyphens (-) are allowed.
template_description	No	String	Provides supplementary information about the custom alarm template. The description can contain 0 to 256 characters.
namespace	Yes	String	Specifies the resource type selected for creating the custom alarm template, that is, the service namespace. For example, if you select ECS, **namespace** is **SYS.ECS**. **NOTICE** If you select OS monitoring, **namespace** must be **SYS.ECS**.
dimension_name	Yes	String	Specifies the dimension corresponding to the resource type. If ECS is selected, the dimension is ECS and **dimension_name** is **instance_id**.
template_items	Yes	Array of objects	Specifies the alarm rules that you add to the custom alarm template. You can add up to 20 alarm rules.

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Table 5-47 template_items data structure description

Parameter	Mandatory	Type	Description
metric_name	Yes	String	Specifies the metric you add to the custom alarm template. For example, you can add ECS **cpu_util**. To view metrics of each resource, see **A.1 Services Interconnected with Cloud Eye**.
condition	Yes	Condition object	Specifies the alarm policy you created for the custom alarm template. For details, see **Table 5-48**.
alarm_level	No	Integer	Specifies the alarm severity. Possible severities are **1** (critical), **2** (major), **3** (minor), and **4** (informational).

Table 5-48 condition data structure description

Parameter	Mandatory	Type	Description
comparison_operator	Yes	String	Specifies the alarm threshold operator, which can be >, =, <, >=, or <=.
count	Yes	Integer	Specifies the number of consecutive occurrence times that the alarm policy was met. Supported range: **1** to **5**
filter	Yes	String	Specifies the data rollup method, which can be **max**, **min**, **average**, **sum**, or **variance**.

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Parameter	Mandatory	Type	Description
period	Yes	Integer	Specifies the period during which Cloud Eye determines whether to trigger an alarm. Unit: second Possible periods are **1**, **300**, **1200**, **3600**, **14400**, and **86400**. **NOTE** If you set **period** to **1**, Cloud Eye uses raw data to determine whether to trigger an alarm. You can set this parameter to **0** when you set **alarm_type** to **(EVENT.SYS|EVENT.CUSTOM)**.
unit	No	String	Specifies the data unit. Enter up to 32 characters.
value	Yes	Double	Specifies the alarm threshold, which ranges from **0** to **Number.MAX_VALUE (1.7976931348623157e+108)**. For detailed thresholds, see the value range of each metric in **A.1 Services Interconnected with Cloud Eye**. For example, you can set ECS **cpu_util** to **80**.

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Parameter	Mandatory	Type	Description
suppress_duration	No	Integer	Specifies the interval for triggering an alarm if the alarm persists. Possible intervals are as follows: **0**: Cloud Eye triggers the alarm only once. **300**: Cloud Eye triggers the alarm every 5 minutes. **600**: Cloud Eye triggers the alarm every 10 minutes. **900**: Cloud Eye triggers the alarm every 15 minutes. **1800**: Cloud Eye triggers the alarm every 30 minutes. **3600**: Cloud Eye triggers the alarm every 1 hour. **10800**: Cloud Eye triggers the alarm every 3 hours. **21600**: Cloud Eye triggers the alarm every 6 hours. **43200**: Cloud Eye triggers the alarm every 12 hours. **86400**: Cloud Eye triggers the alarm every day.

- Example request

```
{
   "template_name": "alarmTemplate-Test01",
   "template_description": "Creating a custom alarm template",
   "namespace": "SYS.ECS",
   "dimension_name": "instance_id",
   "template_items": [
      {
         "metric_name": "cpu_util",
         "condition": {
            "period": 1,
            "filter": "average",
            "comparison_operator": ">=",
            "value": 90,
            "unit": "%",
            "count": 3,
            "suppress_duration": 300
          },
         "alarm_level": 2
      },
      {
         "metric_name": "mem_util",
         "condition": {
            "period": 1,
            "filter": "average",
            "comparison_operator": ">=",
            "value": 90,
            "unit": "%",
```

```
            "count": 3,
            "suppress_duration": 600
        },
        "alarm_level": 2
    }
  ]
}
```

Response

- Response parameters

  Table 5-49 Response parameters

Parameter	Type	Description
template_id	String	Specifies the ID of the custom alarm template.

- Example response

```
{
   "template_id":"at1603252280799wLRyGLxnz"
}
```

Returned Values

- Normal

  201

- Abnormal

Returned Values	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

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5.3.7 Deleting a Custom Alarm Template

Function

This API is used to delete a custom alarm template.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

DELETE /V1.0/{project_id}/alarm-template/{template_id}

- Parameter description

  Table 5-50 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.
template_id	Yes	Specifies the ID of the custom alarm template you want to delete.

- Example

```
DELETE https://{Cloud Eye endpoint}/V1.0/{project_id}/alarm-template/at1603252280799wLRyGLxnz
```

Request

The request has no message body.

Response

The response has no message body.

Returned Values

- Normal

  204

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.

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Returned Value	Description
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.3.8 Querying the Alarm History of an Alarm Rule

Function

This API is used to query the alarm history of an alarm rule based on the alarm rule ID.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /V1.0/{project_id}/alarm-histories

- Parameter description

Table 5-51 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.
group_id	No	Specifies the resource group ID, for example, **rg1603107497873DK4O2pXbn**.
alarm_id	No	Specifies the alarm rule ID, for example, **al1603088932912v98rGl1al**.
alarm_name	No	Specifies the alarm rule name, for example, **alarm-test01**.

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Parameter	Mandatory	Description
alarm_status	No	Specifies the alarm status, which can be **ok**, **alarm**, or **insufficient_data**.
alarm_level	No	Specifies the alarm severity, which can be **1** (critical), **2** (major), **3** (minor), or **4** (informational).
namespace	No	Specifies the resource namespace. For example, the ECS namespace is **SYS.ECS**. To view the namespace of each service, see **A.1 Services Interconnected with Cloud Eye**.
from	No	Specifies the time from when you want to query the alarm history. The time is a UNIX timestamp (ms), for example, **1602501480905**. If you do not configure **from** or **to**, **to** is the current time by default, and **from** is the timestamp of seven days earlier than the current time.
to	No	Specifies when you want your alarm history query to end. The time is a UNIX timestamp (ms). The value of **from** can be **to** or smaller. If you do not configure **from** or **to**, **to** is the current time by default, and **from** is the timestamp of seven days earlier than the current time.
start	No	Specifies the start value of pagination. The value is an integer. The default value is **0**.
limit	No	Specifies the maximum number of records that can be queried at a time. Supported range: **1** to **100** (default)

- Example

```
GET https://{Cloud Eye endpoint}/V1.0/{project_id}/alarm-histories?
limit=10&start=0&from=1602494921346&to=1603099721346&alarm_name=alarm-test01
```

Request

None

Response

- Response parameters

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Parameter	Type	Mandatory	Description
alarm_histories	Array of objects	No	Specifies details about one or more alarm history records. For details, see **Table 5-52**.
meta_data	MetaData object	No	Specifies the total number of query results returned. For details, see **Table 5-61**.

Table 5-52 alarm_histories data structure description

Parameter	Type	Mandatory	Description
alarm_id	String	No	Specifies the alarm rule ID, for example, **al1603131199286dzxpqK3Ez**.
alarm_name	String	No	Specifies the alarm rule name, for example, **alarm-test01**.
alarm_description	String	No	Provides supplementary information about the alarm rule.
metric	Metric object	No	Specifies the metric information. For details, see **Table 5-53**.
condition	Condition object	No	Specifies the alarm policy set in the alarm rule. For details, see **Table 5-58**.
alarm_level	Integer	No	Specifies the alarm severity, which can be **1** (critical), **2** (major), **3** (minor), or **4** (informational).
alarm_type	String	No	Specifies the alarm rule type. This parameter applies only to event alarms. The types are as follows: **EVENT.SYS**: system event alarm **EVENT.CUSTOM**: custom event alarm **DNSHealthCheck**: DNS health check alarm **RESOURCE_GROUP**: resource group alarm **MULTI_INSTANCE**: alarm for a specific resource

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Parameter	Type	Mandatory	Description
alarm_enabled	Boolean	No	Specifies whether the alarm rule has been enabled. Possible values are **true** and **false**.
alarm_action_enabled	Boolean	No	Specifies whether the alarm action has been triggered. Possible values are **true** and **false**.
alarm_actions	Array of objects	No	Specifies the action to be triggered by an alarm. The structure is as follows: {"type": "notification", "notificationList": ["urn:smn:southchina:68438a86d98e427e907e0097b7e35d47:sd"] } The value of **type** can be: **notification**: A notification will be sent. **autoscaling**: A scaling action will be triggered. **notificationList** indicates the list of recipients to be notified of alarm status changes. For details, see **Table 5-55**.
ok_actions	Array of objects	No	Specifies the action to be triggered after the alarm is cleared. The structure is as follows: {"type": "notification", "notificationList": ["urn:smn:southchina:68438a86d98e427e907e0097b7e35d47:sd"] } The value of **type** can be: **notification**: A notification will be sent. **notificationList** indicates the list of recipients to be notified of alarm status changes. For details, see **Table 5-56**.
insufficientdata_actions	Array of objects	No	Specifies the action triggered due to insufficient data. The structure is as follows: {"type": "notification", "notificationList": ["urn:smn:southchina:68438a86d98e427e907e0097b7e35d47:sd"]} For details, see **Table 5-57**.
update_time	Long	No	Specifies when the alarm status changed. The time is a UNIX timestamp (ms), for example, **1603131199000**.

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Parameter	Type	Mandatory	Description
enterprise_project_id	String	No	Specifies the enterprise project ID. Value **all_granted_eps** indicates all enterprise projects. Value **0** indicates enterprise project **default**.
trigger_time	Long	No	Specifies when the alarm was triggered. The time is a UNIX timestamp (ms), for example, **1603131199469**.
alarm_status	String	No	Specifies the alarm status, which can be **ok**, **alarm**, or **insufficient_data**.
datapoints	Array of objects	No	Specifies when the monitoring data of the alarm history is reported and the monitoring data that is calculated. For details, see **Table 5-59**.
additional_info	AdditionalInfo object	No	Specifies the additional field of the alarm history, which applies only to the alarm history generated for event monitoring. For details, see **Table 5-60**.

Table 5-53 metric data structure description

Parameter	Type	Mandatory	Description
dimensions	Array of objects	No	Specifies the metric dimension. For details, see **Table 5-54**.
metric_name	String	No	Specifies the metric name. The value must start with a letter. It allows 1 to 64 characters and can only contain letters, digits, and underscores (_). For details, see the metric name queried in **A.1 Services Interconnected with Cloud Eye**.
namespace	String	No	Specifies the metric namespace in **service.item** format. **service** and **item** each must contain 3 to 32 characters, start with a letter, and contain only letters, digits, and underscores (_). **NOTE** You can leave this parameter blank when you set **alarm_type** to **(EVENT.SYS|EVENT.CUSTOM)**.

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Table 5-54 dimensions data structure description

Parameter	Type	Mandatory	Description
name	String	No	Specifies the monitoring dimension name. For example, the ECS dimension is **instance_id**. For details about the dimension of each service, see the **key** field in **A.1 Services Interconnected with Cloud Eye**.
value	String	No	Dimension value, for example, an ECS ID. Enter 1 to 256 characters.

Table 5-55 alarm_actions data structure description

Parameter	Type	Mandatory	Description
type	String	Yes	Specifies the alarm notification type. • **notification**: A notification will be sent. • **autoscaling**: A scaling action will be triggered.
notificationList	Array of strings	Yes	Specifies the list of objects to be notified if the alarm status changes. **NOTE** The IDs in the list are strings. You can configure up to 5 object IDs.

Table 5-56 ok_actions data structure description

Parameter	Type	Mandatory	Description
type	String	Yes	Specifies the alarm notification type. • **notification**: A notification will be sent. • **autoscaling**: A scaling action will be triggered.
notificationList	Array of strings	Yes	Specifies the list of objects to be notified if the alarm status changes. **NOTE** The IDs in the list are strings. You can configure up to 5 object IDs.

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Table 5-57 insufficientdata_actions data structure description

Parameter	Type	Mandatory	Description
type	String	Yes	Specifies the alarm notification type. • **notification**: A notification will be sent. • **autoscaling**: A scaling action will be triggered.
notificationList	Array of strings	Yes	Specifies the list of objects to be notified if the alarm status changes. **NOTE** The IDs in the list are strings. You can configure up to 5 object IDs.

Table 5-58 condition data structure description

Parameter	Type	Mandatory	Description
period	Integer	No	Specifies how often Cloud Eye aggregates data, which can be • **1**: Cloud Eye performs no aggregation and displays raw data. • **300**: Cloud Eye aggregates data every 5 minutes. • **1200**: Cloud Eye aggregates data every 20 minutes. • **3600**: Cloud Eye aggregates data every hour. • **14400**: Cloud Eye aggregates data every 4 hours. • **86400**: Cloud Eye aggregates data every 24 hours. **NOTE** If you set **period** to **1**, Cloud Eye uses raw data to determine whether to trigger an alarm. You can set this parameter to **0** when you set **alarm_type** to **(EVENT.SYS| EVENT.CUSTOM)**.

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Parameter	Type	Mandatory	Description
filter	String	No	Specifies the data rollup method, which can be • **average**: average value of metric data within an aggregation period. • **max**: maximum value of metric data in an aggregation period. • **min**: minimum value of metric data within an aggregation period. • **sum**: sum of metric data within an aggregation period. • **variance**: variance value of metric data within an aggregation period.
comparison_operator	String	No	Specifies the alarm threshold operator, which can be >, =, <, >=, or <=.
value	Double	Yes	Specifies the alarm threshold. Supported range: **0** to **Number. MAX_VALUE (1.7976931348623157e+108)** For detailed thresholds, see the value range of each metric in the appendix. For example, you can set ECS **cpu_util** in **A.1 Services Interconnected with Cloud Eye** to **80**.
unit	String	No	Specifies the data unit. Enter up to 32 characters.
count	Integer	No	Specifies the number of consecutive occurrence times that the alarm policy was met. Supported range: **1** to **5**

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Parameter	Type	Mandatory	Description
suppress_duration	Integer	No	Specifies the interval for triggering an alarm if the alarm persists. Possible intervals are as follows: **0**: Cloud Eye triggers the alarm only once. **300**: Cloud Eye triggers the alarm every 5 minutes. **600**: Cloud Eye triggers the alarm every 10 minutes. **900**: Cloud Eye triggers the alarm every 15 minutes. **1800**: Cloud Eye triggers the alarm every 30 minutes. **3600**: Cloud Eye triggers the alarm every hour. **10800**: Cloud Eye triggers the alarm every 3 hours. **21600**: Cloud Eye triggers the alarm every 6 hours. **43200**: Cloud Eye triggers the alarm every 12 hours. **86400**: Cloud Eye triggers the alarm every day.

Table 5-59 datapoints data structure description

Parameter	Type	Mandatory	Description
time	Long	No	Specifies when the monitoring data of the alarm history is reported, which is a UNIX timestamp in milliseconds, for example, **1603131028000**.
value	Double	No	Specifies the calculated monitoring data of the alarm history, for example, **7.019**.

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Table 5-60 additional_info data structure description

Parameter	Type	Mandatory	Description
resource_id	String	No	Specifies the resource ID corresponding to the alarm history, for example, **22d98f6c-16d2-4c2d-b424-50e79d82838f**.
resource_name	String	No	Specifies the resource name corresponding to the alarm history, for example, **ECS-Test01**.
event_id	String	No	Specifies the event ID of the alarm history, for example, **ev16031292300990kKN8p17J**.

Table 5-61 meta_data data structure description

Parameter	Type	Mandatory	Description
total	Integer	Yes	Specifies the total number of query results.

- Example response

```
{
 "alarm_histories": [
  {
   "alarm_id": "al1604473987569z6n6nkpm1",
   "alarm_name": "TC_CES_FunctionBaseline_Alarm_008",
   "alarm_description": "",
   "metric": {
    "namespace": "SYS.VPC",
    "dimensions": [
     {
      "name": "bandwidth_id",
      "value": "79a9cc0c-f626-4f15-bf99-a1f184107f88"
     }
    ],
    "metric_name": "downstream_bandwidth"
   },
   "condition": {
    "period": 1,
    "filter": "average",
    "comparison_operator": ">=",
    "value": 0,
    "count": 3
   },
   "alarm_level": 2,
   "alarm_type": "",
   "alarm_enabled": false,
   "alarm_action_enabled": false,
   "alarm_actions": [],
   "ok_actions": [],
   "insufficientdata_actions": [],
   "update_time": 1604473988000,
   "enterprise_project_id": "0",
   "trigger_time": 1604473987607,
```

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```
    "alarm_status": "alarm",
    "datapoints": [
      {
        "time": 1604473860000,
        "value": 0
      },
      {
        "time": 1604473800000,
        "value": 0
      },
      {
        "time": 1604473740000,
        "value": 0
      }
    ],
    "additional_info": {
      "resource_id": "",
      "resource_name": "",
      "event_id": ""
    }
  },
  {
    "alarm_id": "al1604473978613MvlvlbVZD",
    "alarm_name": "alarm_merge",
    "alarm_description": "",
    "metric": {
      "namespace": "AGT.ECS",
      "dimensions": [
        {
          "name": "instance_id",
          "value": "22d98f6c-16d2-4c2d-b424-50e79d82838f"
        }
      ],
      "metric_name": "load_average5",
      "resource_group_id": "rg16044739783733030 3XQbK",
      "resource_group_name": "group1"
    },
    "condition": {
      "period": 1,
      "filter": "average",
      "comparison_operator": ">=",
      "value": 0,
      "count": 3
    },
    "alarm_level": 2,
    "alarm_type": "RESOURCE_GROUP",
    "alarm_enabled": false,
    "alarm_action_enabled": false,
    "alarm_actions": [],
    "ok_actions": [],
    "insufficientdata_actions": [],
    "update_time": 1604473979000,
    "enterprise_project_id": "0",
    "trigger_time": 1604473979070,
    "alarm_status": "insufficient_data",
    "datapoints": [],
    "additional_info": {
      "resource_id": "",
      "resource_name": "",
      "event_id": ""
    }
  }
 ],
 "meta_data": {
   "total": 2
 }
}
```

Returned Values

- Normal

  200
- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.3.9 Querying Custom Alarm Templates

Function

This API is used to query the custom alarm templates.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /V1.0/{project_id}/alarm-template

- Parameter description

Table 5-62 Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.
alarmTemplateId	String	No	Specifies the ID of the custom alarm template, for example, **at1603330892378wkDm77y6B**.
namespace	String	No	Specifies the resource namespace. For example, the ECS namespace is **SYS.ECS**. To view the namespace of each service, see **A.1 Services Interconnected with Cloud Eye**.
dname	String	No	Specifies the resource dimension selected for the custom alarm template. For example, the ECS dimension is **instance_id**. For details about the monitoring dimensions of each service, see **A.1 Services Interconnected with Cloud Eye**.
start	String	No	Specifies the start value of pagination. The value is an integer. The default value is **0**.
limit	String	No	Specifies the maximum number of the custom alarm template that can be queried at a time. The value range is (0,100] and the default value is **100**.

- Example
  ```
  GET https://{Cloud Eye endpoint}/V1.0/{project_id}/alarm-template
  ```

Request

None

Response

- Response parameters

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Parameter	Type	Mandatory	Description
alarm_templates	Array of objects	No	Provides supplementary information about the custom alarm template. For details, see **Table 5-63**.
meta_data	MetaData object	No	Specifies the metadata of query results, including the pagination information. For details, see **Table 5-66**.

Table 5-63 alarm_templates data structure description

Parameter	Type	Mandatory	Description
template_name	String	No	Specifies the custom alarm template name, for example, **alarmTemplate-Test01**.
template_description	String	No	Provides supplementary information about the custom alarm template.
namespace	String	No	Specifies the resource namespace. For example, the ECS namespace is **SYS.ECS**. To view the namespace of each service, see **A.1 Services Interconnected with Cloud Eye**.
dimension_name	String	No	Specifies the resource dimension selected for the custom alarm template. For example, the ECS dimension is **instance_id**. For details about the monitoring dimensions of each service, see **A.1 Services Interconnected with Cloud Eye**.
template_items	Array of objects	No	Specifies the alarm policy or alarm policies added to the custom alarm template. For details, see **Table 5-64**.
template_id	String	No	Specifies the ID of the custom alarm template, for example, **at1603330892378wkDm77y6B**.

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Table 5-64 template_items data structure description

Parameter	Type	Mandatory	Description
metric_name	String	Yes	Specifies the metric you add to the custom alarm template. For example, you can add ECS **cpu_util**. To view metrics of each resource, see **A.1 Services Interconnected with Cloud Eye**.
condition	Condition object	Yes	Specifies the alarm policy you created for the custom alarm template. For details, see **Table 5-65**.
alarm_level	Integer	No	Specifies the alarm severity, which can be **1** (critical), **2** (major), **3** (minor), or **4** (informational).

Table 5-65 condition data structure description

Parameter	Type	Mandatory	Description
period	Integer	Yes	Specifies how often Cloud Eye aggregates data. Possible values: • **1**: Cloud Eye performs no aggregation and displays raw data. • **300**: Cloud Eye aggregates data every 5 minutes. • **1200**: Cloud Eye aggregates data every 20 minutes. • **3600**: Cloud Eye aggregates data every 1 hour. • **14400**: Cloud Eye aggregates data every 4 hours. • **86400**: Cloud Eye aggregates data every 24 hours.

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Parameter	Type	Mandatory	Description
filter	String	Yes	Specifies the data rollup method. The following methods are supported: • **average**: average value of metric data within an aggregation period. • **max**: maximum value of metric data in an aggregation period. • **min**: minimum value of metric data within an aggregation period. • **sum**: sum of metric data within an aggregation period. • **variance**: variance value of metric data within an aggregation period.
comparison_operator	String	Yes	Specifies the alarm threshold operator, which can be >, =, <, ≥, or ≤.
value	Double	Yes	Specifies the alarm threshold. Supported range: **0** to **Number. MAX_VALUE (1.7976931348623157e+108)** For detailed thresholds, see the value range of each metric in the appendix. For example, you can set ECS **cpu_util** to **80**.
unit	String	No	Specifies the data unit, which can contain up to 32 characters.
count	Integer	Yes	Specifies the number of consecutive occurrence times that the alarm policy was met. Supported range: **1** to **5**

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Parameter	Type	Mandatory	Description
suppress_duration	Integer	No	Specifies the interval for triggering an alarm if the alarm persists. Possible intervals are as follows: **0**: Cloud Eye triggers the alarm only once. **300**: Cloud Eye triggers the alarm every 5 minutes. **600**: Cloud Eye triggers the alarm every 10 minutes. **900**: Cloud Eye triggers the alarm every 15 minutes. **1800**: Cloud Eye triggers the alarm every 30 minutes. **3600**: Cloud Eye triggers the alarm every 1 hour. **10800**: Cloud Eye triggers the alarm every 3 hours. **21600**: Cloud Eye triggers the alarm every 6 hours. **43200**: Cloud Eye triggers the alarm every 12 hours. **86400**: Cloud Eye triggers the alarm every day.

Table 5-66 meta_data data structure description

Parameter	Type	Mandatory	Description
total	Integer	Yes	Specifies the total number of query results.
count	Integer	Yes	Specifies the number of returned results.
marker	String	Yes	Specifies the pagination marker.

- Response example

```
{
 "alarm_templates": [
  {
    "template_name": "alarmTemplate-Test01",
    "template_description": "Querying custom templates",
    "namespace": "SYS.ECS",
    "dimension_name": "instance_id",
    "template_items": [
```

```
    {
      "metric_name": "cpu_util",
      "condition": {
        "period": 1,
        "filter": "average",
        "comparison_operator": ">=",
        "value": 90,
        "unit": "%",
        "count": 3,
        "suppress_duration": 300
      },
      "alarm_level": 2
    },
    {
      "metric_name": "mem_util",
      "condition": {
        "period": 1,
        "filter": "average",
        "comparison_operator": ">=",
        "value": 90,
        "unit": "%",
        "count": 3,
        "suppress_duration": 600
      },
      "alarm_level": 2
    }
   ],
   "template_id": "at1604474818207Jo7o7R4Nj"
  }
 ],
 "meta_data": {
  "count": 1,
  "marker": "",
  "total": 1
 }
}
```

Returned Value

- Normal

  200

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

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Error Codes

See **9.2 Error Codes**.

5.3.10 Updating a Custom Alarm Template

Function

This API is used to update a custom alarm template.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

PUT /V1.0/{project_id}/alarm-template/{template_id}

- Parameter description

  Table 5-67 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.
template_id	Yes	Specifies the ID of the custom alarm template you want to update.

- Example
  PUT https://{Cloud Eye endpoint}/V1.0/{project_id}/alarm-template/{template_id}

Request

- Request parameters

  Table 5-68 Request parameters

Parameter	Mandatory	Type	Description
template_name	Yes	String	Specifies the name of the custom alarm template. The name can contain 1 to 128 characters. Only letters, digits, underscores (_), and hyphens (-) are allowed.

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Parameter	Mandatory	Type	Description
template_description	No	String	Provides supplementary information about the custom alarm template. The description can contain 0 to 256 characters.
namespace	Yes	String	Specifies the resource type selected for creating the custom alarm template, that is, the service namespace. For example, if you select ECS, **namespace** is **SYS.ECS**.
dimension_name	Yes	String	Specifies the dimension corresponding to the resource type. If ECS is selected, the dimension is ECS and **dimension_name** is **instance_id**.
template_items	Yes	Array of objects	Specifies the alarm rules that you add to the custom alarm template. You can add up to 20 alarm rules. For details, see **Table 5-69**.

Table 5-69 template_items data structure description

Parameter	Mandatory	Type	Description
metric_name	Yes	String	Specifies the metric you add to the custom alarm template. For example, you can add ECS **cpu_util**. For the metric names of each resource, see **A.1 Services Interconnected with Cloud Eye**.
condition	Yes	Condition object	Specifies the alarm policy you created for the custom alarm template. For details, see **Table 5-70**.
alarm_level	No	Integer	Specifies the alarm severity. Possible severities are **1** (critical), **2** (major), **3** (minor), and **4** (informational).

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Table 5-70 condition data structure description

Parameter	Mandatory	Type	Description
comparison_operator	Yes	String	Specifies the alarm threshold operator, which can be >, =, <, >=, or <=.
count	Yes	Integer	Specifies the number of consecutive occurrence times that the alarm policy was met. Supported range: **1** to **5**
filter	Yes	String	Specifies the data rollup method, which can be **max**, **min**, **average**, **sum**, or **variance**.
period	Yes	Integer	Specifies how often Cloud Eye aggregates data. Possible values: • **1**: Cloud Eye performs no aggregation and displays raw data. • **300**: Cloud Eye aggregates data every 5 minutes. • **1200**: Cloud Eye aggregates data every 20 minutes. • **3600**: Cloud Eye aggregates data every hour. • **14400**: Cloud Eye aggregates data every 4 hours. • **86400**: Cloud Eye aggregates data every 24 hours.
unit	No	String	Specifies the data unit. Enter up to 32 characters.
value	Yes	Double	Specifies the alarm threshold. Supported range: **0** to **Number.MAX_VALUE (1.7976931348623157e+108)** For detailed thresholds, see the value range of each metric in **A.1 Services Interconnected with Cloud Eye**. For example, you can set ECS **cpu_util** to **80**.

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Parameter	Mandatory	Type	Description
suppress_duration	No	Integer	Specifies the interval for triggering an alarm if the alarm persists. Possible intervals are as follows: **0**: Cloud Eye triggers the alarm only once. **300**: Cloud Eye triggers the alarm every 5 minutes. **600**: Cloud Eye triggers the alarm every 10 minutes. **900**: Cloud Eye triggers the alarm every 15 minutes. **1800**: Cloud Eye triggers the alarm every 30 minutes. **3600**: Cloud Eye triggers the alarm every hour. **10800**: Cloud Eye triggers the alarm every 3 hours. **21600**: Cloud Eye triggers the alarm every 6 hours. **43200**: Cloud Eye triggers the alarm every 12 hours. **86400**: Cloud Eye triggers the alarm every day.

- Example request

```
{
  "template_name": "alarmTemplate-Test01",
  "template_description": "Updating a custom alarm template",
  "namespace": "SYS.ECS",
  "dimension_name": "instance_id",
  "template_items": [
    {
      "metric_name": "cpu_util",
      "condition": {
        "period": 1,
        "filter": "average",
        "comparison_operator": ">=",
        "value": 90,
        "unit": "%",
        "count": 3,
        "suppress_duration": 300
      },
      "alarm_level": 2
    },
    {
      "metric_name": "mem_util",
      "condition": {
        "period": 1,
        "filter": "average",
        "comparison_operator": ">=",
        "value": 90,
        "unit": "%",
```

```
            "count": 3,
            "suppress_duration": 600
        },
        "alarm_level": 2
    }
  ]
}
```

Response

The response has no message body.

Returned Values

- Normal

  204

- Abnormal

Returned Values	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.3.11 Modifying an Alarm Rule

Function

This API is used to modify an alarm rule.

NOTE

For API V1, only an alarm rule can be configured for a single resource. You are advised to use **6.2.1 Batch Adding Resources to an Alarm Rule**, **6.2.2 Batch Deleting Resources from an Alarm Rule**, and **6.3.1 Modifying All Fields in an Alarm Policy** to work with the console.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

PUT /V1.0/{project_id}/alarms/{alarm_id}

- Parameter description

  Table 5-71 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.
alarm_id	Yes	Specifies the alarm rule ID.

- Example

```
PUT https://{Cloud Eye endpoint}/V1.0/{project_id}/alarms/{alarm_id}
```

Request

- Request parameters

  Table 5-72 Parameter description

Parameter	Mandatory	Type	Description
alarm_name	No	String	Specifies the alarm rule name. Only letters, digits, underscores (_), and hyphens (-) are allowed.
alarm_description	No	String	Provides supplementary information about the alarm rule. Enter 0 to 256 characters.
condition	No	Condition object	Specifies the alarm policy set in the alarm rule. For details, see **Table 5-73**.

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Parameter	Mandatory	Type	Description
alarm_action_enabled	No	Boolean	Specifies whether to enable the action to be triggered by an alarm. The default value is **true**. **NOTE** If you set **alarm_action_enabled** to **true**, you must specify either **alarm_actions** or **ok_actions**. If **alarm_actions** and **ok_actions** coexist, their **notificationList** must be the same.
alarm_level	No	Integer	Specifies the alarm severity, which can be **1**, **2** (default), **3** or **4**, indicating critical, major, minor, and informational, respectively.
alarm_type	No	String	Specifies the alarm rule type. The following enumeration types are supported: **EVENT.SYS**: The alarm rule is created for system events. **EVENT.CUSTOM**: The alarm rule is created for custom events. **RESOURCE_GROUP**: The alarm rule is created for resource groups.
alarm_actions	No	Array of objects	Specifies the action to be triggered by an alarm. The structure is as follows: { "type": "notification","notificationList": ["urn:smn:southchina:68438a86d98e427e907e0097b7e35d47:sd"] } Possible values of **type** are as follows: **notification**: indicates that a notification will be sent. **autoscaling**: indicates that a scaling action will be triggered. For details, see **Table 5-74**.
insufficient_data_actions	No	Array of objects	Specifies the action to be triggered by the alarm of insufficient data. (You do not need to configure this deprecated parameter.) For details, see **Table 5-76**.
ok_actions	No	Array of objects	Specifies the action to be triggered after the alarm is cleared. For details, see **Table 5-75**.

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Table 5-73 condition data structure description

Parameter	Mandatory	Type	Description
period	Yes	Integer	Specifies how often Cloud Eye aggregates data, which can be • **1**: Cloud Eye performs no aggregation and displays raw data. • **300**: Cloud Eye aggregates data every 5 minutes. • **1200**: Cloud Eye aggregates data every 20 minutes. • **3600**: Cloud Eye aggregates data every hour. • **14400**: Cloud Eye aggregates data every 4 hours. • **86400**: Cloud Eye aggregates data every 24 hours.
filter	Yes	String	Specifies the data rollup method, which can be • **average**: average value of metric data within an aggregation period. • **max**: maximum value of metric data in an aggregation period. • **min**: minimum value of metric data within an aggregation period. • **sum**: sum of metric data within an aggregation period. • **variance**: variance value of metric data within an aggregation period.
comparison_operator	Yes	String	Specifies the alarm threshold operator, which can be **>**, **=**, **<**, **>=**, or **<=**.
value	Yes	Double	Specifies the alarm threshold. Supported range: **0** to **Number.MAX_VALUE (1.7976931348623157e+108)** For detailed thresholds, see the value range of each metric in the appendix. For example, you can set ECS **cpu_util** to **80**.
unit	No	String	Specifies the data unit. Enter up to 32 characters.

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Parameter	Mandatory	Type	Description
count	Yes	Integer	Specifies the number of consecutive occurrence times that the alarm policy was met. Supported range: **1** to **5**
suppress_duration	No	Integer	Specifies the interval for triggering an alarm if the alarm persists. Possible intervals are as follows: **0**: Cloud Eye triggers the alarm only once. **300**: Cloud Eye triggers the alarm every 5 minutes. **600**: Cloud Eye triggers the alarm every 10 minutes. **900**: Cloud Eye triggers the alarm every 15 minutes. **1800**: Cloud Eye triggers the alarm every 30 minutes. **3600**: Cloud Eye triggers the alarm every hour. **10800**: Cloud Eye triggers the alarm every 3 hours. **21600**: Cloud Eye triggers the alarm every 6 hours. **43200**: Cloud Eye triggers the alarm every 12 hours. **86400**: Cloud Eye triggers the alarm every day.

Table 5-74 alarm_actions data structure description

Parameter	Mandatory	Type	Description
type	Yes	String	Specifies the alarm notification type. • **notification**: indicates that a notification will be sent. • **autoscaling**: indicates that a scaling action will be triggered.

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Parameter	Mandatory	Type	Description
notificationList	Yes	Array of strings	Specifies the list of objects to be notified if the alarm status changes. You can add up to 5 object IDs. **topicUrn** can be obtained from SMN. For details, see **Querying Topics**. If you set **type** to **notification**, you must specify **notificationList**. If you set **type** to **autoscaling**, you must set **notificationList** to **[]**. **NOTE** • To apply the Auto Scaling (AS) alarm rule, you must bind the scaling policy. For details, see **Creating an AS Policy**. • If you set **alarm_action_enabled** to **true**, you must specify either **alarm_actions** or **ok_actions**. (You do not need to configure the deprecated parameter **insufficientdata_actions**.) • If **alarm_actions** and **ok_actions** coexist, their **notificationList** must be the same. (You do not need to configure the deprecated parameter **insufficientdata_actions**.) • The IDs in the list are strings.

Table 5-75 ok_actions data structure description

Parameter	Mandatory	Type	Description
type	Yes	String	Specifies the notification type when an alarm is triggered. • **notification**: indicates that a notification will be sent. • **autoscaling**: indicates that a scaling action will be triggered.

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Parameter	Mandatory	Type	Description
notificationList	Yes	Array of objects	Specifies the list of objects to be notified if the alarm status changes. The list contains a maximum of 5 object IDs. **topicUrn** can be obtained from SMN. For details, see **Querying Topics**. **NOTE** If you set **alarm_action_enabled** to **true**, you must specify either **alarm_actions** or **ok_actions**. (You do not need to configure the deprecated parameter **insufficientdata_actions**.) If **alarm_actions** and **ok_actions** coexist, their **notificationList** must be the same. (You do not need to configure the deprecated parameter **insufficientdata_actions**.)

Table 5-76 insufficientdata_actions data structure description

Parameter	Mandatory	Type	Description
type	Yes	String	Specifies the notification type when an alarm is triggered. • **notification**: indicates that a notification will be sent. • **autoscaling**: indicates that a scaling action will be triggered.

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Parameter	Mandatory	Type	Description
notificationList	Yes	Array of objects	Specifies the list of objects to be notified if the alarm status changes. You can add up to 5 object IDs. **topicUrn** can be obtained from SMN. For details, see **Querying Topics**. **NOTE** • If you set **alarm_action_enabled** to **true**, you must specify either **alarm_actions** or **ok_actions**. (You do not need to configure the deprecated parameter **insufficientdata_actions**.) • If **alarm_actions** and **ok_actions** coexist, their **notificationList** must be the same. (You do not need to configure the deprecated parameter **insufficientdata_actions**.) • The IDs in the list are strings.

- Example request

```
{
  "alarm_name": "alarm-update-test01",
  "alarm_description": "alarm-update-test01",
  "condition": {
      "comparison_operator": ">=",
      "count": 3,
      "filter": "average",
      "period": 1,
      "value": 95
  },
  "alarm_action_enabled": false,
  "alarm_level": 2
}
```

Returned Values

- Normal

  204

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.

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Returned Value	Description
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.4 Monitoring Data

5.4.1 Querying Monitoring Data of a Metric

Function

This API is used to query the monitoring data of a specified metric at a specified granularity in a specified time range. You can specify the dimension of data to be queried.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /V1.0/{project_id}/metric-data

Example:

```
GET /V1.0/{project_id}/metric-data?namespace={namespace}&metric_name={metric_name}&dim.{i}=key,value&from={from}&to={to}&period={period}&filter={filter}
```

- Parameter description

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Table 5-77 Parameter description

Parameter	Mandatory	Description
project_id	Yes	**Definition** Project ID, which is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Table 5-78 Query parameter description

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Namespace of a service. For details, see **A.1 Services Interconnected with Cloud Eye**. **Constraints** N/A **Range** The namespace must be in the service.item format. **service** and **item** must be strings, and each must start with a letter and contain only letters (case-insensitive), digits, and underscores (_). In addition, **service** cannot start with **SYS**, **AGT**, or **SRE**. **namespace** cannot be **SERVICE.BMS** because this namespace has been used by the system. The value can contain 3 to 32 characters. For example, the ECS namespace is **SYS.ECS**, and the DDS namespace is **SYS.DDS**. **Default Value** N/A

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Parameter	Mandatory	Type	Description
metric_name	Yes	String	**Definition** Metric ID. For example, **metric_name** of ECS CPU usage is **cpu_util**. For details about the metrics of each service, see **A.1 Services Interconnected with Cloud Eye**. **Constraints** N/A **Range** The value must start with a letter and can contain only digits, letters, underscores (_), and hyphens (-). For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. The value can contain 1 to 96 characters. **Default Value** N/A

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Parameter	Mandatory	Type	Description
from	Yes	String	**Definition** Start time for the query. The value is a UNIX timestamp, in milliseconds (ms). **Constraints** Cloud Eye aggregates raw data generated within an aggregation period to the start time of the period. If the time range specified by **from** and **to** falls within an ongoing aggregation period, the query result will be empty because the aggregation has not finished yet. Set **from** to at least one period earlier than the current time. Take the 5-minute period as an example. If it is 10:35 now, the raw data generated between 10:30 and 10:35 will be aggregated to 10:30. In this example, if **period** is 5 minutes, **from** should be 10:30. **Range** N/A **Default Value** N/A **NOTE** Cloud Eye rounds up **from** based on the level of granularity required to perform the rollup.
to	Yes	String	**Definition** End time of the query. The value is a UNIX timestamp, in milliseconds (ms). **Constraints** **from** must be earlier than **to**. **Range** N/A **Default Value** N/A

Parameter	Mandatory	Type	Description
period	Yes	Integer	**Definition** Aggregation granularity of metric monitoring data. **Constraints** N/A **Range** The value can be: • **1**: real-time data of monitored resources. • **60**: Data is aggregated every one minute (one data point per minute). • **300**: Data is aggregated every 5 minutes (one data point every 5 minutes). • **1200**: Data is aggregated every 20 minutes (one data point every 20 minutes). • **3600**: Data is aggregated every one hour (one data point per hour). • **14400**: Data is aggregated every 4 hours (one data point every four hours). • **86400**: Data is aggregated every one day (one data point per day). **Default Value** N/A

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Parameter	Mandatory	Type	Description
filter	Yes	String	**Definition** Data aggregation method. **Constraints** N/A **Range** The value can be: • **average**: average value of metric data within an aggregation period. • **max**: maximum value of metric data in an aggregation period. • **min**: minimum value of metric data within an aggregation period. • **sum**: sum of metric data within an aggregation period. • **variance**: variance value of metric data within an aggregation period. **Default Value** N/A **NOTE** During an aggregation process, data generated within a specified time range is consolidated to the start point of the aggregation period using the relevant aggregation algorithm. Take the 5-minute period as an example. If the current time is 10:35, the raw data generated between 10:30 and 10:35 will be aggregated to 10:30.

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Parameter	Mandatory	Type	Description
dim	Yes	String	**Definition** Dimension of a metric. If a metric's dimensions are hierarchically structured, you need to use multi-level dimension queries. **Constraints** Cloud Eye supports a maximum of four hierarchical dimensions that are numbered from 0 to 3. **Range** The dimension format is **dim.{i}=key,value**. **key** cannot exceed 32 characters and **value** cannot exceed 256 characters. The following dimensions are only examples. For details about whether multiple dimensions are supported, see **metric description of each service**. • Single-level dimension: For example, the dimension of ECS cpu_util is **instance_id**, and **instance_id** is at layer 0, as shown in the following: dim.0=instance_id,i-1234 • Multi-level dimension: For example, the dimension of ECS disk_agt_read_bytes_rate is **disk**, whose upper-level dimension is **instance_id**. **instance_id** is at layer 0, and **disk** is at layer 1, as shown in the following: dim.0=instance_id,i-12345&dim.1=disk,i-1234 **NOTE** If a metric's dimensions are hierarchically structured, you need to use multi-level dimension queries. **Default Value** N/A

NOTE

- **dimensions** can be obtained from the response body by calling the API for **5.2.1 Querying Metrics**.
- OBS metric data can be queried only when the related OBS APIs are called.

- Example:

  Request example 1: View the CPU usage of ECS whose ID is **6f3c6f91-4b24-4e1b-b7d1-a94ac1cb011d** from 2019-04-30 20:00:00 to 2019-04-30 22:00:00. The monitoring interval is 20 minutes.

```
GET https://{Cloud Eye endpoint}/V1.0/{project_id}/metric-data?namespace=SYS.ECS&metric_name=cpu_util&dim.0=instance_id,6f3c6f91-4b24-4e1b-b7d1-a94ac1cb011d&from=1556625600000&to=1556632800000&period=1200&filter=min
```

Request

None

Response

- Response parameters

Table 5-79 Parameter description

Parameter	Type	Description
datapoints	Array of objects	**Definition** Metric data list. For details, see **Table 5-80**. Since Cloud Eye rounds up **from** based on the level of granularity for data query, **datapoints** may contain more data points than expected.
metric_name	String	**Definition** Metric ID. For example, **metric_name** of ECS CPU usage is **cpu_util**. For details about the metrics of each service, see **A.1 Services Interconnected with Cloud Eye**. **Range** N/A

Table 5-80 datapoints data structure description

Parameter	Type	Description
average	Double	**Definition** Average value of metric data within an aggregation period. **Range** N/A

Parameter	Type	Description
max	Double	**Definition** Maximum value of metric data within an aggregation period. **Range** N/A
min	Double	**Definition** Minimum value of metric data within an aggregation period. **Range** N/A
sum	Double	**Definition** Sum of metric data within an aggregation period. **Range** N/A
variance	Double	**Definition** Variance value of metric data within an aggregation period. **Range** N/A
timestamp	Long	**Definition** Time when a metric was collected. It is a UNIX timestamp, in milliseconds. **Range** N/A
unit	String	**Definition** Metric unit. **Range** N/A

- Example responses

  Example response 1: The dimension is SYS.ECS, and the average CPU usage of ECSs is displayed.

```
{
    "datapoints": [
        {
            "average": 0.23,
            "timestamp": 1442341200000,
            "unit": "%"
        }
    ],
    "metric_name": "cpu_util"
}
```

Example response 2: The dimension is SYS.ECS, and the sum CPU usage of ECSs is displayed.

```
{
   "datapoints": [
      {
         "sum": 0.53,
         "timestamp": 1442341200000,
         "unit": "%"
      }
   ],
   "metric_name": "cpu_util"
}
```

Example response 3: The dimension is SYS.ECS, and the maximum CPU usage of ECSs is displayed.

```
{
   "datapoints": [
      {
         "max": 0.13,
         "timestamp": 1442341200000,
         "unit": "%"
      }
   ],
   "metric_name": "cpu_util"
}
```

Returned Values

- Normal

  200

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

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5.4.2 Adding Monitoring Data

Function

This API is used to add one or more pieces of custom metric monitoring data to solve the problem that the system metrics cannot meet specific service requirements.

For details about the monitoring data retention period, see **How Long Is Metric Data Retained?** in *Cloud Eye User Guide*.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /V1.0/{project_id}/metric-data

- Parameter description

  Table 5-81 Parameter description

Parameter	Mandatory	Description
project_id	Yes	**Definition** Project ID, which is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

- Example
  POST https://{Cloud Eye endpoint}/V1.0/{project_id}/metric-data

For details about Cloud Eye endpoints, go to **Endpoints** to query the URL of each region.

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Request

NOTICE

1. The size of a POST request cannot exceed 512 KB. Otherwise, the request will be denied.
2. The period for sending POST requests must be shorter than the minimum aggregation period. Otherwise, the aggregated data will be noncontinuous. For example, if the aggregation period is 5 minutes and the POST request sending period is 7 minutes, the data will be aggregated every 10 minutes, rather than 5 minutes.
3. Timestamp (collect_time) in the POST request body value must be within the period that starts from three days before the current time to 10 minutes after the current time. If it is not in this range, you are not allowed to insert the metric data.

- Request parameters

Table 5-82 Parameter description

Parameter	Type	Mandatory	Description
Array elements	Array of objects	Yes	**Definition** Request parameters for adding one or more pieces of custom metric data record. For details, see **Table 5-83**. **Constraints** At least one metric data record must be added. A maximum of 10,000 metric data records are allowed. The message body of a single POST request cannot exceed 512 KB.

Table 5-83 Array elements

Parameter	Mandatory	Type	Description
metric	Yes	Object	**Definition** Metric data. For details, see **Table 5-84**. **Constraints** N/A

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Parameter	Mandatory	Type	Description
ttl	Yes	Integer	**Definition** Data validity period, in seconds. If the validity period expires, data will be automatically deleted. **Constraints** N/A **Range** 1 to 604800 **Default Value** N/A
collect_time	Yes	Long	**Definition** Time when the data was collected. The value is a UNIX timestamp, in milliseconds. **Constraints** N/A **Range** Since there is a latency between the client and the server, the timestamp when data was inserted must be within the time range [Current time – 3d + 10s, Current time + 10 mins – 10s]. In this way, the data will be inserted to the database without being affected by the latency. **Default Value** N/A
value	Yes	Double	**Definition** Value of the monitored metric data to be added. **Constraints** N/A **Range** The value can be an integer or a floating point number. **Default Value** N/A

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Parameter	Mandatory	Type	Description
unit	No	String	**Definition** Data unit. **Constraints** N/A **Range** 0 to 32 **Default Value** N/A
type	No	String	**Definition** Data type. **Constraints** N/A **Range** The value can be: • **int**: integer • **float**: floating point number **Default Value** N/A

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Table 5-84 metric data structure description

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Custom namespace. For details, see **A.1 Services Interconnected with Cloud Eye**. **Constraints** N/A **Range** The namespace must be in the service.item format. **service** and **item** must be strings, and each must start with a letter and contain only letters (case-insensitive), digits, and underscores (_). In addition, **service** cannot start with **SYS**, **AGT**, or **SRE**. **namespace** cannot be **SERVICE.BMS** because this namespace has been used by the system. The value can contain 3 to 32 characters. For example, the ECS namespace is **SYS.ECS**, and the DDS namespace is **SYS.DDS**. **Default Value** N/A
dimensions	Yes	Array of objects	**Definition** Dimension of a metric. For details, see **Table 5-85**. **Constraints** A maximum of four dimensions are supported.

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Parameter	Mandatory	Type	Description
metric_name	Yes	String	**Definition** Metric ID. For example, **metric_name** of ECS CPU usage is **cpu_util**. For details about the metrics of each service, see **A.1 Services Interconnected with Cloud Eye**. **Constraints** N/A **Range** The value must start with a letter and can contain only digits, letters (case-insensitive), underscores (_), and hyphens (-). For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. The value can contain 1 to 96 characters. **Default Value** N/A

Table 5-85 dimensions data structure description

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Monitoring dimension name. For example, the dimension of an ECS is **instance_id**. For details about the dimension of each service, see the **key** field in **A.1 Services Interconnected with Cloud Eye**. **Constraints** The value allows 1 to 32 characters. It must start with a letter and can contain only digits, letters, underscores (_), and hyphens (-). **Range** N/A **Default Value** N/A

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Parameter	Mandatory	Type	Description
value	Yes	String	**Definition** Dimension value, for example, an ECS ID. **Constraints** N/A **Range** The value allows 1 to 256 characters. It must start with a letter or digit and can contain only digits, letters, underscores (_), and hyphens (-). **Default Value** N/A

- Example requests

  Example request 1: Add **cpu_util** data of a custom dimension. The instance ID is **6f3c6f91-4b24-4e1b-b7d1-a94ac1cb011d**.

```
[
  {
    "metric": {
      "namespace": "MINE.APP",
      "dimensions": [
        {
          "name": "instance_id",
          "value": "6f3c6f91-4b24-4e1b-b7d1-a94ac1cb011d"
        }
      ],
      "metric_name": "cpu_util"
    },
    "ttl": 172800,
    "collect_time": 1463598260000,
    "type": "float",
    "value": 0.09,
    "unit": "%"
  },
  {
    "metric": {
      "namespace": "MINE.APP",
      "dimensions": [
        {
          "name": "instance_id",
          "value": "6f3c6f91-4b24-4e1b-b7d1-a94ac1cb011d"
        }
      ],
      "metric_name": "cpu_util"
    },
    "ttl": 172800,
    "collect_time": 1463598270000,
    "type": "float",
    "value": 0.12,
    "unit": "%"
  }
]
```

  Example request 2: Add **rds021_myisam_buf_usage** data of the RDS instance whose **rds_cluster_id** is **3c8cc15614ab46f5b8743317555e0de2in01**.

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```
[
  {
    "metric": {
      "namespace": "SYS.RDS",
      "dimensions": [
  {
            "name": "rds_cluster_id",
            "value": "3c8cc15614ab46f5b8743317555e0de2in01"
        }
      ],
      "metric_name": "rds021_myisam_buf_usage"
    },
    "ttl": 172800,
    "collect_time": 1463598260000,
    "type": "float",
    "value": 0.01,
    "unit": "Ratio"
  }
]
```

Example request 3: Add **connections_usage** data of the DCS instance whose **dcs_instance_id** is **1598b5d4-3cb5-4f4d-8d99-2425d8e9ed54** and **dcs_cluster_redis_node** is **6666cd76f96956469e7be39d750cc7d9**.

```
[
  {
    "metric": {
      "namespace": "SYS.DCS",
      "dimensions": [
  {
            "name": "dcs_instance_id",
            "value": "1598b5d4-3cb5-4f4d-8d99-2425d8e9ed54"
    },
  {
            "name": "dcs_cluster_redis_node",
            "value": "6666cd76f96956469e7be39d750cc7d9"
        }
      ],
      "metric_name": "connections_usage"
    },
    "ttl": 172800,
    "collect_time": 1463598260000,
    "type": "float",
    "value": 8.3,
    "unit": "%"
  }
]
```

Response

The response has no message body.

Returned Values

- Normal

  201

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.

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Returned Value	Description
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.4.3 Querying Monitoring Data of Multiple Metrics

Function

You can query the data of specified metrics within a specified time range and at a specified granularity. You can query the monitoring data of up to 500 metrics in one batch.

Constraints

- In regions CN East-Shanghai1, CN East-Shanghai2, CN North-Beijing4, and CN South-Guangzhou, you can query raw data as well as data aggregated at 1-minute and 5-minute intervals for any two days within a 20-day period. In other regions, only data from the most recent two days is available for such queries.
- Data aggregated at 20-minute, 1-hour, and 4-hour intervals is available for querying based on the metric data's retention period. For details, see **How Long Is Metric Data Retained?**

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /V1.0/{project_id}/batch-query-metric-data

- Parameter description

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Table 5-86 Parameter description

Parameter	Mandatory	Description
project_id	Yes	**Definition** Project ID, which is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Request

NOTICE

1. The size of a POST request cannot exceed 512 KB. Otherwise, the request will be denied.
2. The default maximum query interval (**to**–**from**) varies depending on **period** and the number of metrics to be queried. The rule is as follows: Number of metrics x (**to** – **from**)/Monitoring interval ≤ 3000.
   - If **period** is **1**, the monitoring interval is 60,000 ms (60 x 1000).
   - If **period** is **300**, the monitoring interval is 300,000 ms (300 x 1000).
   - If **period** is **1200**, the monitoring interval is 1,200,000 ms (1200 x 1000).
   - If **period** is **3600**, the monitoring interval is 3,600,000 ms (3600 x 1000).
   - If **period** is **14400**, the monitoring interval is 14,400,000 ms (14400 x 1000).
   - If **period** is **86400**, the monitoring interval is 86,400,000 ms (86400 x 1000).

   For example, if 300 metrics are queried in batches and the monitoring interval is 60,000 ms, the maximum value of (**to**-**from**) is **600000**. If (**to**-**from**) exceeds 600,000, **from** is automatically changed to **to**-**600000**.

- Request parameters

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Table 5-87 Request parameters

Parameter	Mandatory	Type	Description
metrics	Yes	Array of objects	**Definition** Metric data. For details, see **Table 5-88**. **Constraints** The array can contain a maximum of 500 items.
from	Yes	Long	**Definition** Start time of the query. The value is a UNIX timestamp, in milliseconds. **Constraints** Set **from** to at least one period earlier than the current time. Cloud Eye aggregates raw data generated within an aggregation period to the start time of the period. If the time range specified by **from** and **to** falls within an ongoing aggregation period, the query result will be empty because the aggregation has not finished yet. Set **from** to at least one period earlier than the current time. Take the 5-minute period as an example. If it is 10:35 now, the raw data generated between 10:30 and 10:35 will be aggregated to 10:30. In this example, if **period** is 5 minutes, **from** should be 10:30. **Range** N/A **Default Value** N/A **NOTE** Cloud Eye rounds up **from** based on the level of granularity required to perform the rollup.

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Parameter	Mandatory	Type	Description
to	Yes	Long	**Definition** End time of the query. The value is a UNIX timestamp, in milliseconds (ms). **Constraints** **from** must be earlier than **to**. **Range** N/A **Default Value** N/A
period	Yes	String	**Definition** Aggregation granularity of metric monitoring data. **Constraints** N/A **Range** The value can be: • **1**: real-time data of monitored resources. • **60**: Data is aggregated every one minute (one data point per minute). • **300**: Data is aggregated every 5 minutes (one data point every 5 minutes). • **1200**: Data is aggregated every 20 minutes (one data point every 20 minutes). • **3600**: Data is aggregated every one hour (one data point per hour). • **14400**: Data is aggregated every 4 hours (one data point every four hours). • **86400**: Data is aggregated every one day (one data point per day). **Default Value** N/A

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Parameter	Mandatory	Type	Description
filter	Yes	String	**Definition** Data aggregation method. **Constraints** **filter** does not affect the query result of raw data. (The period is **1**.) **Range** The value can be: • **average**: average value of metric data within an aggregation period. • **max**: maximum value of metric data in an aggregation period. • **min**: minimum value of metric data within an aggregation period. • **sum**: sum of metric data within an aggregation period. • **variance**: variance value of metric data within an aggregation period. **Default Value** N/A

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Table 5-88 metrics data structure description

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Namespace of the queried service. For details, see **A.1 Services Interconnected with Cloud Eye**. **Constraints** N/A **Range** The namespace must be in the service.item format. **service** and **item** must be strings, and each must start with a letter and contain only letters (case-insensitive), digits, and underscores (_). In addition, **service** cannot start with **SYS**, **AGT**, or **SRE**. **namespace** cannot be **SERVICE.BMS** because this namespace has been used by the system. The value can contain 3 to 32 characters. For example, the ECS namespace is **SYS.ECS**, and the DDS namespace is **SYS.DDS**. **Default Value** N/A

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Parameter	Mandatory	Type	Description
metric_name	Yes	String	**Definition** Metric ID. For example, **metric_name** of ECS CPU usage is **cpu_util**. For details about the metrics of each service, see **A.1 Services Interconnected with Cloud Eye**. **Constraints** N/A **Range** The value must start with a letter and can contain only digits, letters (case-insensitive), underscores (_), and hyphens (-). For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. The value can contain 1 to 96 characters. **Default Value** N/A

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Parameter	Mandatory	Type	Description

dimensions	Yes	Array of objects	**Definition**
			Dimension of a metric.
			Each dimension is a JSON object, and its structure is as follows:
			{
			"name": "instance_id",
			"value": "33328f02-3814-422e-b688-bfdba93d4050"
			}
			For multi-level service dimensions, for example, the dimension of ECS disk_agt_read_bytes_rate is **disk**, whose upper-level dimension is **instance_id**. **instance_id** is at layer 0, and **disk** is at layer 1, as shown in the following:
			{
			"name": "instance_id",
			"value": "33328f02-3814-422e-b688-bfdba93d4050"
			},
			{
			"name": "disk",
			"value": "31f45764-38b3-44ad-aaca-4015c83371e6"
			}
			For details, see **Table 5-89**.
			Constraints
			A maximum of four dimensions are supported.

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Table 5-89 dimensions data structure description

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Monitoring dimension name. For example, the dimension of an ECS is **instance_id**. For details about the dimension of each service, see the **key** field in **A.1 Services Interconnected with Cloud Eye**. **Constraints** N/A **Range** The value must start with a letter and can contain 1 to 32 characters. It can contain only digits, letters, underscores (_), and hyphens (-). **Default Value** N/A
value	Yes	String	**Definition** Dimension value, for example, an ECS ID. **dimensions** can be obtained from the response body by calling the API for **querying metrics**. **Constraints** N/A **Range** The value must start with a letter or digit and can contain 1 to 256 characters. It can contain only digits, letters, underscores (_), and hyphens (-). **Default Value** N/A

NOTE

- **dimensions** can be obtained from the response body by calling the API for **querying metrics**.
- OBS metric data can be queried only when the related OBS APIs are called.

- Example requests

Example 1: Query the average disk usage of the disk whose **mount_point** is **012bec14bc176310c19f40e384fd629b** on the ECS whose **instance_id** is **07d878a9-2243-4e84-aeef-c47747d18024** from 20:00:00 to 22:00:00 on April 30, 2019.

```
{
   "from": 1556625600000,
   "to": 1556632800000,
   "period": "1",
   "filter": "average",
   "metrics": [{
      "dimensions": [{
         "name": "instance_id",
         "value": "07d878a9-2243-4e84-aeef-c47747d18024"
      }, {
         "name": "mount_point",
         "value": "012bec14bc176310c19f40e384fd629b"
      }],
      "metric_name": "disk_usedPercent",
      "namespace": "AGT.ECS"
   }]
}
```

Example 2: Query the average memory usage of the ECS whose **instance_id** is **238764d4-c4e1-4274-88a1-5956b057766b** from 20:00:00 to 22:00:00 on April 30, 2019.

```
{
   "from": 1556625600000,
   "to": 1556632800000,
   "period": "1",
   "filter": "average",
   "metrics": [{
      "dimensions": [{
         "name": "instance_id",
         "value": "238764d4-c4e1-4274-88a1-5956b057766b"
      }],
      "metric_name": "mem_usedPercent",
      "namespace": "AGT.ECS"
   }]
}
```

Example 3: Query the average **cpu_util** of the five ECSs whose values of **instance_id** are **faea5b75-e390-4e2b-8733-9226a9026070**, **faea5b75-e390-4e2b-8733-9226a9026071**, **faea5b75-e390-4e2b-8733-9226a9026072**, **faea5b75-e390-4e2b-8733-9226a9026073**, and **faea5b75-e390-4e2b-8733-9226a9026074** from 00:00:00 to 23:59:59 on August 21, 2024. Query five metrics. The monitoring period is 60,000 ms. The maximum value of (**to** – **from**) is **36000000**. The value of the request parameter (**to** – **from**) is **86399000**, which exceeds the maximum value **36000000**. The formula is as follows: Number of metrics × Value of (**to** – **from**)/Monitoring period ≤ 3000. The system automatically sets the value of **from** to **to** – **36000000**, that is, **1724219999000**.

```
{
   "metrics": [
     {
         "namespace": "SYS.ECS",
         "dimensions": [
            {
               "name": "instance_id",
               "value": "faea5b75-e390-4e2b-8733-9226a9026070"
            }
         ],
         "metric_name": "cpu_util"
     },
     {
```

```
            "namespace": "SYS.ECS",
            "dimensions": [
               {
                  "name": "instance_id",
                  "value": "faea5b75-e390-4e2b-8733-9226a9026071"
               }
            ],
            "metric_name": "cpu_util"
         },
            {
            "namespace": "SYS.ECS",
            "dimensions": [
               {
                  "name": "instance_id",
                  "value": "faea5b75-e390-4e2b-8733-9226a9026072"
               }
            ],
            "metric_name": "cpu_util"
         },
            {
            "namespace": "SYS.ECS",
            "dimensions": [
               {
                  "name": "instance_id",
                  "value": "faea5b75-e390-4e2b-8733-9226a9026073"
               }
            ],
            "metric_name": "cpu_util"
         },
            {
            "namespace": "SYS.ECS",
            "dimensions": [
               {
                  "name": "instance_id",
                  "value": "faea5b75-e390-4e2b-8733-9226a9026074"
               }
            ],
            "metric_name": "cpu_util"
         }
      ],
      "from": 1724169600000,
      "to": 1724255999000,
      "period": "1",
      "filter": "average"
}
```


Example 4: View the average **cpu_util** of the ECS whose **instance_id** is **faea5b75-e390-4e2b-8733-9226a9026070** and the average **network_vm_connections** of the ECS whose **instance_id** is **06b4020f-461a-4a52-84da-53fa71c2f42b** from 20:00:00 to 22:00:00 on April 30, 2019.


```
{
   "metrics": [
     {
         "namespace": "SYS.ECS",
         "dimensions": [
            {
               "name": "instance_id",
               "value": "faea5b75-e390-4e2b-8733-9226a9026070"
            }
         ],
         "metric_name": "cpu_util"
      },
      {
         "namespace": "SYS.ECS",
         "dimensions": [
            {
               "name": "instance_id",
               "value": "06b4020f-461a-4a52-84da-53fa71c2f42b"
```

```
            }
         ],
         "metric_name": "network_vm_connections"
      }
   ],
   "from": 1556625600000,
   "to": 1556632800000,
   "period": "1",
   "filter": "average"
}
```

Example 5: View the individual sums of **rds021_myisam_buf_usage** of the RDS instance whose **rds_cluster_id** is **3c8cc15614ab46f5b8743317555e0de2in01** and the RDS instance whose **rds_cluster_id** is **3b2fa8b55a9b4adca3713962a9d31884in01** from 20:00:00 to 22:00:00 on April 30, 2019.

```
{
   "metrics": [
      {
         "namespace": "SYS.RDS",
         "dimensions": [
            {
               "name": "rds_cluster_id",
               "value": "3c8cc15614ab46f5b8743317555e0de2in01"
            }
         ],
         "metric_name": "rds021_myisam_buf_usage"
      },
      {
         "namespace": "SYS.RDS",
         "dimensions": [
            {
               "name": "rds_cluster_id",
               "value": "3b2fa8b55a9b4adca3713962a9d31884in01"
            }
         ],
         "metric_name": "rds021_myisam_buf_usage"
      }
   ],
   "from": 1556625600000,
   "to": 1556632800000,
   "period": "1",
   "filter": "sum"
}
```

Example 6: View the minimum **proc_specified_count** of the server whose **instance_id** is **cd841102-f6b1-407d-a31f-235db796dcbb** and **proc** is **b28354b543375bfa94dabaeda722927f**. The monitoring data is collected from 20:00:00 to 22:00:00 on April 30, 2019 and the aggregation period is 20 minutes.

```
{
   "metrics": [
      {
         "namespace": "AGT.ECS",
         "dimensions": [
            {
               "name": "instance_id",
               "value": "cd841102-f6b1-407d-a31f-235db796dcbb"
            },
            {
               "name": "proc",
               "value": "b28354b543375bfa94dabaeda722927"
            }
         ],
         "metric_name": "proc_specified_count"
      }
   ],
   "from": 1556625600000,
```

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```
  "to": 1556632800000,
  "period": "1200",
  "filter": "min"
}
```

Response

- Response parameters

Table 5-90 Parameter description

Parameter	Type	Description
metrics	Array of objects	**Definition** Metric data list. For details, see **Table 5-91**.

Table 5-91 metrics data structure description

Parameter	Type	Description
unit	String	**Definition** Metrics unit. **Range** N/A
datapoints	Array of objects	**Definition** Metric data list. During data query, Cloud Eye rounds up the value of **from** based on the aggregation granularity selected, so there may be more data points in **datapoints** than expected. A maximum of 3,000 data points can be returned. For details, see **Table 5-93**.
namespace	String	**Definition** Metric namespace. **Range** N/A

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Parameter	Type	Description

dimensions	Array of objects	**Definition**
		List of metric dimensions.
		Each dimension is a JSON object, and its structure is as follows:
		{
		"name": "instance_id",
		"value": "33328f02-3814-422e-b688-bfdba93d4050"
		}
		For details, see **Table 5-92**.

metric_name	String	**Definition** Metric name. **Range** N/A

Table 5-92 dimensions data structure description

Parameter	Type	Description
name	String	**Definition** Monitoring dimension name. For example, the dimension of an ECS is **instance_id**. For details about the dimension of each service, see the **key** field in **A.1 Services Interconnected with Cloud Eye**. **Range** N/A
value	String	**Definition** Dimension value, for example, an ECS ID. **Range** N/A

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Table 5-93 datapoints data structure description

Parameter	Type	Description
average	Double	**Definition** Average value of metric data within an aggregation period. **Range** N/A
max	Double	**Definition** Maximum value of metric data within an aggregation period. **Range** N/A
min	Double	**Definition** Minimum value of metric data within an aggregation period. **Range** N/A
sum	Double	**Definition** Sum of metric data within an aggregation period. **Range** N/A
variance	Double	**Definition** Variance value of metric data within an aggregation period. **Range** N/A
timestamp	Long	**Definition** Time when a metric was collected. It is a UNIX timestamp, in milliseconds. **Range** N/A

- Example responses

  Example response 1: The average **cpu_util** of the ECS whose **instance_id** is **faea5b75-e390-4e2b-8733-9226a9026070** and the average **network_vm_connections** of the ECS whose **instance_id** is **06b4020f-461a-4a52-84da-53fa71c2f42b** are displayed.

```
{
   "metrics": [
      {
         "namespace": "SYS.ECS",
         "metric_name": "cpu_util",
         "dimensions": [
```

```
            {
                "name": "instance_id",
                "value": "faea5b75-e390-4e2b-8733-9226a9026070"
            }
        ],
        "datapoints": [
            {
                "average": 0.69,
                "timestamp": 1556625610000
            },
            {
                "average": 0.7,
                "timestamp": 1556625715000
            }
        ],
        "unit": "%"
    },
    {
        "namespace": "SYS.ECS",
        "metric_name": "network_vm_connections",
        "dimensions": [
            {
                "name": "instance_id",
                "value": "06b4020f-461a-4a52-84da-53fa71c2f42b"
            }
        ],
        "datapoints": [
            {
                "average": 1,
                "timestamp": 1556625612000
            },
            {
                "average": 3,
                "timestamp": 1556625717000
            }
        ],
        "unit": "count"
    }
  ]
}
```

Response example 2: The **rds021_myisam_buf_usage** sums of the RDS instance whose **rds_cluster_id** are **3c8cc15614ab46f5b8743317555e0de2in01** is displayed, and those of the RDS instance whose **rds_cluster_id** is **3b2fa8b55a9b4adca3713962a9d31884in01** are displayed.

```
{
  "metrics": [
    {
        "unit": "Ratio",
        "datapoints": [
            {
                "sum": 0.07,
                "timestamp": 1556625628000
            },
            {
                "sum": 0.07,
                "timestamp": 1556625688000
            }
        ],
        "namespace": "SYS.RDS",
        "dimensions": [
            {
                "name": "rds_cluster_id",
                "value": "3c8cc15614ab46f5b8743317555e0de2in01"
            }
        ],
        "metric_name": "rds021_myisam_buf_usage"
    },
```

```
    {
      "unit": "Ratio",
      "datapoints": [
        {
          "sum": 0.06,
          "timestamp": 1556625614000
        },
        {
          "sum": 0.07,
          "timestamp": 1556625674000
        }
      ],
      "namespace": "SYS.RDS",
      "dimensions": [
        {
          "name": "rds_cluster_id",
          "value": "3b2fa8b55a9b4adca3713962a9d31884in01"
        }
      ],
      "metric_name": "rds021_myisam_buf_usage"
    }
  ]
}
```


Response example 3: The minimum **rds021_myisam_buf_usage** of the server whose **instance_id** is **cd841102-f6b1-407d-a31f-235db796dcbb** and **proc** is **b28354b543375bfa94dabaeda722927f** is displayed.


```
{
  "metrics": [
    {
      "unit": "Ratio",
      "datapoints": [
        {
          "min": 0,
          "timestamp": 1556625612000
        },
        {
          "min": 0,
          "timestamp": 1556625672000
        }
      ],
      "namespace": "AGT.ECS",
      "dimensions": [
        {
          "name": "instance_id",
          "value": "cd841102-f6b1-407d-a31f-235db796dcbb"
        },
        {
          "name": "proc",
          "value": "b28354b543375bfa94dabaeda722927f"
        }
      ],
      "metric_name": "rds021_myisam_buf_usage"
    }
  ]
}
```


Returned Values

- Normal

  200

- Abnormal

Returned Value	Description
400 Bad Request	Request error.

Returned Value	Description
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.4.4 Querying the Host Configuration

Function

This API is used to query the host configuration for a specified event type in a specified time range. You can specify the dimension of data to be queried.

NOTICE

This API is provided for SAP Monitor in the HANA scenario to query the host configuration. In other scenarios, the host configuration cannot be queried with this API.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /V1.0/{project_id}/event-data

- Parameter description

Table 5-94 Parameter description

Parameter	Mandatory	Description
project_id	Yes	**Definition** Project ID, which is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.

- Parameters that are used to query the host configuration

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Namespace of the queried service. For details, see **A.1 Services Interconnected with Cloud Eye**. **Constraints** N/A **Range** The namespace must be in the service.item format. **service** and **item** must be strings, and each must start with a letter and contain only letters (case-insensitive), digits, and underscores (_). In addition, **service** cannot start with **SYS**, **AGT**, or **SRE**. **namespace** cannot be **SERVICE.BMS** because this namespace has been used by the system. The value can contain 3 to 32 characters. For example, the ECS namespace is **SYS.ECS**, and the DDS namespace is **SYS.DDS**. **Default Value** N/A

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Parameter	Mandatory	Type	Description
type	Yes	String	**Definition** Event type. It can contain only letters, underscores (_), and hyphens (-). It must start with a letter and cannot exceed 64 characters, for example, **instance_host_info**. **Constraints** N/A **Range** The value cannot exceed 64 characters. Regular matching: ^([a-z]|[A-Z]){1}([a-z]|[A-Z]|[0-9]|_|-)*$ **Default Value** N/A
from	Yes	String	**Definition** Start time of the query. The value is a UNIX timestamp, in milliseconds. **Constraints** N/A **Range** N/A **Default Value** N/A
to	Yes	String	**Definition** End time of the query. The value is a UNIX timestamp, in milliseconds. **Constraints** **from** must be earlier than **to**. **Range** N/A **Default Value** N/A

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Parameter	Mandatory	Type	Description
dim	Yes	String	**Definition** Monitoring dimension, for example, **instance_id** for ECSs. For details about the dimensions corresponding to the monitoring metrics of each service, see the monitoring metrics description of the corresponding service in **A.1 Services Interconnected with Cloud Eye**. **Constraints** N/A **Range** Metric dimension. A maximum of 3 dimensions are supported, numbered from 0 and in the dim.{i}=key,value format. **key** cannot exceed 32 characters and **value** cannot exceed 256 characters. Example: **dim.0=instance_id,i-12345** **Default Value** N/A

- Example: Query the configuration information about the ECS whose **ID** is **33328f02-3814-422e-b688-bfdba93d4051** and **type** is **instance_host_info**.

```
GET https://{Cloud Eye endpoint}/V1.0/{project_id}/event-data?
namespace=SYS.ECS&dim.0=instance_id,33328f02-3814-422e-b688-
bfdba93d4051&type=instance_host_info&from=1450234543422&to=1450320943422
```

Request

None

Response

- Response parameters

Table 5-95 Parameter description

Parameter	Type	Description
datapoints	Array of objects	**Definition** Configuration list. If the corresponding configuration information does not exist, **datapoints** is an empty array and is **[]**. For details, see **Table 5-96**.

Table 5-96 datapoints data structure description

Parameter	Type	Description
type	String	**Definition** Event type, for example, **instance_host_info**. **Range** N/A
timestamp	Long	**Definition** Time when the event was reported. The value is a UNIX timestamp, in milliseconds. **Range** N/A
value	String	**Definition** Host configuration information. **Range** N/A

- Example response

```
{
  "datapoints": [
    {
      "type": "instance_host_info",
      "timestamp": 1450231200000,
      "value": "xxx"
    },
    {
      "type": "instance_host_info",
      "timestamp": 1450231800000,
      "value": "xxx"
    }
  ]
}
```

Returned Values

- Normal

  200

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- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.5 Quotas

5.5.1 Querying Quotas

Function

This API is used to query the alarm rule quota and the number of alarm rules that have been created.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /V1.0/{project_id}/quotas

- Parameter description

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Table 5-97 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.

- Example: Query the alarm rule quota.
  ```
  GET https://{Cloud Eye endpoint}/V1.0/{project_id}/quotas
  ```

Request

None

Response

- Response parameters

Table 5-98 Response parameters

Parameter	Type	Description
quotas	Object	Specifies the quota list. For details, see **Table 5-99**.

Table 5-99 Data structure description of **quotas**

Parameter	Type	Description
resources	Array of objects	Specifies the resource quota list. For details, see **Table 5-100**.

Table 5-100 Data structure description of **resources**

Parameter	Type	Description
type	String	Specifies the quota type. **alarm** indicates the alarm rule.
used	Integer	Specifies the used amount of the quota.
unit	String	Specifies the quota unit.
quota	Integer	Specifies the total amount of the quota.

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- Example response

```
{
"quotas":
   {
   "resources": [
         {
            "unit":"",
            "type":"alarm",
            "quota":1000,
            "used":10
         }
      ]
   }
}
```

Returned Values

- Normal

  200

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.6 Resource Groups

5.6.1 Querying Resources in a Resource Group

Function

This API is used to query resources in a resource group based on the resource group ID.

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Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /V1.0/{project_id}/resource-groups/{group_id}

- Parameter description

  Table 5-101 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.
group_id	Yes	Specifies the resource group ID.
status	No	Specifies the resource group status, which can be **health**, **unhealth**, or **no_alarm_rule**. • **health**: No alarms have been generated for the resource group. • **unhealth**: An alarm or alarms have been generated for a resource or resources in the resource group. • **no_alarm_rule**: No alarm rules have been set for the resource group.
namespace	No	Specifies the resource namespace. For example, the ECS namespace is **SYS.ECS**. For details about the namespace of each service, see **A.1 Services Interconnected with Cloud Eye**.
dname	No	Specifies the resource dimension. For example, the ECS dimension is **instance_id**. For details, see **A.1 Services Interconnected with Cloud Eye**.
start	No	Specifies the start value of pagination. The value is an integer. The default value is **0**.
limit	No	Specifies the maximum number of records that can be queried at a time. The value range is (0,100] and the default value is 100.

- Example: Query resources in a resource group.

```
GET https://{Cloud Eye endpoint}/V1.0/{project_id}/resource-groups/{group_id}
```

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Request

None

Response

- Response parameters

Table 5-102 Parameter description

Parameter	Type	Description
group_name	String	Specifies the resource group, for example, **Resource-Group-ECS-01**.
group_id	String	Specifies the resource group ID, for example, **rg1603786526428bWbVmk4rP**.
resources	Array of objects	Specifies information about one or more resource groups. For details, see **Table 5-103**.
status	String	Specifies the resource group status, which can be **health**, **unhealth**, or **no_alarm_rule**. • **health**: No alarms have been generated for the resource group. • **unhealth**: An alarm or alarms have been generated for a resource or resources in the resource group. • **no_alarm_rule**: No alarm rules have been set for the resource group.
create_time	Long	Specifies the time when the resource group was created. The value is a UNIX timestamp in milliseconds. Example: **1603819753000**
meta_data	MetaData object	Specifies the metadata of query results, including the pagination information. For details, see **Table 5-105**.
enterprise_project_id	String	Specifies the enterprise project associated with the resource group. The default value **0** indicates enterprise project **default.**

Table 5-103 resources data structure description

Parameter	Type	Description
namespace	String	Specifies the resource namespace. For example, the ECS namespace is **SYS.ECS**. To view the namespace of each service, see **A.1 Services Interconnected with Cloud Eye**.

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Parameter	Type	Description
dimensions	Array of objects	Specifies one or more resource dimensions. For details, see **Table 5-104**.
status	String	Specifies the resource group status, which can be **health**, **unhealth**, or **no_alarm_rule**. **health**: No alarms have been generated for the resource group. **unhealth**: An alarm or alarms have been generated for a resource or resources in the resource group. **no_alarm_rule**: No alarm rules have been set for the resource group.
event_type	Integer	Specifies the event type. The default value is **0**.

Table 5-104 dimensions data structure description

Parameter	Type	Description
name	String	Specifies the resource dimension. For example, the ECS dimension is **instance_id**. For details, see **A.1 Services Interconnected with Cloud Eye**.
value	String	Specifies the resource dimension value, which is the instance ID. Example: **4270ff17-aba3-4138-89fa-820594c39755**

Table 5-105 meta_data data structure description

Parameter	Type	Description
count	Integer	Specifies the number of returned results.
total	Integer	Specifies the total number of query results.
marker	String	Specifies the pagination marker.

- Example response

```
{
 "group_name": "ResourceGroup-Test-01",
 "resources": [
  {
   "namespace": "SYS.ECS",
   "dimensions": [
    {
     "name": "instance_id",
```

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```
        "value": "6cffb0bd-fd37-400f-ae6f-8f4be021ff7e"
      }
    ],
    "status": "health",
    "event_type": 0
  },
  {
    "namespace": "SYS.ECS",
    "dimensions": [
      {
        "name": "instance_id",
        "value": "e37d6238-9dd3-4720-abcc-eb9f8fb08ca0"
      }
    ],
    "status": "health",
    "event_type": 0
  }
],
"create_time": 1604476378000,
"group_id": "rg16044763786104XvXvl00a",
"status": "health",
"meta_data": {
  "count": 0,
  "marker": "",
  "total": 2
},
"enterprise_project_id": "0"
}
```


Returned Values

- Normal

  200

- Abnormal

Returned Values	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

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5.6.2 Creating a Resource Group

Function

This API is used to create a resource group. You can use resource groups to manage resources by service, and view monitoring and alarm information by group to ease O&M.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /V1.0/{project_id}/resource-groups

- Parameter description

  Table 5-106 Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.

- Request example

```
POST https://{Cloud Eye endpoint}/V1.0/{project_id}/resource-groups
```

Request

- Request parameters

  Table 5-107 Parameter description

Parameter	Type	Mandatory	Description
group_name	String	Yes	Specifies the resource group name. Enter 1 to 128 characters. Only letters, digits, underscores (_), and hyphens (-) are allowed. Example: **ResourceGroup-Test01**
resources	Array of objects	Yes	Select one or more resources for the resource group to be created. For details, see **Table 5-108**.

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Table 5-108 resources data structure description

Parameter	Type	Mandatory	Description
namespace	String	Yes	Specifies the resource namespace. For example, the ECS namespace is **SYS.ECS**. For details about the namespace of each service, see **A.1 Services Interconnected with Cloud Eye**.
dimensions	Array of objects	Yes	Specifies one or more resource dimensions. For details, see **Table 5-109**.

Table 5-109 dimensions data structure description

Parameter	Type	Mandatory	Description
name	String	Yes	Specifies the resource dimension. For example, the ECS dimension is **instance_id**. For details, see **A.1 Services Interconnected with Cloud Eye**.
value	String	Yes	Specifies the resource dimension value, which is the instance ID. Example: **4270ff17-aba3-4138-89fa-820594c39755**

Response

- Response parameter

Table 5-110 Parameter description

Parameter	Type	Description
group_id	String	Specifies the resource group ID, for example, **rg1603786526428bWbVmk4rP**.

Example Request

```
{
  "group_name" : "Resource-Group-Test01",
  "resources" : [ {
    "namespace" : "SYS.ECS",
    "dimensions" : [ {
      "name" : "instance_id",
      "value" : "063a83da-a2b5-4630-ab6b-9b4fcfc261ea"
    } ]
  }, {
    "namespace" : "SYS.ECS",
```

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```
    "dimensions" : [ {
      "name" : "instance_id",
      "value" : "518ace88-abde-46bf-829b-0d1f0f2fb2e9"
    } ]
  } ]
}
```

Example Responses

Status code: 201

OK

```
{
  "group_id" : "rg1606377637506DmVOENVyL"
}
```

Returned Values

- Normal

  201

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.6.3 Updating a Resource Group

Function

This API is used to update a resource group. You can use resource groups to manage resources by service, and view monitoring and alarm information by group to ease O&M.

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Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

PUT /V1.0/{project_id}/resource-groups/{group_id}

- Parameter description

  Table 5-111 Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.
group_id	String	Yes	Specifies the resource group ID.

- Request example

```
PUT https://{Cloud Eye endpoint}/V1.0/{project_id}/resource-groups/{group_id}
```

Request

- Request parameters

  Table 5-112 Parameter description

Parameter	Type	Mandatory	Description
group_name	String	Yes	Specifies the resource group name. Enter 1 to 128 characters. Only letters, digits, underscores (_), and hyphens (-) are allowed. Example: **ResourceGroup-Test01**
resources	Array of objects	Yes	Select one or more resources for the resource group to be created. For details, see **Table 5-113**.

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Table 5-113 resources data structure description

Parameter	Type	Mandatory	Description
namespace	String	Yes	Specifies the resource namespace. For example, the ECS namespace is **SYS.ECS**. To view the namespace of each service, see **A.1 Services Interconnected with Cloud Eye**.
dimensions	Array of objects	Yes	Specifies one or more resource dimensions. For details, see **Table 5-114**.

Table 5-114 dimensions data structure description

Parameter	Type	Mandatory	Description
name	String	Yes	Specifies the resource dimension. For example, the ECS dimension is **instance_id**. For details, see **A.1 Services Interconnected with Cloud Eye**.
value	String	Yes	Specifies the resource dimension value, which is the instance ID. Example: **4270ff17-aba3-4138-89fa-820594c39755**

- Example request

```
{
  "group_name": "Resource-Group-Test01",
  "resources": [
    {
      "namespace": "SYS.ECS",
      "dimensions": [
        {
          "name": "instance_id",
          "value": "063a83da-a2b5-4630-ab6b-9b4fcfc261ea"
        }
      ]
    },
    {
      "namespace": "SYS.ECS",
      "dimensions": [
        {
          "name": "instance_id",
          "value": "518ace88-abde-46bf-829b-0d1f0f2fb2e9"
        }
      ]
    },
    {
      "namespace": "SYS.ECS",
      "dimensions": [
        {
          "name": "instance_id",
          "value": "675006b5-477a-4aab-948c-0aa467de9c68"
```

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```
        }
      ]
    }
  ]
}
```

Response

None

Returned Values

- Normal

  204

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.6.4 Deleting a Resource Group

Function

This API is used to delete a resource group.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

DELETE /V1.0/{project_id}/resource-groups/{group_id}

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- Parameter description

  Table 5-115 Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.
group_id	String	Yes	Specifies the resource group ID.

- Request example

```
DELETE https://{Cloud Eye endpoint}/V1.0/{project_id}/resource-groups/{group_id}
```

Request

None

Response

None

Returned Value

- Normal

  204

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

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5.6.5 Query Resource Groups

Function

This API is used to query all resource groups you created.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /V1.0/{project_id}/resource-groups

- Parameter description

Table 5-116 Parameter description

Parameter	Type	Mandatory (Yes/No)	Description
project_id	String	Yes	Specifies the project ID. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**.
group_name	String	No	Specifies the resource group, for example, **Resource-Group-ECS-01**.
group_id	String	No	Specifies the resource group ID, for example, **rg1603786526428bWbVmk4rP**.
status	String	No	Specifies the resource group status. The value can be: • **health**: No alarms have been generated for the resource group. • **unhealth**: An alarm or alarms have been generated for a resource or resources in the resource group. • **no_alarm_rule**: No alarm rules have been set for the resource group.
start	Integer	No	Specifies the start value of pagination. The value is an integer. The default value is **0**.
limit	Integer	No	Specifies the maximum number of records that can be queried at a time. Supported range: **1** to **100** (default)

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- Example
  GET https://{Cloud Eye endpoint}/V1.0/{project_id}/resource-groups

Request

None

Response

- Response parameters

Table 5-117 Parameter description

Parameter	Type	Mandatory (Yes/No)	Description
resource_groups	Array of objects	No	Specifies information about one or more resource groups. For details, see **Table 5-118**.
meta_data	MetaData object	No	Specifies the number of metadata records in the query result. For details, see **Table 5-120**.

Table 5-118 resource_groups data structure description

Parameter	Type	Mandatory (Yes/No)	Description
group_name	String	No	Specifies the resource group name, for example, **ResourceGroup-Test01**.
group_id	String	No	Specifies the resource group ID, for example, **rg1603786526428bWbVmk4rP**.
create_time	Long	No	Specifies the time when the resource group was created. The value is a UNIX timestamp in milliseconds. Example: **1603819753000**
relation_ids	Array of strings	No	Specifies the enterprise project IDs.

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Parameter	Type	Mandatory (Yes/No)	Description
type	String	No	Specifies the method of adding or matching resources to a resource group. The value can be: **EPS**: matching resources by enterprise project. **TAG**: matching resources by tag. **NAME**: matching resources by instance name. **COMB**: matching resources by multiple criteria. **Manual**: add resources manually. If the response parameter is empty, resources are manually added. Minimum length: 0 character Maximum length: 32 characters
resources	Array of Resource objects	No	Specifies information about one or more resources. Array length: 0 to 20
instance_statistics	InstanceStatistics object	No	Specifies the resource statistics in the resource group. For details, see **Table 5-119**.
status	String	No	Specifies the resource group status, which can be **health**, **unhealth**, or **no_alarm_rule**. • **health**: No alarms have been generated for the resource group. • **unhealth**: An alarm or alarms have been generated for a resource or resources in the resource group. • **no_alarm_rule**: No alarm rules have been set for the resource group.
enterprise_project_id	String	No	Specifies the enterprise project associated with the resource group. The default value **0** indicates enterprise project **default.**

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Table 5-119 instance_statistics data structure description

Parameter	Type	Mandatory (Yes/No)	Description
unhealth	Integer	No	Specifies the number of resources in the **Alarm** state in the resource group.
total	Integer	No	Specifies the total number of resources in the resource group.
type_statistics	Integer	No	Specifies the total number of resource types in the resource group. For example, if ECS, EIP and bandwidth are added to the resource group, the **type_statistics** value is **2**.

Table 5-120 meta_data data structure description

Parameter	Type	Mandatory (Yes/No)	Description
total	Integer	No	Specifies the total number of query results.

– Example response

```
{
 "resource_groups": [
  {
   "group_name": "ResourceGroup-Test01",
   "create_time": 1606374365000,
   "group_id": "rg16063743652226ew93e64p",
   "relation_ids": ["0"],
   "instance_statistics": {
    "unhealth": 2,
    "total": 10,
    "type_statistics": 1
   },
   "status": "unhealth",
   "enterprise_project_id": "0",
   "type": "TAG",
   "resources": []
  },
  {
   "group_name": "RS",
   "create_time": 1606327955000,
   "group_id": "rg1606327955657LRj1lrE4y",
   "relation_ids": ["0"],
   "instance_statistics": {
    "unhealth": 0,
    "total": 2,
    "type_statistics": 1
```

```
    },
    "status": "no_alarm_rule",
    "enterprise_project_id": "0",
    "type": "TAG",
    "resources": []
  },
  {
    "group_name": "RS",
    "create_time": 1606327947000,
    "group_id": "rg1606327947514v9OWqAD3N",
    "relation_ids": ["0"],
    "instance_statistics": {
      "unhealth": 0,
      "total": 2,
      "type_statistics": 1
    },
    "status": "no_alarm_rule",
    "enterprise_project_id": "0",
    "type": "TAG",
    "resources": []
  },
  {
    "group_name": "RS",
    "create_time": 1606327946000,
    "group_id": "rg1606327946625PYogr059N",
    "relation_ids": ["0"],
    "instance_statistics": {
      "unhealth": 0,
      "total": 2,
      "type_statistics": 1
    },
    "status": "no_alarm_rule",
    "enterprise_project_id": "0",
    "type": "TAG",
    "resources": []
  },
  {
    "group_name": "ResourceGroupCorrect_2",
    "create_time": 1606325669000,
    "group_id": "rg1606325669900Rk4eKkLMZ",
    "relation_ids": ["0"],
    "instance_statistics": {
      "unhealth": 0,
      "total": 1,
      "type_statistics": 1
    },
    "status": "no_alarm_rule",
    "enterprise_project_id": "0",
    "type": "TAG",
    "resources": []
  }
 ],
 "meta_data": {
  "total": 5
 }
}
```


Returned Values

- Normal

  200

- Abnormal

Returned Value	Description
400 Bad Request	Request error.

Returned Value	Description
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.7 Event Monitoring

5.7.1 Reporting Events

Function

An API for reporting custom events is provided, which helps you collect and report abnormal events or important change events to Cloud Eye.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /V1.0/{project_id}/events

- Parameter description

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Table 5-121 Parameter description

Parameter	Mandatory	Description
project_id	Yes	**Definition** Project ID, which is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

- Example
  POST https://{Cloud Eye endpoint}/V1.0/{project_id}/events

Request

NOTE

- Events with the same **time**, **project_id**, **event_source**, **event_name**, **event_type**, **sub_event_type**, **event_state**, **event_level**, **event_user**, **resource_id** and **resource_name** fields are considered as the same event.
- Event subcategory parameters are only available in regions **CN East-Shanghai1**, **CN East-Shanghai2**, **CN North-Beijing4**, and **CN South-Guangzhou**.

- Request parameters

Table 5-122 Parameter description

Parameter	Type	Mandatory	Description
[Array element]	Array of **EventItem** objects	Yes	**Definition** Request parameter for reporting custom events. **Constraints** Array length: [1,100]

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Table 5-123 Parameter description of the **EventItem** field

Parameter	Mandatory	Type	Description
event_name	Yes	String	**Definition** Event name. **Constraints** N/A **Range** The value must start with a letter and can contain 1 to 64 characters. It can only contain letters, digits, and underscores (_). **Default Value** N/A
event_source	Yes	String	**Definition** Event source. **Constraints** N/A **Range** The format is service.item. Set this parameter based on the site requirements. **service** and **item** each must be a string that starts with a letter and contains 3 to 32 characters, including only letters, digits, and underscores (_). **Default Value** N/A

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Parameter	Mandatory	Type	Description
time	Yes	Long	**Definition** Time when the event occurred. The value is a UNIX timestamp, in milliseconds. **Constraints** Since there is a latency between the client and the server, the timestamp when data was inserted must be within the time range [Current time – 1h + 10s, Current time + 10 mins – 10s]. In this way, the data will be inserted to the database without being affected by the latency. **Range** The timestamp when data was inserted must be within the time range [Current time – 1h + 10s, Current time + 10 mins – 10s]. **Default Value** N/A
detail	Yes	Detail object	**Definition** Event details. For details, see **Table 5-124**. **Constraints** N/A

Table 5-124 detail data structure description

Parameter	Mandatory	Type	Description
content	No	String	**Definition** Event content. **Constraints** N/A **Range** 0 to 4,096 characters **Default Value** N/A **NOTE** In some scenarios, this field does not support **\n**. When this happens, **\n** is preferentially converted to **\\n**.

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Parameter	Mandatory	Type	Description
group_id	No	String	**Definition** Resource group that the event belongs to. This ID must be the ID of an existing resource group. To query the group ID, perform the following steps: 1. Log in to the management console. 2. Click **Cloud Eye**. 3. Choose **Resource Groups**. Obtain the resource group ID in the **Name /ID** column. **Constraints** N/A **Range** 24 characters **Default Value** N/A
resource_id	No	String	**Definition** Resource ID. To query the resource ID, perform the following steps: 1. Log in to the management console. 2. Under **Computing**, select **Elastic Cloud Server**. On the **Resource Overview** page, obtain the resource ID. **Constraints** N/A **Range** The value allows a maximum of 128 characters and can only contain letters, digits, underscores (_), hyphens (-), and colons (:). Example: **6a69bf28-ee62-49f3-9785-845dacd799ec** **Default Value** N/A

Parameter	Mandatory	Type	Description
resource_name	No	String	**Definition** Resource name. **Constraints** N/A **Range** The value allows a maximum of 128 characters and can contain letters, digits, underscores (_), hyphens (-), and periods (.). **Default Value** N/A
event_state	No	String	**Definition** Event status. **Constraints** N/A **Range** The value can be: • **normal**: normal • **warning**: abnormal • **incident**: critical **Default Value** N/A
event_level	No	String	**Definition** Event severity. **Constraints** N/A **Range** The value can be: • **Critical** • **Major** • **Minor** • **Info** **Default Value** N/A

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Parameter	Mandatory	Type	Description
event_user	No	String	**Definition** Event user. **Constraints** N/A **Range** The value allows 0 to 64 characters and can contain letters, digits, underscores (_), hyphens (-), and spaces. **Default Value** N/A
event_type	No	String	**Definition** Event type. **Constraints** **EVENT.SYS** indicates a system event, which is not from users. Only **EVENT.CUSTOM** can be transferred. **Range** The value can be: • **EVENT.SYS**: system event • **EVENT.CUSTOM**: custom event **Default Value** N/A
sub_event_type	No	String	**Definition** Event subcategory. **Constraints** N/A **Range** The options are as follows: If the event type is system event, the value can be **SUB_EVENT.OPS** (O&M event) or **SUB_EVENT.PLAN** (planned event). If the event type is custom event, the value is **SUB_EVENT.CUSTOM** (custom event). **Default Value** **SUB_EVENT.OPS**

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Parameter	Mandatory	Type	Description
dimensions	No	Array of objects	**Definition** Event dimension. Resource information is described by dimension. Event alarm rules can be configured by dimension to monitor specified resources and resource groups. For parameter details, see **Table 5-125**. **Constraints** A maximum of four dimensions are supported.

Table 5-125 dimensions data structure description

Parameter	Type	Mandatory	Description
name	String	Yes	**Definition** Resource dimension, for example, **instance_id** for ECSs. For details about the dimension of each service, see the **key** field in **A.1 Services Interconnected with Cloud Eye**. **Constraints** N/A **Range** 1 to 32 characters **Default Value** N/A
value	String	Yes	**Definition** Resource dimension value, which is the instance ID of the resource, for example, **4270ff17-aba3-4138-89fa-820594c39755** (ECS ID). **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

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- Example request

```
[
 {
  "event_name": "systemInvaded",
  "event_source": "financial.System",
  "time": 1742264993000,
  "detail": {
   "content": "The financial system was invaded",
   "group_id": "rg15221211517051YWWkEnVd",
   "resource_id": "1234567890sjgggad",
   "resource_name": "ecs001",
   "event_state": "normal",
   "event_level": "Major",
   "event_user": "xiaokong",
   "event_type": "EVENT.CUSTOM",
   "sub_event_type": "SUB_EVENT.CUSTOM",
   "dimensions": [
    {
     "name": "instance_id",
     "value": "instance_xxx"
    }
   ]
  }
 }
]
```

Response

- Response parameters

Table 5-126 Parameter description

Parameter	Type	Description
Array elements	Array of objects	**Definition** Event list. For details, see **Table 5-127**.

Table 5-127 Response parameters

Parameter	Mandatory	Type	Description
event_id	Yes	String	**Definition** Event ID. **Range** N/A
event_name	Yes	String	**Definition** Event name. **Range** N/A

- Example response

```
[
    {
```

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```
        "event_id":"evdgiqwgedkkcvhdjcdu346",
        "event_name":"systemInvaded"
    }
]
```

Returned Values

- Normal

  201

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.7.2 Querying Events

Function

This API is used to query events, including system events and custom events.

NOTE

Event subcategory parameters are only available in regions **CN East-Shanghai1**, **CN East-Shanghai2**, **CN North-Beijing4**, and **CN South-Guangzhou**.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /V1.0/{project_id}/events

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- Parameter description

Table 5-128 Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	**Definition** Project ID, which is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
event_type	String	No	**Definition** Event type. **Constraints** N/A **Range** The value can be: • **EVENT.SYS**: system event • **EVENT.CUSTOM**: custom event **Default Value** N/A

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Parameter	Type	Mandatory	Description
sub_event_type	String	No	**Definition** Event subcategory. **Constraints** N/A **Range** The options are as follows: If the event type is system event, the value can be **SUB_EVENT.OPS** (O&M event) or **SUB_EVENT.PLAN** (planned event). If the event type is custom event, the value is **SUB_EVENT.CUSTOM** (custom event). **Default Value** **SUB_EVENT.OPS**
event_name	String	No	**Definition** Event name. The name can be a system event name or a custom event name. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
from	Integer	No	**Definition** Start time of the query. The value is a UNIX timestamp, in milliseconds. Example: **1605952700911** **Constraints** N/A **Range** N/A **Default Value** N/A

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Parameter	Type	Mandatory	Description
to	Integer	No	**Definition** End time of the query. The value is a UNIX timestamp, in milliseconds. Example: **1606557500911** **Constraints** **from** must be earlier than **to**. **Range** N/A **Default Value** N/A
start	Integer	No	**Definition** Pagination start value. The value is an integer. **Constraints** N/A **Range** ≥ 0 **Default Value** 0
limit	Integer	No	**Definition** Maximum number of records that can be queried at a time. **Constraints** N/A **Range** (0,100] **Default Value** 100

- Example
  ```
  GET https://{Cloud Eye endpoint}/V1.0/{project_id}/events
  ```

Request

None

Response

- Response parameters

Table 5-129 Parameter description

Parameter	Type	Mandatory	Description
events	Array of Events objects	No	**Definition** One or more pieces of event data. For details, see **Table 5-130**.
meta_data	MetaData object	No	**Definition** Number of metadata records in the query results. For details, see **Table 5-131**.

Table 5-130 events field description

Parameter	Type	Mandatory	Description
event_name	String	No	**Definition** Event name. **Range** N/A
event_type	String	No	**Definition** Event type. **Range** N/A
sub_event_type	String	No	**Definition** Event subcategory. **Range** The value can be: • **SUB_EVENT.OPS**: O&M event • **SUB_EVENT.PLAN**: planned event • **SUB_EVENT.CUSTOM**: custom event

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Parameter	Type	Mandatory	Description
event_count	Integer	No	**Definition** Number of times that the event occurs within the specified time range. **Range** N/A
latest_occur_time	Long	No	**Definition** Time when the event last occurred. **Range** N/A
latest_event_source	String	No	**Definition** Event source. If the event is a system event, the source is the namespace of each service. For details, see **A.1 Services Interconnected with Cloud Eye**. If the event is a custom event, the event source is defined by the user. **Range** N/A

Table 5-131 meta_data data structure description

Parameter	Type	Mandatory	Description
total	Integer	No	**Definition** Total number of events. **Range** N/A

- Example response

```
{
 "events": [
  {
    "event_name": "rebootServer",
    "event_type": "EVENT.SYS",
    "sub_event_type": "SUB_EVENT.OPS",
    "event_count": 5,
    "latest_occur_time": 1606302400000,
    "latest_event_source": "SYS.ECS"
  },
  {
    "event_name": "deleteVolume",
```

```
    "event_type": "EVENT.SYS",
    "sub_event_type": "SUB_EVENT.OPS",
    "event_count": 6,
    "latest_occur_time": 1606300359126,
    "latest_event_source": "SYS.EVS"
  },
  {
    "event_name": "event_001",
    "event_type": "EVENT.CUSTOM",
    "sub_event_type": "SUB_EVENT.CUSTOM",
    "event_count": 4,
    "latest_occur_time": 1606499035522,
    "latest_event_source": "TEST.System"
  }
 ],
 "meta_data": {
   "total": 10
 }
}
```


Returned Values

- Normal

  200

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

5.7.3 Querying Details of an Event

Function

This API is used to query details of an event based on the event name.

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NOTE

Event subcategory parameters are only available in regions **CN East-Shanghai1**, **CN East-Shanghai2**, **CN North-Beijing4**, and **CN South-Guangzhou**.

Debugging

You can debug the API in **API Explorer** which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /V1.0/{project_id}/event/{event_name}

- Parameter description

Table 5-132 Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	**Definition** Project ID, which is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details about how to obtain the project ID, see **9.3 Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
event_name	String	Yes	**Definition** Event name. The name can be a system event name or a custom event name. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

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Parameter	Type	Mandatory	Description
event_type	String	Yes	**Definition** Event type. **Constraints** N/A **Range** The value can be: • **EVENT.SYS**: system event • **EVENT.CUSTOM**: custom event **Default Value** N/A
sub_event_type	String	No	**Definition** Event subcategory. **Constraints** N/A **Range** The options are as follows: If the event type is system event, the value can be **SUB_EVENT.OPS** (O&M event) or **SUB_EVENT.PLAN** (planned event). If the event type is custom event, the value is **SUB_EVENT.CUSTOM** (custom event). **Default Value** **SUB_EVENT.OPS**
event_source	String	No	**Definition** Event source. The value is the namespace of each cloud service. For details, see **A.1 Services Interconnected with Cloud Eye**.
event_level	String	No	**Constraints** N/A **Range** The value cannot exceed 32 characters. Regular matching: ^((([a-z]|[A-Z]){1}([a-z]|[A-Z]|[0-9]|_)*\.([a-z]|[A-Z]){1}([a-z]|[A-Z]|[0-9]|_)*)|)$ **Default Value** N/A

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Parameter	Type	Mandatory	Description
event_user	String	No	**Definition** Event severity, which can be **Critical**, **Major**, **Minor**, or **Info**. **Constraints** N/A **Range** **Critical**, **Major**, **Minor**, or **Info** **Default Value** N/A
event_state	String	No	**Definition** Name of the user who reports the event monitoring data. It can also be a project ID. **Constraints** N/A **Range** The value cannot exceed 64 characters. Regular matching: ^([a-z]|[A-Z]|[0-9]|_|-|\/| |@|\.|)+$ **Default Value** N/A
from	Long	No	**Definition** Event status, which can be **normal**, **warning**, or **incident**. **Constraints** N/A **Range** **normal**, **warning**, or **incident** **Default Value** N/A

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Parameter	Type	Mandatory	Description
to	Long	No	**Definition** Start time of the query. The value is a UNIX timestamp, in milliseconds. Example: **1605952700911** **Constraints** N/A **Range** N/A **Default Value** N/A
start	Integer	No	**Definition** End time of the query. The value is a UNIX timestamp, in milliseconds. **Constraints** **from** must be earlier than **to**. **Range** N/A **Default Value** N/A

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Parameter	Type	Mandatory	Description
limit	Integer	No	**Definition** Pagination start value. **Constraints** N/A **Range** ≥ 0 Regular matching: ^(0|[1-9][0-9]*)$ **Default Value** 0 **Definition** Maximum number of records that can be queried at a time. The value range is (0,100] and the default value is **100**. **Constraints** N/A **Range** 1 to 100 Regular matching: ^([1-9]|[1-9][0-9]|100)$ **Default Value** 100

- Example
  ```
  GET https://{Cloud Eye endpoint}/V1.0/{project_id}/event/{event_name}
  ```

Request

None

Response

- Response parameters

Table 5-133 Parameter description

Parameter	Type	Mandatory	Description
event_name	String	No	**Definition** Event name. The name can be a system event name or a custom event name. **Range** N/A
event_type	String	No	**Definition** Event type. **Range** The value can be: • **EVENT.SYS**: system event • **EVENT.CUSTOM**: custom event
sub_event_type	String	No	**Definition** Event subcategory. **Range** The value can be: If the event type is system event, the value can be **SUB_EVENT.OPS** or **SUB_EVENT.PLAN**. If the event type is custom event, the value is **SUB_EVENT.CUSTOM**. • **SUB_EVENT.OPS**: O&M event • **SUB_EVENT.PLAN**: planned event • **SUB_EVENT.CUSTOM**: custom event
event_users	Array of strings	No	**Definition** Name of the user who reports the event. It can also be a project ID. **Range** N/A

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Parameter	Type	Mandatory	Description
event_sources	Array of strings	No	**Definition** Event source. If the event is a system event, the source is the namespace of each service. For details, see **A.1 Services Interconnected with Cloud Eye**. If the event is a custom event, the event source is defined by the user. **Range** N/A
event_info	Array of objects	No	**Definition** Details of one or more events. For details, see **Table 5-134**.
meta_data	MetaData object	No	**Definition** Number of metadata records in the query results. For details, see **Table 5-137**.

Table 5-134 event_info data structure description

Parameter	Type	Mandatory	Description
event_name	String	Yes	**Definition** Event name. **Range** The value must start with a letter. It allows 1 to 64 characters and can only contain letters, digits, and underscores (_).
event_source	String	No	**Definition** Event source. **Range** The namespace must be in the **service.item** format and contain 3 to 32 characters. **service** and **item** each must start with a letter and contain only letters, digits, and underscores (_).

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Parameter	Type	Mandatory	Description
time	Long	Yes	**Definition** Time when an incident occurred. The value is a UNIX timestamp, in milliseconds. **Range** Since there is a latency between the client and the server, the timestamp when data was inserted must be within the time range [Current time – 1h + 20s, Current time + 10 mins – 20s]. In this way, the data will be inserted to the database without being affected by the latency.
detail	Detail object	Yes	**Definition** Event details. For details, see **Table 5-135**.
event_id	String	No	**Definition** Event ID. **Range** N/A

Table 5-135 detail data structure description

Parameter	Type	Mandatory	Description
content	String	No	**Definition** Event content. **Range** Max. 4,096 characters
group_id	String	No	**Definition** Resource group that the event belongs to. **Range** 24 characters
resource_id	String	No	**Definition** Resource ID. **Range** Max. 128 characters

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Parameter	Type	Mandatory	Description
resource_name	String	No	**Definition** Resource name. **Range** Max. 128 characters
event_state	String	No	**Definition** Event status. **Range** The value can be: • **normal** • **warning** • **incident**
event_level	String	No	**Definition** Event severity. **Range** The value can be: • **Critical** • **Major** • **Minor** • **Info**
event_user	String	No	**Definition** Event user. **Range** Max. 64 characters
event_type	String	No	**Definition** Event type. **Range** The value can be: • **EVENT.SYS**: system event • **EVENT.CUSTOM**: custom event.

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Parameter	Type	Mandatory	Description
sub_event_type	String	No	**Definition** Event subcategory. **Range** The options are as follows: If the event type is system event, the value can be **SUB_EVENT.OPS** (default) or **SUB_EVENT.PLAN**. If the event type is custom event, the value is **SUB_EVENT.CUSTOM**. • **SUB_EVENT.OPS**: O&M event • **SUB_EVENT.PLAN**: planned event • **SUB_EVENT.CUSTOM**: custom event
dimensions	Array of objects	No	**Definition** Event dimension. Resource information is described by dimension. Event alarm rules can be configured by dimension to monitor specified resources and resource groups. For details, see **Table 5-136**. **Range** A maximum of four dimensions are supported.

Table 5-136 dimensions data structure description

Parameter	Type	Mandatory	Description
name	String	No	**Definition** Monitoring dimension name. For example, the ECS dimension is **instance_id**. For details about the dimension of each service, see the **key** field in **A.1 Services Interconnected with Cloud Eye**. **Range** N/A
value	String	No	**Definition** Dimension value, for example, an ECS ID. **Range** 1 to 256 characters

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Table 5-137 meta_data data structure description

Parameter	Type	Mandatory	Description
total	Integer	No	**Definition** Total number of records. **Range** N/A

- Example response

```
{
 "event_name": "rebootServer",
 "event_type": "EVENT.SYS",
 "sub_event_type": "SUB_EVENT.OPS",
 "event_users": [
   ""
 ],
 "event_sources": [
   "SYS.ECS"
 ],
 "event_info": [
  {
    "event_id": "ev1606302402256R6doP5YeZ",
    "event_name": "rebootServer",
    "event_source": "SYS.ECS",
    "time": 1606302400000,
    "detail": {
      "content": "{\"resourceSpecCode\":\"kc1.4xlarge.2.linux\",\"enterpriseProjectId
\":\"6efb843e-391a-46a8-afc8-7fe51c9dd575\"}",
      "group_id": "",
      "resource_id": "ef8dad27-0488-4de7-bb43-1a0df9806d90",
      "resource_name": "CES-POROS-0001",
      "event_state": "normal",
      "event_level": "Minor",
      "event_user": "",
      "event_type": "EVENT.SYS",
      "sub_event_type": "SUB_EVENT.OPS",
      "dimensions": [
        {
          "name": "instance_id",
          "value": "fddad01f-e3b6-420d-8fdc-a42451de7c34"
        }
      ]
    }
  },
  {
    "event_id": "ev1606296088071wGoAOxVYa",
    "event_name": "rebootServer",
    "event_source": "SYS.ECS",
    "time": 1606296086000,
    "detail": {
      "content": "{\"resourceSpecCode\":\"kc1.4xlarge.2.linux\",\"enterpriseProjectId
\":\"6efb843e-391a-46a8-afc8-7fe51c9dd575\"}",
      "group_id": "",
      "resource_id": "ef8dad27-0488-4de7-bb43-1a0df9806d90",
      "resource_name": "CES-POROS-0001",
      "event_state": "normal",
      "event_level": "Minor",
      "event_user": "",
      "event_type": "EVENT.SYS",
      "sub_event_type": "SUB_EVENT.OPS",
      "dimensions": [
        {
```

```
        "name": "instance_id",
        "value": "fddad01f-e3b6-420d-8fdc-a42451de7c34"
      }
    ]
   }
  },
  {
   "event_id": "ev1604654426090g7g37E6Yb",
   "event_name": "rebootServer",
   "event_source": "SYS.ECS",
   "time": 1604654425000,
   "detail": {
    "content": "{\"resourceSpecCode\":\"c6.4xlarge.2.linux\",\"enterpriseProjectId\":\"129559eb-
f795-4b5f-9e46-cbd43a462362\"}",
    "group_id": "",
    "resource_id": "0bfa63ee-31f5-40a9-b992-50992c80c58a",
    "resource_name": "ndrv2-pod-ops-0001",
    "event_state": "normal",
    "event_level": "Minor",
    "event_user": "",
    "event_type": "EVENT.SYS",
    "sub_event_type": "SUB_EVENT.OPS",
    "dimensions": [
     {
      "name": "instance_id",
      "value": "fddad01f-e3b6-420d-8fdc-a42451de7c34"
     }
    ]
   }
  }
 ],
 "meta_data": {
  "total": 5
 }
}
```


Returned Values

- Normal

  200

- Abnormal

Returned Value	Description
400 Bad Request	Request error.
401 Unauthorized	The authentication information is not provided or is incorrect.
403 Forbidden	Access to the requested page is forbidden.
408 Request Timeout	The request timed out.
429 Too Many Requests	Concurrent requests are excessive.
500 Internal Server Error	Failed to complete the request because of an internal service error.
503 Service Unavailable	The service is currently unavailable.

Error Codes

See **9.2 Error Codes**.

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6 API V2

6.1 Alarm Rules

6.1.1 Creating an Alarm Rule (Recommended)

Function

This API is used to create alarm rules.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:create	Write	-	• g:EnterpriseProjectId • g:RequestTag/<tag-key> • g:TagKeys • ces:namespace	-	-

URI

POST /v2/{project_id}/alarms

Table 6-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

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Request Parameters

Table 6-2 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-3 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Alarm name. **Constraints** N/A **Range** The value allows 1 to 128 characters and can only contain digits, letters, underscores (_), and hyphens (-). **Default Value** N/A

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Parameter	Mandatory	Type	Description
description	No	String	**Definition** Alarm description. **Constraints** N/A **Range** [0,256] **Default Value** N/A
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Service Namespaces**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 0 to 32 characters. **Default Value** N/A
resource_group_id	No	String	**Definition** Resource group ID. **Constraints** N/A **Range** The value starts with rg and is followed by 22 characters that may include letters, digits, or a combination of both. It can contain 2 to 24 characters. **Default Value** N/A

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Parameter	Mandatory	Type	Description
resources	Yes	Array<Array<Dimension>>	**Definition** Resource list. **Constraints** If an alarm rule is created for all resources or resources in a resource group, leave the resource dimension blank. If the alarm rule is created for specified resources, the resource dimension value is mandatory, and you can specify multiple resources to be monitored at a time. A maximum of 1,000 resource dimensions can be specified.
policies	No	Array of AlarmRulePolicy objects	**Definition** Alarm policy. **Constraints** This parameter is mandatory when **alarm_template_id** is left blank. Otherwise, leave it empty. A maximum of 50 policies can be configured.
type	Yes	String	**Definition** Alarm rule type. **Constraints** N/A **Range** The value can be: • **ALL_INSTANCE**: alarms for all resources • **RESOURCE_GROUP**: alarms for resource groups • **MULTI_INSTANCE**: alarms for specified resources • **EVENT.SYS**: system event alarms • **EVENT.CUSTOM**: custom event alarms • **DNSHealthCheck**: health check alarms **Default Value** N/A

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Parameter	Mandatory	Type	Description
alarm_notifications	No	Array of **Notification** objects	**Definition** Notification group or topic subscription for alarm notifications. **Constraints** N/A **Range** A maximum of 10 notification groups or topic subscriptions **Default Value** N/A
ok_notifications	No	Array of **Notification** objects	**Definition** Information about the notification group or topic subscription when the alarm is cleared. **Constraints** N/A **Range** A maximum of 10 notification groups or topic subscriptions **Default Value** N/A
notification_begin_time	No	String	**Definition** Time when alarm notifications were enabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A

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Parameter	Mandatory	Type	Description
notification_end_time	No	String	**Definition** Time when alarm notifications were disabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A
effective_timezone	No	String	**Definition** Time zone, for example, **GMT-08:00**, **GMT+08:00**, or **GMT+0:00**. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A
enterprise_project_id	No	String	**Definition** Enterprise project ID. **Constraints** N/A **Range** Only lowercase letters, digits, and hyphens (-) are allowed. **Default Value** N/A

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Parameter	Mandatory	Type	Description
enabled	Yes	Boolean	**Definition** Whether to enable the alarm rule. **Constraints** N/A **Range** A boolean value. • **true**: enabled • **false**: disabled **Default Value** **true**
notification_enabled	Yes	Boolean	**Definition** Whether to enable alarm notifications. **Constraints** N/A **Range** A boolean value. • **true**: enabled • **false**: disabled **Default Value** **true**
alarm_template_id	No	String	**Definition** ID of an alarm template associated with an alarm rule. If this parameter is specified, the policy associated with the alarm rule changes accordingly with the alarm template policy. **Constraints** N/A **Range** The value starts with **at** and allows 2 to 64 characters. It can only contain letters and digits. **Default Value** N/A

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Parameter	Mandatory	Type	Description
tags	No	Array of ResourceTag objects	**Definition** Tenant tags. **Constraints** A maximum of 20 tags can be added.
product_name	No	String	**Definition** Product name. It needs to be specified when product alarm rules with multiple dimensions are created. Generally, the value format is *Service namespace,First-level dimension of the service*, for example, **SYS.ECS,instance_id**. **Constraints** N/A **Range** [0,128] **Default Value** N/A
resource_level	No	String	**Definition** Product alarm rules with multiple dimensions need to be specified as product-level rules. If the value of **resource_level** is **product**, it refers to the cloud product level. If the value of **resource_level** is **dimension** or not specified, it refers to the sub-dimension level. **Constraints** N/A **Range** The value can be: • **product**: cloud product • **dimension**: specific dimension **Default Value** **dimension**

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Table 6-4 Dimension

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Dimension of the resource. For example, the dimension of an ECS is **instance_id**. For details about the metric dimension name of each service resource, see **Service Dimension Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
value	No	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

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Table 6-5 AlarmRulePolicy

Parameter	Mandatory	Type	Description
metric_name	Yes	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A

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Parameter	Mandatory	Type	Description
period	Yes	Integer	**Definition** Metric period, in seconds. For details about the original metric period for each cloud service, see **Supported Services**. **Constraints** N/A **Range** The value can be: • **0**: The alarm is triggered immediately for event scenarios only. • **1**: original metric period. For example, if the original period of an RDS metric is 60s, the metric data is collected and calculated every 60s. • **300**: The metric data is collected and calculated every 5 minutes. • **1200**: The metric data is collected and calculated every 20 minutes. • **3600**: The metric data is collected and calculated every hour. • **14400**: The metric data is collected and calculated every 4 hours. • **86400**: The metric data is collected and calculated every day. **Default Value** N/A

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Parameter	Mandatory	Type	Description
filter	Yes	String	**Definition** Aggregation method. **Constraints** N/A **Range** **average**, **variance**, **min**, **max**, or **sum** **Default Value** N/A
comparison_operator	Yes	String	**Definition** Threshold symbol. **Constraints** The threshold symbols for metric alarms are >, >=, <, <=, =, !=, cycle_decrease, cycle_increase, and cycle_wave. The threshold symbols for event alarms are >, >=, <, <=, =, and !=. **Range** The value can be **>**, **<**, **>=**, **<=**, **=**, **!=**, **cycle_decrease**, **cycle_increase**, or **cycle_wave**. **cycle_decrease** indicates the decrease relative to the last period; **cycle_increase** indicates the increase relative to the last period; **cycle_wave** indicates the increase or decrease relative to the last period. **Default Value** N/A

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Parameter	Mandatory	Type	Description
value	No	Number	**Definition** Alarm threshold. For specific thresholds, see the value range of each metric in the appendix. **Constraints** If there is only one threshold, **value** and **alarm_level** are used in pairs. If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. **Range** The value ranges from **-1.7976931348623157e+108** to **1.7976931348623157e+108**. **Default Value** N/A
hierarchical_value	No	**HierarchicalValue** object	**Definition** Multi-level alarm threshold. **Constraints** If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. When you create or modify an alarm rule, you can set only one threshold in the following scenarios: 1. The alarm type is **Metric** and the alarm policy is **Trigger an alarm when all policies are met**. 2. The alarm type is **Event**.
unit	No	String	**Definition** Data unit. **Constraints** N/A **Range** [0,32] **Default Value** N/A

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Parameter	Mandatory	Type	Description
count	Yes	Integer	**Definition** Number of times that the alarm triggering conditions are met. **Constraints** N/A **Range** For event alarms, the value ranges from **1** to **180**. For metric and website alarms, the value can be **1**, **2**, **3**, **4**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, or **180**. **Default Value** N/A

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Parameter	Mandatory	Type	Description
suppress_duration	No	Integer	**Definition** Alarm suppression duration, in seconds. This parameter corresponds to the last field in the alarm policy when you create an alarm rule. This field is used to mitigate frequent alarm occurrences. **Constraints** N/A **Range** The value can be: • **0**: In the immediate triggering scenario, **0** indicates that the alarm is not suppressed. In the accumulated triggering scenario, **0** indicates that the alarm is generated only once. • **300**: An alarm is generated every 5 minutes once the alarm triggering condition is met. • **600**: An alarm is generated every 10 minutes once the alarm triggering condition is met. • **900**: An alarm is generated every 15 minutes once the alarm triggering condition is met. • **1800**: An alarm is generated every 30 minutes once the alarm triggering condition is met. • **3600**: An alarm is generated every 60 minutes once the alarm triggering condition is met. • **10800**: An alarm is generated every 3 hours once the alarm triggering condition is met. • **21600**: An alarm is generated every 6 hours

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Parameter	Mandatory	Type	Description
			after the alarm triggering condition is met. • **43200**: An alarm is generated every 12 hours once the alarm triggering condition is met. • **86000**: An alarm is generated once every day once the alarm triggering condition is met. **Default Value** N/A
level	No	Integer	**Definition** Alarm severity. **Constraints** N/A **Range** The value can be: **1** (critical), ** 2** (major), **3** (minor), or **4** (warning) **Default Value** 2
namespace	No	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Service Namespaces**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value can contain 0 to 32 characters. **Default Value** N/A

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Parameter	Mandatory	Type	Description
dimension_name	No	String	**Definition** Metric dimension name. For details, see **Service Dimension Names**. **namespace** and **dimension_name** need to be specified for cloud product-level rules. This is to specify the resources that the policies apply to. **Constraints** N/A **Range** A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios. **Default Value** N/A

Table 6-6 HierarchicalValue

Parameter	Mandatory	Type	Description
critical	No	Double	**Definition** Threshold for critical alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

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Parameter	Mandatory	Type	Description
major	No	Double	**Definition** Threshold for major alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
minor	No	Double	**Definition** Threshold for minor alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
info	No	Double	**Definition** Threshold for warnings. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

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Table 6-7 Notification

Parameter	Mandatory	Type	Description
type	Yes	String	**Definition** Notification type. **Constraints** N/A **Range** The value can be: • **notification**: SMN notifications • **contact**: account contacts • **contactGroup**: notification groups • autoscaling: AS notifications. This value is used only for AS. • **groupwatch**: deprecated • **ecsRecovery**: deprecated • **iecAction**: This API has been deprecated and is not recommended. **Default Value** N/A

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Parameter	Mandatory	Type	Description
notification_list	Yes	Array of strings	**Definition** Recipients to be notified of the alarm status changes. The value of **topicUrn** can be obtained from SMN. For details, see section "Querying Topics". **Constraints** If **type** is set to **notification**, the value of **notificationList** cannot be left blank. If **type** is set to **autoscaling**, the value of **notification_list** must be left blank. If **notification_enabled** is set to **true**, you must specify either **alarm_notifications** or **ok_notifications**. If both **alarm_notifications** and **ok_notifications** are specified, their **notification_list** values must be the same. A maximum of 20 recipients are allowed.

Table 6-8 ResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	**Definition** Tag name. **Constraints** N/A **Range** Max. 128 Unicode characters **Default Value** N/A

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Parameter	Mandatory	Type	Description
value	Yes	String	**Definition** Tag value. **Constraints** N/A **Range** Max. 255 Unicode characters **Default Value** N/A

Response Parameters

Status code: 201

Table 6-9 Response body parameters

Parameter	Type	Description
alarm_id	String	**Definition** Alarm rule ID. **Range** The value starts with **al** and is followed by 22 characters that may include letters, digits, or a combination of both.

Status code: 400

Table 6-10 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

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Table 6-11 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Creating an alarm rule whose **name** is **alarm-lxy-rg-RDS**, **type** is **RESOURCE_GROUP**, ** suppress_duration** is **86400**, and **level** is **2**.

```
{
  "name" : "alarm-lxy-rg-RDS",
  "description" : "",
  "namespace" : "SYS.RDS",
  "type" : "RESOURCE_GROUP",
  "resources" : [ [ {
    "name" : "rds_cluster_id"
  } ] ],
  "policies" : [ {
    "metric_name" : "rds001_cpu_util",
    "period" : 1,
    "filter" : "average",
    "comparison_operator" : ">=",
    "value" : 0,
    "unit" : "%",
    "count" : 1,
    "suppress_duration" : 86400,
    "level" : 2
  } ],
  "enabled" : true,
  "notification_enabled" : false,
  "resource_group_id" : "rg1623429506587NbRweoa3J",
  "enterprise_project_id" : "a9d919b7-0456-4bb8-b470-6a23b64f4f7e",
  "alarm_template_id" : "at1628592157541dB1klWgY6"
}
```

Example Responses

Status code: 201

Alarm rule created.

```
{
  "alarm_id" : "alCzk8o9dtSQHtiDgb44Eepw"
}
```

Status Codes

Status Code	Description
201	Alarm rule created.
400	Parameter verification failed.

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Status Code	Description
500	Internal system error.

Error Codes

See **Error Codes**.

6.1.2 Batch Deleting Alarm Rules

Function

This API (V2) is used to batch delete alarm rules.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:delete	Write	alarm *	• g:ResourceTag/<tag-key> • g:EnterpriseProjectId	-	-

URI

POST /v2/{project_id}/alarms/batch-delete

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Table 6-12 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Request Parameters

Table 6-13 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.

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Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-14 Request body parameters

Parameter	Mandatory	Type	Description
alarm_ids	Yes	Array of strings	**Definition** IDs of the alarm rules to be deleted in batches. **Constraints** At least one and a maximum of 10 alarm rule IDs can be configured.

Response Parameters

Status code: 200

Table 6-15 Response body parameters

Parameter	Type	Description
alarm_ids	Array of strings	**Definition** IDs of the alarm rules that are deleted.

Status code: 400

Table 6-16 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.

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Parameter	Type	Description
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-17 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Deleting alarm rules in batches.

```
{
  "alarm_ids" : [ "al12345678901234567890" ]
}
```

Example Responses

Status code: 200

Alarm rule deleted.

```
{
  "alarm_ids" : [ "alCzk8o9dtSQHtiDgb44Eepw" ]
}
```

Status Codes

Status Code	Description
200	Alarm rule deleted.
400	Parameter verification failed.
500	Internal system error.

Error Codes

See **Error Codes**.

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6.1.3 Enabling or Disabling Alarm Rules in Batches

Function

This API is used to enable or disable alarm rules in batches.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:putAction	Write	alarm *	• g:ResourceTag/<tag-key> • g:EnterpriseProjectId	• ces:alarms:put	-

URI

POST /v2/{project_id}/alarms/action

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Table 6-18 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Request Parameters

Table 6-19 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.

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Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-20 Request body parameters

Parameter	Mandatory	Type	Description
alarm_ids	Yes	Array of strings	**Definition** IDs of alarm rules to be enabled or disabled in batches. **Constraints** At least one and a maximum of 100 alarm rule IDs can be configured.
alarm_enabled	Yes	Boolean	**Definition** Whether to enable the alarm rule. **Constraints** N/A **Range** A boolean value. • **true**: enabled • **false**: disabled **Default Value** **true**

Response Parameters

Status code: 200

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Table 6-21 Response body parameters

Parameter	Type	Description
alarm_ids	Array of strings	**Definition** IDs of alarm rules that were enabled or disabled.

Status code: 400

Table 6-22 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-23 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Enabling or disabling alarm rules in batches.

```
{
  "alarm_ids" : [ "al12345678901234567890" ],
  "alarm_enabled" : true
}
```

Example Responses

Status code: 200

Alarm rules enabled or disabled.

```
{
  "alarm_ids" : [ "alCzk8o9dtSQHtiDgb44Eepw" ]
}
```

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Status Codes

Status Code	Description
200	Alarm rules enabled or disabled.
400	Parameter verification failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.1.4 Querying Alarm Rules (Recommended)

Function

This API is used to query the alarm rule list.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:list	List	-	g:EnterpriseProjectId	-	-

URI

GET /v2/{project_id}/alarms

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Table 6-24 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Table 6-25 Query Parameters

Parameter	Mandatory	Type	Description
alarm_id	No	String	**Definition** Alarm rule ID. **Constraints** N/A **Range** The value starts with **al** and is followed by 22 characters of letters, digits, or a combination of both. **Default Value** N/A

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Parameter	Mandatory	Type	Description
name	No	String	**Definition** Alarm name. **Constraints** N/A **Range** The value allows 1 to 128 characters and can only contain digits, letters, underscores (_), and hyphens (-). **Default Value** N/A
namespace	No	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Service Namespaces**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value can contain 0 to 32 characters. **Default Value** N/A

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Parameter	Mandatory	Type	Description
resource_id	No	String	**Definition** ID of a resource in an alarm rule. **Constraints** N/A **Range** If the resource has multiple dimensions, the resource IDs are sorted in ascending alphabetical order and separated by commas (,). The value can contain 0 to 700 characters. **Default Value** N/A
enterprise_project_id	No	String	**Definition** Enterprise project ID. **Constraints** N/A **Range** The value allows 36 characters. It can only contain lowercase letters, digits, hyphens (-), and underscores (_). You can customize an enterprise project ID. The value can also be **0** (default enterprise project ID) or **all_granted_eps** (all enterprise project IDs). **Default Value** N/A

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Parameter	Mandatory	Type	Description
product_name	No	String	**Definition** Product name. It needs to be specified when alarm rules with multiple dimensions are used. Generally, the value format is *Service namespace,First-level dimension of the service*, for example, **SYS.ECS,instance_id**. **Constraints** N/A **Range** [0,128] **Default Value** N/A
resource_level	No	String	**Definition** If the value of **resource_level** is **product**, cloud product alarm rules with multiple dimensions are used. If the value of **resource_level** is **dimension** or not specified, the original rule type is used. **Constraints** N/A **Range** The value can be: • **product**: cloud product • **dimension**: specific dimension **Default Value** N/A
offset	No	Integer	**Definition** Pagination offset. **Constraints** N/A **Range** [0,10,000] **Default Value** **0**

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Parameter	Mandatory	Type	Description
limit	No	Integer	**Definition** Number of records displayed on each page. **Constraints** N/A **Range** [1,100] **Default Value** 10

Request Parameters

Table 6-26 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

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Response Parameters

Status code: 200

Table 6-27 Response body parameters

Parameter	Type	Description
alarms	Array of **alarms** objects	**Definition** Alarm rule list. **Range** 1 to 100 characters
count	Integer	**Definition** Total number of alarm rules. **Range** [0,10000]

Table 6-28 alarms

Parameter	Type	Description
alarm_id	String	**Definition** Alarm rule ID. **Range** The value starts with **al** and is followed by 22 characters that may include letters, digits, or a combination of both.
name	String	**Definition** Alarm name. **Range** The value allows 1 to 128 characters and can contain digits, letters, underscores (_), and hyphens (-).
description	String	**Definition** Alarm description. **Range** [0,256]

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Parameter	Type	Description
namespace	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Service Namespaces**. **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value can contain 0 to 32 characters.
policies	Array of **Policy** objects	**Definition** Alarm policy. **Range** Max. 100 policies
resources	Array of **ResourcesInListResp** objects	**Definition** Resource list. Associated resources can be obtained by calling the API for querying resources in an alarm rule. **Range** Max. 3,000 resources
type	String	**Definition** Alarm rule type. **Range** The value can be: • **ALL_INSTANCE**: alarms for all resources • **RESOURCE_GROUP**: alarms for resource groups • **MULTI_INSTANCE**: alarms for specified resources • **EVENT.SYS**: system event alarms • **EVENT.CUSTOM**: custom event alarms • **DNSHealthCheck**: health check alarms

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Parameter	Type	Description
enabled	Boolean	**Definition** Whether to enable the alarm rule. **Range** A boolean value. • **true**: enabled • **false**: disabled
notification_enabled	Boolean	**Definition** Whether to enable alarm notifications. **Range** A boolean value. • **true**: enabled • **false**: disabled
alarm_notifications	Array of **NotificationResp** objects	**Definition** Notification group or topic subscription for alarm notifications. **Range** A maximum of 10 notification groups or topic subscriptions
ok_notifications	Array of **NotificationResp** objects	**Definition** Information about the notification group or topic subscription when the alarm is cleared. **Range** A maximum of 10 notification groups or topic subscriptions
notification_begin_time	String	**Definition** Time when alarm notifications were enabled. **Range** The value allows 1 to 64 characters and can only contain digits and colons (:).
notification_end_time	String	**Definition** Time when alarm notifications were disabled. **Range** The value allows 1 to 64 characters and can only contain digits and colons (:).

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Parameter	Type	Description
effective_timezone	String	**Definition** Time zone, for example, **GMT-08:00**, **GMT+08:00**, or **GMT+0:00**. **Range** 1 to 16 characters
enterprise_project_id	String	**Definition** Enterprise project ID. **Range** Only lowercase letters, digits, and hyphens (-) are allowed.
alarm_template_id	String	**Definition** ID of an alarm template associated with an alarm rule. If this parameter is specified, the policy associated with the alarm rule changes accordingly with the alarm template policy. **Range** The value starts with **at** and allows 2 to 64 characters. It can only contain letters and digits.
product_name	String	**Definition** Product name. It needs to be specified when product alarm rules with multiple dimensions are used. Generally, the value format is *Service namespace,First-level dimension of the service*, for example, **SYS.ECS,instance_id**. **Range** 0 to 128 characters

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Parameter	Type	Description
resource_level	String	**Definition** Product alarm rules with multiple dimensions need to be specified as product-level rules. If the value of **resource_level** is **product**, it refers to the cloud product level. If the value of **resource_level** is **dimension** or not specified, it refers to the sub-dimension level. **Range** The value can be: • **product**: cloud product • **dimension**: specific dimension
tags	Array of **ResourceTag** objects	**Definition** Tenant tags. **Range** A maximum of 20 tags

Table 6-29 Policy

Parameter	Type	Description
metric_name	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A

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Parameter	Type	Description
period	Integer	**Definition** Metric period, in seconds. For details about the original metric period for each cloud service, see **Supported Services**. **Constraints** N/A **Range** The value can be: • **0**: The alarm is triggered immediately for event scenarios only. • **1**: original metric period. For example, if the original period of an RDS metric is 60s, the metric data is collected and calculated every 60s. • **300**: The metric data is collected and calculated every 5 minutes. • **1200**: The metric data is collected and calculated every 20 minutes. • **3600**: The metric data is collected and calculated every hour. • **14400**: The metric data is collected and calculated every 4 hours. • **86400**: The metric data is collected and calculated every day. **Default Value** N/A
filter	String	**Definition** Aggregation method. **Constraints** N/A **Range** **average**, **variance**, **min**, **max**, or **sum** **Default Value** N/A

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Parameter	Type	Description
comparison_operator	String	**Definition** Threshold symbol. **Constraints** The threshold symbols for metric alarms are >, >=, <, <=, =, !=, cycle_decrease, cycle_increase, and cycle_wave. The threshold symbols for event alarms are >, >=, <, <=, =, and !=. **Range** The value can be **>**, **<**, **>=**, **<=**, **=**, **!=**, **cycle_decrease**, **cycle_increase**, or **cycle_wave**. **cycle_decrease** indicates the decrease relative to the last period; **cycle_increase** indicates the increase relative to the last period; **cycle_wave** indicates the increase or decrease relative to the last period. **Default Value** N/A
value	Number	**Definition** Alarm threshold. For specific thresholds, see the value range of each metric in the appendix. **Constraints** If there is only one threshold, **value** and **alarm_level** are used in pairs. If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. **Range** The value ranges from **-1.7976931348623157e+108** to **1.7976931348623157e+108**. **Default Value** N/A

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Parameter	Type	Description
hierarchical_value	**HierarchicalValue** object	**Definition** Multi-level alarm threshold. **Constraints** If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. When you create or modify an alarm rule, you can set only one threshold in the following scenarios: 1. The alarm type is **Metric** and the alarm policy is **Trigger an alarm when all policies are met**. 2. The alarm type is **Event**.
unit	String	**Definition** Data unit. **Constraints** N/A **Range** [0,32] **Default Value** N/A
count	Integer	**Definition** Number of times that the alarm triggering conditions are met. **Constraints** N/A **Range** For event alarms, the value ranges from **1** to **180**. For metric and website alarms, the value can be **1**, **2**, **3**, **4**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, or **180**. **Default Value** N/A

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Parameter	Type	Description
suppress_duration	Integer	**Definition** Alarm suppression duration, in seconds. This parameter corresponds to the last field in the alarm policy when you create an alarm rule. This field is used to mitigate frequent alarm occurrences. **Constraints** N/A **Range** The value can be: • **0**: In the immediate triggering scenario, **0** indicates that the alarm is not suppressed. In the accumulated triggering scenario, **0** indicates that the alarm is generated only once. • **300**: An alarm is generated every 5 minutes once the alarm triggering condition is met. • **600**: An alarm is generated every 10 minutes once the alarm triggering condition is met. • **900**: An alarm is generated every 15 minutes once the alarm triggering condition is met. • **1800**: An alarm is generated every 30 minutes once the alarm triggering condition is met. • **3600**: An alarm is generated every 60 minutes once the alarm triggering condition is met. • **10800**: An alarm is generated every 3 hours once the alarm triggering condition is met. • **21600**: An alarm is generated every 6 hours after the alarm triggering condition is met. • **43200**: An alarm is generated every 12 hours once the alarm triggering condition is met. • **86000**: An alarm is generated once every day once the alarm triggering condition is met. **Default Value**

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Parameter	Type	Description
		N/A
level	Integer	**Definition** Alarm severity. **Constraints** N/A **Range** The value can be: **1** (critical), ** 2** (major), **3** (minor), or **4** (warning) **Default Value** 2
namespace	String	**Definition** **namespace** and **dimension_name** need to be specified for cloud product-level rules. This is to specify the resources that the policies apply to. For details about the namespace of each service, see **Service Namespaces**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 0 to 32 characters. **Default Value** N/A

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Parameter	Type	Description
dimension_name	String	**Definition** Metric dimension name. For details, see **Service Dimension Names**. **namespace** and **dimension_name** need to be specified for cloud product-level rules. This is to specify the resources that the policies apply to. **Constraints** N/A **Range** A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios. **Default Value** N/A
enabled	Boolean	**Definition** Whether the alarm policy is enabled. The value can be **true** (enabled) or **false** (disabled). **Constraints** N/A **Range** N/A **Default Value** N/A

Table 6-30 HierarchicalValue

Parameter	Type	Description
critical	Double	**Definition** Threshold for critical alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

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Parameter	Type	Description
major	Double	**Definition** Threshold for major alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
minor	Double	**Definition** Threshold for minor alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
info	Double	**Definition** Threshold for warnings. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

Table 6-31 ResourcesInListResp

Parameter	Type	Description
resource_group_id	String	**Definition** Resource group ID. This parameter is available when the monitoring scope is **Resource groups**. **Range** The value starts with **rg** and is followed by 22 characters of letters, digits, or a combination of both.

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Parameter	Type	Description
resource_group_name	String	**Definition** Resource group name. This parameter is available when the monitoring scope is **Resource groups**. **Range** 1 to 128 characters
dimensions	Array of **MetricDimensionResp** objects	**Definition** Dimension information.

Table 6-32 MetricDimensionResp

Parameter	Type	Description
name	String	**Definition** Metric dimension name. **Range** The value must start with a letter and can contain 1 to 32 characters.
value	String	**Definition** Metric dimension value. **Range** [0,256]

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Table 6-33 NotificationResp

Parameter	Type	Description
type	String	**Definition** Notification type. **Range** The value can be: • **notification**: SMN notifications • **contact**: account contacts • **contactGroup**: notification groups • **autoscaling**: AS notifications. It is used only in AS and is not recommended. • **groupwatch**: This API has been deprecated and is not recommended. • **ecsRecovery**: This API has been deprecated and is not recommended. • **iecAction**: This API has been deprecated and is not recommended.
notification_list	Array of strings	**Definition** Recipients to be notified of the alarm status changes. The value of **topicUrn** can be obtained from SMN. For details, see section "Querying Topics".

Table 6-34 ResourceTag

Parameter	Type	Description
key	String	**Definition** Tag name. **Constraints** N/A **Range** Max. 128 Unicode characters **Default Value** N/A

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Parameter	Type	Description
value	String	**Definition** Tag value. **Constraints** N/A **Range** Max. 255 Unicode characters **Default Value** N/A

Status code: 400

Table 6-35 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-36 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Query alarm rules.

```
/v2/{project_id}/alarms?offset=0&limit=10
```

Example Responses

Status code: 200

Query succeeded.

```
{
  "alarms" : [ {
    "alarm_id" : "al16558829757444BVVxr999",
    "name" : "alarm01",
    "description" : "",
    "namespace" : "SYS.ECS",
    "policies" : [ {
      "metric_name" : "disk_device_read_bytes_rate",
      "period" : 1,
      "filter" : "average",
      "comparison_operator" : ">",
      "value" : 75,
      "unit" : "byte/s",
      "count" : 3,
      "suppress_duration" : 10800,
      "level" : 2
    } ],
    "resources" : [ {
      "dimensions" : [ {
        "name" : "disk_name"
      } ]
    } ],
    "type" : "ALL_INSTANCE",
    "enabled" : true,
    "notification_enabled" : true,
    "alarm_notifications" : [ {
      "type" : "notification",
      "notification_list" : [ "urn:smn:xxx:xxx70e7359:topic_xxx" ]
    } ],
    "ok_notifications" : [ {
      "type" : "notification",
      "notification_list" : [ "urn:smn:xxx:xxx70e7359:topic_xxx" ]
    } ],
    "notification_begin_time" : "00:00",
    "notification_end_time" : "23:59",
    "enterprise_project_id" : "0",
    "tags" : [ {
      "key" : "Usage",
      "value" : "project1"
    } ]
  } ],
  "count" : 1
}
```


Status Codes

Status Code	Description
200	Query succeeded.
400	Parameter verification failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.2 Alarm Resources

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6.2.1 Batch Adding Resources to an Alarm Rule

Function

This API is used to batch add resources to an alarm rule. This API does not support alarm rules whose **AlarmType** is **RESOURCE_GROUP**. To modify resources in such alarm rules, use the resource group management APIs.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:addResources	Write	alarm *	• g:ResourceTag/<tag-key> • g:EnterpriseProjectId	• ces:alarms:put	-

URI

POST /v2/{project_id}/alarms/{alarm_id}/resources/batch-create

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Table 6-37 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
alarm_id	Yes	String	Alarm rule ID.

Request Parameters

Table 6-38 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.

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Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-39 Request body parameters

Parameter	Mandatory	Type	Description
resources	Yes	Array<Array< **Dimension**>>	Resource information.

Table 6-40 Dimension

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Dimension of the resource. For example, the dimension of an ECS is **instance_id**. For details about the metric dimension name of each service resource, see **Service Dimension Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A

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Parameter	Mandatory	Type	Description
value	No	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

Response Parameters

Status code: 200

Resources added.

Status code: 400

Table 6-41 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-42 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

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Table 6-43 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Batch adding resources to an alarm rule.

```
{
  "resources" : [ [ {
    "name" : "rds_cluster_id",
    "value" : "rds000000000001"
  } ] ]
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Resources added.
400	Parameter verification failed.
404	Resource not found.
500	Internal system error.

Error Codes

See **Error Codes**.

6.2.2 Batch Deleting Resources from an Alarm Rule

Function

This API is used to batch delete resources from an alarm rule. This API does not support alarm rules whose **AlarmType** is **RESOURCE_GROUP**. To modify resources in such alarm rules, use the resource group management APIs.

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Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:deleteResources	Write	alarm *	• g:ResourceTag/<tag-key> • g:EnterpriseProjectId	• ces:alarms:put	-

URI

POST /v2/{project_id}/alarms/{alarm_id}/resources/batch-delete

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Table 6-44 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
alarm_id	Yes	String	Alarm rule ID.

Request Parameters

Table 6-45 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.

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Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-46 Request body parameters

Parameter	Mandatory	Type	Description
resources	Yes	Array<Array< **Dimension**>>	Resource information.

Table 6-47 Dimension

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Dimension of the resource. For example, the dimension of an ECS is **instance_id**. For details about the metric dimension name of each service resource, see **Service Dimension Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A

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Parameter	Mandatory	Type	Description
value	No	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

Response Parameters

Status code: 200

Resources deleted.

Status code: 400

Table 6-48 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-49 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

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Table 6-50 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Deleting resources monitored by an alarm rule.

```
{
  "resources" : [ [ {
    "name" : "rds_cluster_id",
    "value" : "rds000000000001"
  } ] ]
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Resources deleted.
400	Parameter verification failed.
404	Resource not found.
500	Internal system error.

Error Codes

See **Error Codes**.

6.2.3 Querying Resources in an Alarm Rule

Function

This API is used to query resources in an alarm rule by alarm rule ID.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

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Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:getResources	Read	alarm *	• g:ResourceTag/<tag-key> • g:EnterpriseProjectId	• ces:alarms:list	-

URI

GET /v2/{project_id}/alarms/{alarm_id}/resources

Table 6-51 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

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Parameter	Mandatory	Type	Description
alarm_id	Yes	String	**Definition** Alarm rule ID. **Constraints** N/A **Range** The value starts with **al** and is followed by 22 characters of letters, digits, or a combination of both. **Default Value** N/A

Table 6-52 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	**Description** Pagination offset. **Constraints** N/A **Range** **0** to **10000** **Default Value** 0
limit	No	Integer	**Description** Number of records displayed on each page. **Constraints** N/A **Range** 1 to 100 **Default Value** 10

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Request Parameters

Table 6-53 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Response Parameters

Status code: 200

Table 6-54 Response body parameters

Parameter	Type	Description
resources	Array<Array<**DimensionResp**>>	**Definition** Resource information.
count	Integer	**Definition** Total number of resources. **Range** [0,2147483647]

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Table 6-55 DimensionResp

Parameter	Type	Description
name	String	**Definition** Dimension of the resource. For example, the dimension of an ECS is **instance_id**. For details about the metric dimension name of each service resource, see **Service Dimension Names**. **Range** The value must start with a letter and can only contain letters, digits, underscores (_), and hyphens (-).
value	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Range** 1 to 256 characters

Status code: 400

Table 6-56 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-57 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Example Requests

Querying resources monitored by an alarm rule whose **alarm_id** is **alCzk8o9dtSQHtiDgb44Eepw** and **limit** is **10**.

```
/v2/{project_id}/alarms/alCzk8o9dtSQHtiDgb44Eepw/resources?offset=0&limit=10
```

Example Responses

Status code: 200

Query succeeded.

```
{
  "resources" : [ [ {
    "name" : "disk_name"
  } ] ],
  "count" : 10
}
```

Status Codes

Status Code	Description
200	Query succeeded.
400	Parameter verification failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.3 Alarm Policies

6.3.1 Modifying All Fields in an Alarm Policy

Function

This API is used to modify all fields in an alarm rule.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

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- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:updatePolicies	Write	alarm *	• g:ResourceTag/<tag-key> • g:EnterpriseProjectId	• ces:alarms:put	-

URI

PUT /v2/{project_id}/alarms/{alarm_id}/policies

Table 6-58 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Parameter	Mandatory	Type	Description
alarm_id	Yes	String	**Definition** Alarm rule ID. **Constraints** N/A **Range** The value starts with **al** and is followed by 24 characters of letters, digits, or a combination of both. **Default Value** N/A

Request Parameters

Table 6-59 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

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Table 6-60 Request body parameters

Parameter	Mandatory	Type	Description
policies	Yes	Array of **UpdatePolicyReq** objects	**Definition** Policy information. **Constraints** A maximum of 50 policies can be configured.

Table 6-61 UpdatePolicyReq

Parameter	Mandatory	Type	Description
metric_name	Yes	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A
extra_info	No	**MetricExtraInfo** object	**Definition** Additional information about the policy. **Constraints** If the policy does not contain additional information, **extra_info** does not need to be transferred.

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Parameter	Mandatory	Type	Description
period	Yes	Integer	**Definition** Metric period, in seconds. For details about the original metric period for each cloud service, see **Supported Services**. **Constraints** N/A **Range** The value can be: • **0**: The alarm is triggered immediately for event scenarios only. • **1**: original metric period. For example, if the original period of an RDS metric is 60s, the metric data is collected and calculated every 60s. • **300**: The metric data is collected and calculated every 5 minutes. • **1200**: The metric data is collected and calculated every 20 minutes. • **3600**: The metric data is collected and calculated every hour. • **14400**: The metric data is collected and calculated every 4 hours. • **86400**: The metric data is collected and calculated every day. **Default Value** N/A

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Parameter	Mandatory	Type	Description
filter	Yes	String	**Definition** Aggregation method. **Constraints** N/A **Range** **average**, **variance**, **min**, **max**, or **sum** **Default Value** N/A
comparison_operator	Yes	String	**Definition** Threshold symbol. **Constraints** The threshold symbols for metric alarms are >, >=, <, <=, =, !=, cycle_decrease, cycle_increase, and cycle_wave. The threshold symbols for event alarms are >, >=, <, <=, =, and !=. **Range** The value can be **>**, **<**, **>=**, **<=**, **=**, **!=**, **cycle_decrease**, **cycle_increase**, or **cycle_wave**. **cycle_decrease** indicates the decrease relative to the last period; **cycle_increase** indicates the increase relative to the last period; **cycle_wave** indicates the increase or decrease relative to the last period. **Default Value** N/A

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Parameter	Mandatory	Type	Description
value	No	Number	**Definition** Alarm threshold. For specific thresholds, see the value range of each metric in the appendix. **Constraints** If there is only one threshold, **value** and **alarm_level** are used in pairs. If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. **Range** The value ranges from **-1.7976931348623157e+108** to **1.7976931348623157e+108**. **Default Value** N/A
hierarchical_value	No	**HierarchicalValue** object	**Definition** Multi-level alarm threshold. **Constraints** If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. When you create or modify an alarm rule, you can set only one threshold in the following scenarios: 1. The alarm type is **Metric** and the alarm policy is **Trigger an alarm when all policies are met**. 2. The alarm type is **Event**.
unit	No	String	**Definition** Data unit. **Constraints** N/A **Range** [0,32] **Default Value** N/A

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Parameter	Mandatory	Type	Description
type	No	String	**Definition** Alarm policy type. This API has been deprecated. **Constraints** N/A **Range** The value can only be **auto**. **Default Value** N/A
count	Yes	Integer	**Definition** Number of times that the alarm triggering conditions are met. **Constraints** N/A **Range** For event alarms, the value ranges from **1** to **180**. For metric and website alarms, the value can be **1**, **2**, **3**, **4**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, or **180**. **Default Value** N/A

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Parameter	Mandatory	Type	Description
suppress_duration	No	Integer	**Definition** Alarm suppression duration, in seconds. This parameter corresponds to the last field in the alarm policy when you create an alarm rule. This field is used to mitigate frequent alarm occurrences. **Constraints** N/A **Range** The value can be: • **0**: In the immediate triggering scenario, **0** indicates that the alarm is not suppressed. In the accumulated triggering scenario, **0** indicates that the alarm is generated only once. • **300**: An alarm is generated every 5 minutes once the alarm triggering condition is met. • **600**: An alarm is generated every 10 minutes once the alarm triggering condition is met. • **900**: An alarm is generated every 15 minutes once the alarm triggering condition is met. • **1800**: An alarm is generated every 30 minutes once the alarm triggering condition is met. • **3600**: An alarm is generated every 60 minutes once the alarm triggering condition is met. • **10800**: An alarm is generated every 3 hours once the alarm triggering condition is met. • **21600**: An alarm is generated every 6 hours

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Parameter	Mandatory	Type	Description
			after the alarm triggering condition is met. • **43200**: An alarm is generated every 12 hours once the alarm triggering condition is met. • **86000**: An alarm is generated once every day once the alarm triggering condition is met. **Default Value** N/A
level	No	Integer	**Definition** Alarm severity. **Constraints** N/A **Range** The value can be: **1** (critical), ** 2** (major), **3** (minor), or **4** (warning) **Default Value** 2

Parameter	Mandatory	Type	Description
namespace	No	String	**Definition** For details about the namespace of each service, see **Service Namespaces**. **namespace** and **dimension_name** need to be specified for cloud product-level rules. This is to specify the resources that the policies apply to. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). [0,32] **Default Value** N/A
dimension_name	No	String	**Definition** Metric dimension name. For details, see **Service Dimension Names**. **namespace** and **dimension_name** need to be specified for cloud product-level rules. This is to specify the resources that the policies apply to. **Constraints** N/A **Range** A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios. **Default Value** N/A

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Table 6-62 MetricExtraInfo

Parameter	Mandatory	Type	Description
origin_metric_name	Yes	String	**Definition** Original metric name. **Constraints** N/A **Range** 0 to 4,096 characters **Default Value** N/A
metric_prefix	No	String	**Definition** Metric name prefix. **Constraints** N/A **Range** 0 to 4,096 characters **Default Value** N/A
custom_proc_name	No	String	**Definition** Name of a process. **Constraints** N/A **Range** [0,250] **Default Value** N/A
metric_type	No	String	**Definition** Metric type. **Constraints** N/A **Range** 0 to 32 characters **Default Value** N/A

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Table 6-63 HierarchicalValue

Parameter	Mandatory	Type	Description
critical	No	Double	**Definition** Threshold for critical alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
major	No	Double	**Definition** Threshold for major alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
minor	No	Double	**Definition** Threshold for minor alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
info	No	Double	**Definition** Threshold for warnings. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

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Response Parameters

Status code: 200

Table 6-64 Response body parameters

Parameter	Type	Description
policies	Array of **UpdatePolicyResp** objects	**Definition** Policy information.

Table 6-65 UpdatePolicyResp

Parameter	Type	Description
metric_name	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency.
extra_info	**MetricExtraInfoResp** object	**Definition** Additional information about the policy.

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Parameter	Type	Description
period	Integer	**Definition** Metric period, in seconds. For details about the original metric period for each cloud service, see **Supported Services**. **Range** The value can be: • **0**: The alarm is triggered immediately for event scenarios only. • **1**: original metric period. For example, if the original period of an RDS metric is 60s, the metric data is collected and calculated every 60s. • **300**: The metric data is collected and calculated every 5 minutes. • **1200**: The metric data is collected and calculated every 20 minutes. • **3600**: The metric data is collected and calculated every hour. • **14400**: The metric data is collected and calculated every 4 hours. • **86400**: The metric data is collected and calculated every day.
filter	String	**Definition** Aggregation method. **Range** **average**, **variance**, **min**, **max**, or **sum**
comparison_operator	String	**Definition** Threshold symbol. **Range** The value can be >, <, >=, <=, =, **!=**, **cycle_decrease**, **cycle_increase**, or **cycle_wave**. **cycle_decrease** indicates the decrease relative to the last period; **cycle_increase** indicates the increase relative to the last period; **cycle_wave** indicates the increase or decrease relative to the last period.

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Parameter	Type	Description
value	Number	**Definition** Alarm threshold. For specific thresholds, see the value range of each metric in the appendix. **Range** The value ranges from **0** to **1.7976931348623157e+108**.
hierarchical_value	**HierarchicalValueResp** object	**Definition** Multi-level alarm threshold. **Range** When you create or modify an alarm rule, you can set only one threshold in the following scenarios: 1. The alarm type is **Metric** and the alarm policy is **Trigger an alarm when all policies are met**. 2. The alarm type is **Event**.
unit	String	**Definition** Data unit. **Range** [0,32]
type	String	**Definition** Alarm policy type. This API has been deprecated. **Range** The value can only be **auto**.
count	Integer	**Definition** Number of times that the alarm triggering conditions are met. **Range** For event alarms, the value ranges from **1** to **180**. For metric and website alarms, the value can be **1**, **2**, **3**, **4**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, or **180**.

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Parameter	Type	Description
suppress_duration	Integer	**Definition** Alarm suppression duration, in seconds. This parameter corresponds to the last field in the alarm policy when you create an alarm rule. This field is used to mitigate frequent alarm occurrences. **Range** The value can be: • **0**: In the immediate triggering scenario, **0** indicates that the alarm is not suppressed. In the accumulated triggering scenario, **0** indicates that the alarm is generated only once. • **300**: An alarm is generated every 5 minutes once the alarm triggering condition is met. • **600**: An alarm is generated every 10 minutes once the alarm triggering condition is met. • **900**: An alarm is generated every 15 minutes once the alarm triggering condition is met. • **1800**: An alarm is generated every 30 minutes once the alarm triggering condition is met. • **3600**: An alarm is generated every 60 minutes once the alarm triggering condition is met. • **10800**: An alarm is generated every 3 hours once the alarm triggering condition is met. • **21600**: An alarm is generated every 6 hours after the alarm triggering condition is met. • **43200**: An alarm is generated every 12 hours once the alarm triggering condition is met. • **86000**: An alarm is generated once every day once the alarm triggering condition is met.

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Parameter	Type	Description
level	Integer	**Definition** Alarm severity. **Range** The value can be: **1** (critical), ** 2** (major), **3** (minor), or **4** (warning)
namespace	String	**Definition** For details about the namespace of each service, see **Service Namespaces**. **namespace** and **dimension_name** need to be specified for cloud product-level rules. This is to specify the resources that the policies apply to. **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). [0,32] .
dimension_name	String	**Definition** Metric dimension name. For details, see **Service Dimension Names**. **Range** A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios.

Table 6-66 MetricExtraInfoResp

Parameter	Type	Description
origin_metric_name	String	**Definition** Original metric name. **Range** [0,4,096]
metric_prefix	String	**Definition** Metric name prefix. **Range** [0,4,096]

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Parameter	Type	Description
custom_proc_name	String	**Definition** Name of a process. **Range** [0,250]
metric_type	String	**Definition** Metric type. **Range** [0,32]

Table 6-67 HierarchicalValueResp

Parameter	Type	Description
critical	Double	**Definition** Threshold for critical alarms. **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108]
major	Double	**Definition** Threshold for major alarms. **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108]
minor	Double	**Definition** Threshold for minor alarms. **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108]
info	Double	**Definition** Threshold for warnings. **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108]

Status code: 400

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Table 6-68 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-69 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Modify an alarm policy whose **metric name** is **disk_device_read_bytes_rate**.

```
{
  "policies" : [ {
    "metric_name" : "disk_device_read_bytes_rate",
    "period" : 1,
    "filter" : "average",
    "comparison_operator" : ">",
    "value" : 75,
    "unit" : "byte/s",
    "count" : 3,
    "suppress_duration" : 10800,
    "level" : 2
  } ]
}
```

Example Responses

Status code: 200

Modification succeeded.

```
{
  "policies" : [ {
    "metric_name" : "disk_device_read_bytes_rate",
    "period" : 1,
    "filter" : "average",
    "comparison_operator" : ">",
    "value" : 75,
    "unit" : "byte/s",
    "count" : 3,
    "type" : "",
```

```
    "suppress_duration" : 10800,
    "level" : 2
  } ]
}
```

Status Codes

Status Code	Description
200	Modification succeeded.
400	Parameter verification failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.3.2 Querying Alarm Policies

Function

This API is used to query alarm policies by alarm rule ID.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:getPolicies	Read	alarm *	• g:ResourceTag/<tag-key> • g:EnterpriseProjectId	• ces:alarms:get	-

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URI

GET /v2/{project_id}/alarms/{alarm_id}/policies

Table 6-70 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
alarm_id	Yes	String	**Definition** Alarm rule ID. **Constraints** N/A **Range** The value starts with **al** and is followed by 22 characters that may include letters, digits, or a combination of both. The value can contain a total of 24 characters. **Default Value** N/A

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Table 6-71 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	**Definition** Pagination offset. **Constraints** N/A **Range** 0-10000 **Default Value** 0
limit	No	Integer	**Definition** Number of records displayed on each page. **Constraints** N/A **Range** 1-100 **Default Value** 10

Request Parameters

Table 6-72 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.

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Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Response Parameters

Status code: 200

Table 6-73 Response body parameters

Parameter	Type	Description
policies	Array of **ListPolicyResp** objects	**Definition** List of alarm policies.
count	Integer	**Definition** Total number of policies in an alarm rule. **Range** 0-100

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Table 6-74 ListPolicyResp

Parameter	Type	Description
metric_name	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency.
extra_info	**MetricExtraInfoResp** object	**Definition** Additional information about the alarm policy.
period	Integer	**Definition** Interval (seconds) for checking whether the alarm rule conditions are met. **Range** The value can be: • **0**: default value. This value can be used for event alarms. • **1**: original metric period. For example, if the original period of an RDS metric is 60s, the metric data is collected and calculated every 60s. • **300**: The metric data is collected and calculated every 5 minutes. • **1200**: The metric data is collected and calculated every 20 minutes. • **3600**: The metric data is collected and calculated every hour. • **14400**: The metric data is collected and calculated every 4 hours. • **86400**: The metric data is collected and calculated every day.
filter	String	**Definition** Aggregation method. **Range** **average**, **variance**, **min**, **max**, or **sum**

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Parameter	Type	Description
comparison_operator	String	**Definition** Threshold symbol. **Range** The value can be **>**, **<**, **>=**, **<=**, **=**, **!=**, **cycle_decrease**, **cycle_increase**, or **cycle_wave**. **cycle_decrease** indicates the decrease relative to the last period; **cycle_increase** indicates the increase relative to the last period; **cycle_wave** indicates the increase or decrease relative to the last period.
value	Number	**Definition** Alarm threshold. For specific thresholds, see the value range of each metric in the appendix. **Range** The value ranges from **0** to **1.7976931348623157e+108**.
hierarchical_value	**HierarchicalValueResp** object	**Definition** Multi-level alarm threshold. **Range** When you create or modify an alarm rule, you can set only one threshold in the following scenarios: 1. The alarm type is **Metric** and the alarm policy is **Trigger an alarm when all policies are met**. 2. The alarm type is **Event**.
unit	String	**Definition** Data unit. **Range** [0,32]
type	String	**Definition** Alarm policy type. This API has been deprecated. **Constraints** N/A **Range** [0,32] **Default Value** N/A

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Parameter	Type	Description
count	Integer	**Definition** Number of times that the alarm triggering conditions are met. **Range** For event alarms, the value ranges from **1** to **180**. For metric and website alarms, the value can be **1**, **2**, **3**, **4**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, or **180**.

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Parameter	Type	Description
suppress_duration	Integer	**Definition** Alarm suppression duration, in seconds. This parameter corresponds to the last field in the alarm policy when you create an alarm rule. This field is used to mitigate frequent alarm occurrences. **Range** The value can be: • **0**: An event alarm is not suppressed in the immediate triggering scenario, and is generated only once in the accumulated triggering scenario.generated only once. • **300**: An alarm is generated every 5 minutes once the alarm triggering condition is met. • **600**: An alarm is generated every 10 minutes once the alarm triggering condition is met. • **900**: An alarm is generated every 15 minutes once the alarm triggering condition is met. • **1800**: An alarm is generated every 30 minutes once the alarm triggering condition is met. • **3600**: An alarm is generated every 60 minutes once the alarm triggering condition is met. • **10800**: An alarm is generated every 3 hours once the alarm triggering condition is met. • **21600**: An alarm is generated every 6 hours once the alarm triggering condition is met. • **43200**: An alarm is generated every 12 hours once the alarm triggering condition is met. • **86000**: An alarm is generated once every day once the alarm triggering condition is met.

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Parameter	Type	Description
level	Integer	**Definition** Alarm severity. **Range** The value can be: **1** (critical), ** 2** (major), **3** (minor), or **4** (warning)
namespace	String	**Definition** Service namespace. For details about the namespace of each service, see **Service Namespaces**. **Range** The value is in the service.item format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value contains 0 to 32 characters.
dimension_name	String	**Definition** Metric dimension name. For details, see **Service Dimension Names**. **Range** The value must start with a letter. Each dimension allows a maximum of 32 characters and can only contain digits, letters, underscores (_), and hyphens (-). Multiple dimensions are separated by commas (,). A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios.

Table 6-75 MetricExtraInfoResp

Parameter	Type	Description
origin_metric_name	String	**Definition** Original metric name. **Range** [0,4,096]

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Parameter	Type	Description
metric_prefix	String	**Definition** Metric name prefix. **Range** [0,4,096]
custom_proc_name	String	**Definition** Name of a process. **Range** [0,250]
metric_type	String	**Definition** Metric type. **Range** [0,32]

Table 6-76 HierarchicalValueResp

Parameter	Type	Description
critical	Double	**Definition** Threshold for critical alarms. **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108]
major	Double	**Definition** Threshold for major alarms. **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108]
minor	Double	**Definition** Threshold for minor alarms. **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108]
info	Double	**Definition** Threshold for warnings. **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108]

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Status code: 400

Table 6-77 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-78 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-79 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Query an alarm policy whose **alarm_id** is **alCzk8o9dtSQHtiDgb44Eepw** and **limit** is **10**.

```
/v2/{project_id}/alarms/alCzk8o9dtSQHtiDgb44Eepw/policies?offset=0&limit=10
```

Example Responses

Status code: 200

Query succeeded.

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```
{
  "policies" : [ {
    "namespace" : "AGT.ECS",
    "metric_name" : "disk_device_read_bytes_rate",
    "extra_info" : { },
    "period" : 1,
    "filter" : "average",
    "comparison_operator" : ">",
    "value" : 75,
    "hierarchical_value" : {
      "critical" : 1
    },
    "unit" : "byte/s",
    "count" : 3,
    "type" : "",
    "suppress_duration" : 10800,
    "level" : 2
  } ],
  "count" : 10
}
```


Status Codes

Status Code	Description
200	Query succeeded.
400	Parameter verification failed.
404	Alarm rule not found.
500	Internal system error.

Error Codes

See **Error Codes**.

6.4 Alert Notifications

6.4.1 Modifying Alarm Notification Information in an Alarm Rule

Function

This API is used to modify alarm notification information in an alarm rule.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

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Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:putAlarmNotifications	Write	alarm *	• g:ResourceTag/<tag-key> • g:EnterpriseProjectId	• ces:alarms:put	-

URI

PUT /v2/{project_id}/alarms/{alarm_id}/notifications

Table 6-80 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

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Parameter	Mandatory	Type	Description
alarm_id	Yes	String	**Definition** Alarm rule ID. **Constraints** N/A **Range** The value starts with **al** and is followed by 22 characters of letters, digits, or a combination of both. **Default Value** N/A

Request Parameters

Table 6-81 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

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Table 6-82 Request body parameters

Parameter	Mandatory	Type	Description
notification_enabled	Yes	Boolean	**Definition** Whether to enable alarm notifications. **Constraints** If this parameter is set to true, other fields are mandatory. If it is set to false, other fields are optional. **Range** A boolean value. • **true**: Alarm notifications are enabled. • **false**: Alarm notifications are disabled. **Default Value** N/A
alarm_notifications	No	Array of **Notification** objects	**Definition** Notification group or topic subscription for alarm notifications. **Constraints** N/A **Range** A maximum of 10 notification groups or topic subscriptions **Default Value** N/A
ok_notifications	No	Array of **Notification** objects	**Definition** Information about the notification group or topic subscription when the alarm is cleared. **Constraints** N/A **Range** A maximum of 10 notification groups or topic subscriptions **Default Value** N/A

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Parameter	Mandatory	Type	Description
notification_begin_time	No	String	**Definition** Time when alarm notifications were enabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A
notification_end_time	No	String	**Definition** Time when alarm notifications were disabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A
effective_timezone	No	String	**Definition** Time zone, for example, **GMT-08:00**, **GMT+08:00**, or **GMT+0:00**. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A

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Table 6-83 Notification

Parameter	Mandatory	Type	Description
type	Yes	String	**Definition** Notification type. **Constraints** N/A **Range** The value can be: • **notification**: SMN notifications • **contact**: account contacts • **contactGroup**: notification groups • autoscaling: AS notifications. This value is used only for AS. • **groupwatch**: deprecated • **ecsRecovery**: deprecated • **iecAction**: This API has been deprecated and is not recommended. **Default Value** N/A

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Parameter	Mandatory	Type	Description
notification_list	Yes	Array of strings	**Definition** Recipients to be notified of the alarm status changes. The value of **topicUrn** can be obtained from SMN. For details, see section "Querying Topics". **Constraints** If **type** is set to **notification**, the value of **notificationList** cannot be left blank. If **type** is set to **autoscaling**, the value of **notification_list** must be left blank. If **notification_enabled** is set to **true**, you must specify either **alarm_notifications** or **ok_notifications**. If both **alarm_notifications** and **ok_notifications** are specified, their **notification_list** values must be the same. A maximum of 20 recipients are allowed.

Response Parameters

Status code: 200

Table 6-84 Response body parameters

Parameter	Type	Description
notification_enabled	Boolean	**Definition** Whether to enable alarm notifications. **Range** A boolean value. • **true**: Alarm notifications are enabled. • **false**: Alarm notifications are disabled.

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Parameter	Type	Description
alarm_notifications	Array of NotificationResp objects	**Definition** Notification group or topic subscription for alarm notifications. **Range** A maximum of 10 notification groups or topic subscriptions
ok_notifications	Array of NotificationResp objects	**Definition** Information about the notification group or topic subscription when the alarm is cleared. **Range** A maximum of 10 notification groups or topic subscriptions
notification_begin_time	String	**Definition** Time when alarm notifications were enabled. **Range** The value allows 1 to 64 characters and can only contain digits and colons (:).
notification_end_time	String	**Definition** Time when alarm notifications were disabled. **Range** The value allows 1 to 64 characters and can only contain digits and colons (:).

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Table 6-85 NotificationResp

Parameter	Type	Description
type	String	**Definition** Notification type. **Range** The value can be: • **notification**: SMN notifications • **contact**: account contacts • **contactGroup**: notification groups • **autoscaling**: AS notifications. It is used only in AS and is not recommended. • **groupwatch**: This API has been deprecated and is not recommended. • **ecsRecovery**: This API has been deprecated and is not recommended. • **iecAction**: This API has been deprecated and is not recommended.
notification_list	Array of strings	**Definition** Recipients to be notified of the alarm status changes. The value of **topicUrn** can be obtained from SMN. For details, see section "Querying Topics".

Status code: 400

Table 6-86 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

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Table 6-87 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Modifying alarm notification information in an alarm rule.

```
{
  "notification_enabled" : true,
  "alarm_notifications" : [ {
    "type" : "notification",
    "notification_list" : [ "urn:smn:cn-north-7:65c438cab60xxxxxxx:CES_notification_group_MGj4AJ03X" ]
  } ],
  "ok_notifications" : [ {
    "type" : "notification",
    "notification_list" : [ "urn:smn:cn-north-7:65c438cab60xxxxxxx:CES_notification_group_MGj4AJ03X" ]
  } ],
  "notification_begin_time" : "00:00",
  "notification_end_time" : "23:59"
}
```

Example Responses

Status code: 200

Alarm notification information modified.

```
{
  "notification_enabled" : true,
  "alarm_notifications" : [ {
    "type" : "",
    "notification_list" : [ ]
  } ],
  "ok_notifications" : [ {
    "type" : "",
    "notification_list" : [ ]
  } ],
  "notification_begin_time" : "00:00",
  "notification_end_time" : "23:59"
}
```

Status Codes

Status Code	Description
200	Alarm notification information modified.
400	Parameter verification failed.
500	Internal system error.

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Error Codes

See **Error Codes**.

6.5 Alarm Records

6.5.1 This API is used to query alarm records.

Function

This API is used to query alarm records.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarmHistory:list	List	-	g:EnterpriseProjectId	-	-

URI

GET /v2/{project_id}/alarm-histories

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Table 6-88 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Table 6-89 Query Parameters

Parameter	Mandatory	Type	Description
alarm_id	No	Array of strings	**Definition**: List of alarm IDs. Alarm ID. It starts with **al** and is followed by 22 characters, including letters or digits. **Constraints**: The list can contain a maximum of 50 alarm IDs.
record_id	No	String	**Definition**: Alarm record ID. **Constraints**: None **Value range**: The value can contain 24 characters. It starts with **ah** and is followed by 22 characters, including letters or digits. **Default value**: None

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Parameter	Mandatory	Type	Description
name	No	String	**Definition**: Alarm rule name. **Constraints**: None **Value range**: The value can contain a maximum of 128 characters. **Default value**: None
status	No	Array of strings	**Definition**: Alarm rule statuses. The value can be **ok**, **alarm**, or **invalid**. **Constraints**: The list can contain a maximum of three elements.
level	No	Integer	**Definition**: Alarm severity. **Constraints**: None **Value range**: The value can be **1** (critical), ** 2** (major), **3** (minor), or **4** (informational). **Default value**: None

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Parameter	Mandatory	Type	Description
namespace	No	String	**Definition**: Namespace of a service. For details about the namespace of each service, see **Service namespace**. **Constraints**: None **Value range**: The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default value**: None
resource_id	No	String	**Definition**: Alarm resource ID. **Constraints**: None **Value range**: In the context of multiple dimensions, resource IDs are separated by commas (,) in ascending alphabetical order. The value can contain a maximum of 2,048 characters. **Default value**: None

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Parameter	Mandatory	Type	Description
from	No	String	**Definition**: Start time of the period during which alarm records are updated, for example, **2022-02-10T10:05:46+08:00**. **Constraints**: None **Value range**: The value can contain a maximum of 64 characters. **Default value**: None
to	No	String	**Definition**: End time of the period during which alarm records are updated, for example, **2022-02-10T10:05:47+08:00**. **Constraints**: None **Value range**: The value can contain a maximum of 64 characters. **Default value**: None
alarm_type	No	String	**Definition**: Alarm type. **Constraints**: None **Value range**: Enumerated value. The value can be **event** (querying event alarms) or **metric** (querying metric alarms). **Default value**: None

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Parameter	Mandatory	Type	Description
create_time_from	No	String	**Definition**: Start time for generating alarm records, for example, **2022-02-10T10:05:46+08:00**. **Constraints**: None **Value range**: The value can contain a maximum of 64 characters. **Default value**: None
create_time_to	No	String	**Definition**: End time of the period during which alarm records are created, for example, **2022-02-10T10:05:47+08:00**. **Constraints**: None **Value range**: The value can contain a maximum of 64 characters. **Default value**: None
offset	No	Integer	**Definition**: Pagination offset. **Constraints**: None **Value range**: The value is an integer from **0** to **1000000000**. **Default value**: 0

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Parameter	Mandatory	Type	Description
limit	No	Integer	**Definition**: Pagination offset. **Constraints**: None **Value range**: The value is an integer from **1** to **100**. **Default value**: 100
order_by	No	String	**Definition**: Keyword for sorting alarms. **Constraints**: None **Value range**: Enumerated value. The value can be **first_alarm_time** (time for generating the alarm for the first time), **update_time** (alarm update time), **alarm_level** (alarm severity), or **record_id** (primary key of the table record). **Default value**: update_time

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Request Parameters

Table 6-90 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Response Parameters

Status code: 200

Table 6-91 Response body parameters

Parameter	Type	Description
alarm_histories	Array of **AlarmHistoryItemV2** objects	**Definition**: Alarm records.
count	Integer	**Definition**: Total number of alarm records. **Value range**: None

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Table 6-92 AlarmHistoryItemV2

Parameter	Type	Description
record_id	String	**Definition**: Alarm record ID. **Value range**: The value can contain a maximum of 24 characters.
alarm_id	String	**Definition**: Alarm rule ID, for example, **al1603131199286dzxpqK3Ez**. **Value range**: The value can contain a maximum of 24 characters.
name	String	**Definition**: Alarm rule name, for example, **alarm-test01**. **Value range**: The value can contain 1 to 128 characters.
status	String	**Definition**: Alarm record status. **Value range**: The value can be **ok**, **alarm**, **invalid**, or **ok_manual**. **ok** indicates normal, **alarm** indicates an ongoing alarm, **invalid** indicates an invalid alarm, and **ok_manual** indicates manual recovery.
level	Integer	**Definition**: Alarm severity. **Value range**: The value can be **1** (critical), **2** (major), **3** (minor), and **4** (informational).

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Parameter	Type	Description
type	String	**Definition**: Alarm rule type. **Value range**: Enumerated value. **ALL_INSTANCE** indicates alarm rules for metrics of all resources. **RESOURCE_GROUP** indicates alarm rules for metrics of resources in a resource group. **MULTI_INSTANCE** indicates alarm rules for metrics of specified resources. **EVENT.SYS** indicates alarm rules for system events. **EVENT.CUSTOM** indicates alarm rules for custom events. **DNSHealthCheck** indicates alarm rules for health checks.
action_enabled	Boolean	**Definition**: Whether to send notifications. **Value range**: **true**: Notifications are sent. **false**: Notifications are not sent.
begin_time	String	**Definition**: UTC time when the alarm was generated. **Value range**: None
end_time	String	**Definition**: Alarm end time (UTC time). **Value range**: None
first_alarm_time	String	**Definition**: UTC time when the alarm was generated for the first time. **Value range**: None
last_alarm_time	String	**Definition**: UTC time when the alarm was generated for the last time. **Value range**: None

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Parameter	Type	Description
alarm_recovery_time	String	**Definition**: UTC time when the alarm was cleared. **Value range**: None
metric	**metric** object	**Definition** Metric information.
condition	**condition** object	**Definition**: Alarm triggering condition.
additional_info	**AdditionalInfo** object	**Definition**: Additional field of an alarm record. This is only intended for alarm records generated in event monitoring.
alarm_actions	Array of **alarm_actions** objects	**Definition**: Actions triggered by the alarm. The structure is as follows: { "type": "notification", "notification_list": ["urn:smn:southchina:68438a86d98e427e907e0097b7e35d47:sd"] }. The value of **type** can be: **notification**: Notifications will be sent. **autoscaling**: A scaling action will be triggered. **notification_list**: recipients to be notified of the alarm status changes.
ok_actions	Array of **ok_actions** objects	**Definition**: Action to be triggered after an alarm is cleared. The structure is as follows: { "type": "notification", "notification_list": ["urn:smn:southchina:68438a86d98e427e907e0097b7e35d47:sd"] }. The value of **type** can be **notification** or **notification_list** (recipients to be notified of the alarm status changes).
data_points	Array of **DataPointInfo** objects	Time when the resource monitoring data is reported and the monitoring data in the alarm record.

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Table 6-93 metric

Parameter	Type	Description
namespace	String	**Definition**: Namespace of a service. For details about the namespace of each service, see **Service namespace**. **Value range**: The value can contain 3 to 32 characters.
metric_name	String	**Definition**: Metric name of a resource. For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. For details about the metrics of each service, see **Service metric name**. **Value range**: The value can contain 1 to 64 characters.
dimensions	Array of **dimensions** objects	**Definition**: Metric dimension. **Value range**: None

Table 6-94 dimensions

Parameter	Type	Description
name	String	**Definition**: Dimension of a resource. For example, the dimension of an ECS can be **instance_id**. A maximum of four dimensions are supported. For the metric dimension of each resource, see **Service metric dimension**. **Value range**: The value can contain 1 to 32 characters.

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Parameter	Type	Description
value	String	**Definition**: Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Value range**: The value can contain 1 to 256 characters.

Table 6-95 condition

Parameter	Type	Description
period	Integer	**Definition**: Metric period, in seconds. For details about the original metric period for each cloud service, see **Supported Services**. **Value range**: **0**: default value. For example, this value can be used for event alarms. **1**: original metric period. For example, if the original period of an RDS metric is 60s, the metric data is collected and calculated every 60s. **300**: The metric data is collected and calculated every 5 minutes. **1200**: The metric data is collected and calculated every 20 minutes. **3600**: The metric data is collected and calculated every 60 minutes. **14400**: The metric data is collected and calculated every 4 hours. **86400**: The metric data is collected and calculated every day.
filter	String	**Definition** Aggregation method. **Range** The value can be **average**, **variance**, **min**, **max**, or **sum**. It allows 1 to 15 characters.

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Parameter	Type	Description
comparison_operator	String	**Definition**: Threshold symbol. **Value range**: Enumerated value. The value can be **>**, **<**, **>=**, **<=**, **=**, **!=**, **cycle_decrease**, **cycle_increase**, or **cycle_wave**. **cycle_decrease** indicates the decrease relative to the last period; **cycle_increase** indicates the increase relative to the last period; **cycle_wave** indicates the increase or decrease relative to the last period. The value can contain 1 to 10 characters.
value	Double	**Definition**: Alarm threshold. **Value range**: For detailed thresholds, see the value range of each metric in the appendix. For example, you can set ECS **cpu_util** to **80** in **Services Interconnected with Cloud Eye**. The value ranges from **0** to **1.7976931348623157e+108**.
unit	String	**Definition**: Data unit. **Value range**: The value can contain a maximum of 32 characters.
count	Integer	**Definition**: Number of consecutive alarm triggers. **Value range**: The value can contain 1 to 180 characters.

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Parameter	Type	Description
suppress_duration	Integer	**Definition** Alarm suppression duration (alarm interval), in seconds. This parameter corresponds to the last field in the alarm policy when you create an alarm rule. This field is used to address the issue of frequent alarm occurrences. **Range** The value can be: • **0**: In the immediate triggering scenario, **0** indicates that the alarm is not suppressed. In the accumulated triggering scenario, **0** indicates that the alarm is generated only once. • **300**: An alarm is generated every 5 minutes once the alarm triggering condition is met. • **600**: An alarm is generated every 10 minutes once the alarm triggering condition is met. • **900**: An alarm is generated every 15 minutes once the alarm triggering condition is met. • **1800**: An alarm is generated every 30 minutes once the alarm triggering condition is met. • **3600**: An alarm is generated every 60 minutes once the alarm triggering condition is met. • **10800**: An alarm is generated every 3 hours once the alarm triggering condition is met. • **21600**: An alarm is generated every 6 hours once the alarm triggering condition is met. • **43200**: An alarm is generated every 12 hours once the alarm triggering condition is met. • **86000**: An alarm is generated once every day once the alarm triggering condition is met.

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Table 6-96 AdditionalInfo

Parameter	Type	Description
resource_id	String	**Definition**: Resource ID corresponding to the alarm record, for example, **22d98f6c-16d2-4c2d-b424-50e79d82838f**. **Value range**: The value can contain a maximum of 128 characters.
resource_name	String	**Definition**: Resource name corresponding to the alarm record, for example, **ECS-Test01**. **Value range**: The value can contain a maximum of 128 characters.
event_id	String	**Definition**: ID of the event in the alarm record, for example, **ev16031292300990kKN8p17J**. **Value range**: The value can contain a maximum of 24 characters.

Table 6-97 alarm_actions

Parameter	Type	Description
type	String	**Definition**: Notification type. **Value range**: Enumerated value. The value can be **notification** (SMN notifications), **contact** (account contacts), **contactGroup** (notification groups), or **autoscaling** (AS notifications). **autoscaling** is used only in AS and is not recommended. **groupwatch**, **ecsRecovery**, and **iecAction** are no longer used.

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Parameter	Type	Description
notification_list	Array of strings	**Definition**: Recipients to be notified of the alarm status changes. The value of **topicUrn** can be obtained from SMN. For details, see section "Querying Topics".

Table 6-98 ok_actions

Parameter	Type	Description
type	String	**Definition**: Notification type. **Value range**: Enumerated value. The value can be **notification** (SMN notifications), **contact** (account contacts), **contactGroup** (notification groups), or **autoscaling** (AS notifications). **autoscaling** is used only in AS and is not recommended. **groupwatch**, **ecsRecovery**, and **iecAction** are no longer used.
notification_list	Array of strings	**Definition**: Recipients to be notified of the alarm status changes. The value of **topicUrn** can be obtained from SMN. For details, see section "Querying Topics".

Table 6-99 DataPointInfo

Parameter	Type	Description
time	String	**Definition**: UTC time when the resource monitoring data of the alarm record is reported. **Value range**: The value can contain 1 to 64 characters.

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Parameter	Type	Description
value	Double	**Definition**: Resource monitoring data of the alarm record at the time point, for example, **7.019**. **Value range**: The value is an integer from **0** to **1.7976931348623157e+308**.

Status code: 400

Table 6-100 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-101 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Alarm records whose **alarm_name** is **alarm-test01**, and **from** and **to** are **2022-02-10T10:05:46+08:00**.

```
/v2/{project_id}/alarm-histories?
limit=10&offset=0&from=2022-02-10T10:05:46+08:00&to=2022-02-10T12:05:46+08:00&alarm_name=alarm-test01
```

Example Responses

Status code: 200

Query succeeded.

```
{
  "alarm_histories" : [ {
    "alarm_id" : "al1604473987569z6n6nkpm1",
    "record_id" : "ah1655717086704DEnBrJ999",
    "name" : "TC_CES_FunctionBaseline_Alarm_008",
    "metric" : {
      "namespace" : "SYS.VPC",
      "dimensions" : [ {
        "name" : "bandwidth_id",
        "value" : "79a9cc0c-f626-4f15-bf99-a1f184107f88"
      } ],
      "metric_name" : "downstream_bandwidth"
    },
    "condition" : {
      "period" : 1,
      "filter" : "average",
      "comparison_operator" : ">=",
      "value" : 0,
      "count" : 3,
      "suppress_duration" : 3600
    },
    "level" : 2,
    "type" : "ALL_INSTANCE",
    "begin_time" : "2024-02-11T05:48:08+08:00",
    "end_time" : "2024-02-11T08:48:08+08:00",
    "last_alarm_time" : "2024-02-11T06:48:08+08:00",
    "alarm_recovery_time" : "2024-02-11T08:48:08+08:00",
    "action_enabled" : false,
    "alarm_actions" : [ ],
    "ok_actions" : [ ],
    "status" : "alarm",
    "data_points" : [ {
      "time" : "2022-06-22T16:38:02+08:00",
      "value" : 873.1507798960139
    }, {
      "time" : "2022-06-22T16:28:02+08:00",
      "value" : 883.1507798960139
    }, {
      "time" : "2022-06-22T16:18:02+08:00",
      "value" : 873.4
    } ],
    "additional_info" : {
      "resource_id" : "",
      "resource_name" : "",
      "event_id" : ""
    }
  } ],
  "count" : 103
}
```


Status Codes

Status Code	Description
200	Query succeeded.
400	Parameter verification failed.
500	Internal system error.

Error Codes

See **Error Codes**.

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6.6 Alarm Templates

6.6.1 Creating a Custom Alarm Template

Function

This API is used to create a custom alarm template.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:customAlarmTemplates:create	Write	-	g:EnterpriseProjectId	-	-

URI

POST /v2/{project_id}/alarm-templates

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Table 6-102 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Request Parameters

Table 6-103 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	**Definition** User token. **Constraints** N/A **Range** 1 to 16,384 characters **Default Value** N/A

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Table 6-104 Request body parameters

Parameter	Mandatory	Type	Description
template_name	Yes	String	**Definition** Alarm template name. **Constraints** N/A **Range** The value allows 1 to 128 characters. It must start with a letter and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
template_type	No	Integer	**Definition** Custom alarm template type. **Constraints** N/A **Range** The value can be: • **0**: metric type • **2**: event type **Default Value** **0**
template_description	No	String	**Definition** Alarm template description. **Constraints** N/A **Range** [0,256] **Default Value** An empty string

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Parameter	Mandatory	Type	Description
is_overwrite	No	Boolean	**Definition** Whether to overwrite the existing alarm template with the same name. **Constraints** N/A **Range** A boolean value. • **true**: Overwrite the alarm template with the same name. • **false**: Create an alarm template instead of overwriting the alarm template with the same name. **Default Value** false
policies	Yes	Array of **Policies** objects	**Definition** Alarm policies in an alarm template. **Constraints** A maximum of 1000 policies can be configured.

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Table 6-105 Policies

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Service Namespaces**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
dimension_name	No	String	**Definition** Resource dimension. **Constraints** The **DimensionName** field of the event alarm template is empty. **Range** The value must start with a letter. Each dimension allows a maximum of 32 characters and can only contain digits, letters, underscores (_), and hyphens (-). Multiple dimensions are separated by commas (,). A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios and **instance_id,disk** for multi-dimension scenarios. **Default Value** N/A

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Parameter	Mandatory	Type	Description
metric_name	Yes	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A
extra_info	No	**MetricExtraInfo** object	**Definition** Additional information about the alarm policy. **Constraints** N/A

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Parameter	Mandatory	Type	Description
period	Yes	Integer	**Definition** Interval (seconds) for checking whether the alarm rule conditions are met. **Constraints** N/A **Range** The value can be: • **0**: default value. This value can be used for event alarms. • **1**: original metric period. For example, if the original period of an RDS metric is 60s, the metric data is collected and calculated every 60s. • **300**: The metric data is collected and calculated every 5 minutes. • **1200**: The metric data is collected and calculated every 20 minutes. • **3600**: The metric data is collected and calculated every hour. • **14400**: The metric data is collected and calculated every 4 hours. • **86400**: The metric data is collected and calculated every day. **Default Value** N/A
filter	Yes	String	**Definition** Aggregation method. **Constraints** N/A **Range** **average**, **variance**, **min**, **max**, or **sum** **Default Value** N/A

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Parameter	Mandatory	Type	Description
comparison_operator	Yes	String	**Definition** Threshold symbol. **Constraints** The threshold symbols for metric alarms are >, >=, <, <=, =, !=, cycle_decrease, cycle_increase, and cycle_wave. The threshold symbols for event alarms are >, >=, <, <=, =, and !=. **Range** The value can be **>**, **<**, **>=**, **<=**, **=**, **!=**, **cycle_decrease**, **cycle_increase**, or **cycle_wave**. **cycle_decrease** indicates the decrease relative to the last period; **cycle_increase** indicates the increase relative to the last period; **cycle_wave** indicates the increase or decrease relative to the last period. **Default Value** N/A
value	No	Number	**Definition** Alarm threshold. **Constraints** If there is only one threshold, **value** and **alarm_level** are used in pairs. If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. **Range** N/A **Default Value** N/A

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Parameter	Mandatory	Type	Description
hierarchical_value	No	HierarchicalValue object	**Definition** Multi-level alarm threshold. **Constraints** If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. When you create or modify an alarm rule, you can set only one threshold in the following scenarios: 1. The alarm type is **Metric** and the alarm policy is **Trigger an alarm when all policies are met**. 2. The alarm type is **Event**.
unit	No	String	**Definition** Data unit. The value can contain a maximum of 32 characters. **Constraints** N/A **Range** [0,32] **Default Value** N/A
selected_unit	No	String	**Definition** The metric unit you selected. It is used for subsequent metric data display and calculation. **Constraints** N/A **Range** [0,64] **Default Value** N/A

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Parameter	Mandatory	Type	Description
count	Yes	Integer	**Definition** Number of times that the alarm triggering conditions are met. **Constraints** N/A **Range** For event alarms, the value ranges from **1** to **180**. For metric and website alarms, the value can be **1**, **2**, **3**, **4**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, or **180**. **Default Value** N/A
type	No	String	**Definition** Alarm policy type. This API has been deprecated. **Constraints** N/A **Range** The value can only be **auto**. **Default Value** N/A
alarm_level	No	Integer	**Definition** Alarm severity. **Constraints** N/A **Range** The value can be: • **1**: critical • **2**: major • **3**: minor • **4**: warning **Default Value** N/A

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Parameter	Mandatory	Type	Description
suppress_duration	No	Integer	**Definition** Alarm suppression interval, in seconds. **Constraints** N/A **Range** The value can be: • **0**: In the immediate triggering scenario, **0** indicates that the alarm is not suppressed. In the accumulated triggering scenario, **0** indicates that the alarm is generated only once. • **300**: An alarm is generated every 5 minutes once the alarm triggering condition is met. • **600**: An alarm is generated every 10 minutes once the alarm triggering condition is met. • **900**: An alarm is generated every 15 minutes once the alarm triggering condition is met. • **1800**: An alarm is generated every 30 minutes once the alarm triggering condition is met. • **3600**: An alarm is generated every 60 minutes once the alarm triggering condition is met. • **10800**: An alarm is generated every 3 hours once the alarm triggering condition is met. • **21600**: An alarm is generated every 6 hours after the alarm triggering condition is met. • **43200**: An alarm is generated every 12 hours

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Parameter	Mandatory	Type	Description
			once the alarm triggering condition is met. • **86000**: An alarm is generated once every day once the alarm triggering condition is met. **Default Value** N/A

Table 6-106 MetricExtraInfo

Parameter	Mandatory	Type	Description
origin_metric_name	Yes	String	**Definition** Original metric name. **Constraints** N/A **Range** 0 to 4,096 characters **Default Value** N/A
metric_prefix	No	String	**Definition** Metric name prefix. **Constraints** N/A **Range** 0 to 4,096 characters **Default Value** N/A
custom_proc_name	No	String	**Definition** Name of a process. **Constraints** N/A **Range** [0,250] **Default Value** N/A

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Parameter	Mandatory	Type	Description
metric_type	No	String	**Definition** Metric type. **Constraints** N/A **Range** 0 to 32 characters **Default Value** N/A

Table 6-107 HierarchicalValue

Parameter	Mandatory	Type	Description
critical	No	Double	**Definition** Threshold for critical alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
major	No	Double	**Definition** Threshold for major alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

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Parameter	Mandatory	Type	Description
minor	No	Double	**Definition** Threshold for minor alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
info	No	Double	**Definition** Threshold for warnings. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

Response Parameters

Status code: 201

Table 6-108 Response body parameters

Parameter	Type	Description
template_id	String	**Definition** Alarm template ID. **Constraints** N/A **Range** The value starts with **at** and allows 2 to 64 characters. It can only contain letters and digits. **Default Value** N/A
overwrite_result	**OverwriteResultResp** object	**Definition** Whether to overwrite an existing template with the same name.

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Table 6-109 OverwriteResultResp

Parameter	Type	Description
success_ids	String	**Definition**: ID of the template that is overwritten. **Range**: 2 to 64 characters
failed_ids	String	**Definition**: ID of the template that is not overwritten. **Range**: 2 to 64 characters

Status code: 400

Table 6-110 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-111 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-112 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.

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Parameter	Type	Description
request_id	String	Request ID.

Status code: 500

Table 6-113 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Creating a custom alarm template whose **template_name** is **my_template**, **count** is **2**, **suppress_duration** is **300**, and **alarm_level** is **2**.

```
{
  "template_name" : "my_template",
  "template_description" : "hello world",
  "policies" : [ {
    "namespace" : "SYS.ECS",
    "dimension_name" : "instance_id",
    "metric_name" : "cpu_util",
    "period" : 300,
    "filter" : "sum",
    "comparison_operator" : ">",
    "value" : 2,
    "unit" : "bit/s",
    "count" : 2,
    "alarm_level" : 2,
    "suppress_duration" : 300
  } ]
}
```

Example Responses

Status code: 201

Created

```
{
  "template_id" : "at1628592157541dB1klWgY6"
}
```

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Status Codes

Status Code	Description
201	Created
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.6.2 Deleting Custom Alarm Templates in Batches

Function

This API is used to delete custom alarm templates in batches.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:customAlarmTemplates:delete	Write	-	g:EnterpriseProjectId	-	-

URI

POST /v2/{project_id}/alarm-templates/batch-delete

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Table 6-114 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 6-115 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Tenant token.

Table 6-116 Request body parameters

Parameter	Mandatory	Type	Description
template_ids	Yes	Array of strings	IDs of alarm templates to be deleted in batches. Alarm templates that are not associated with alarm rules can be deleted in batches. For alarm templates that are associated with alarm rules, you can delete only one alarm template at a time. If you delete multiple ones, an exception will be returned.
delete_associate_alarm	Yes	Boolean	Whether alarm rules associated with an alarm template will be deleted when you delete the alarm template. **true** indicates that the alarm rules will be deleted. **false** indicates that only the alarm template will be deleted.

Response Parameters

Status code: 200

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Table 6-117 Response body parameters

Parameter	Type	Description
template_ids	Array of strings	IDs of alarm templates that were deleted successfully.

Status code: 400

Table 6-118 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-119 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-120 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

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Table 6-121 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Deleting custom alarm templates in batches.

```
{
  "template_ids" : [ "at1628592157541dB1klWgY6" ],
  "delete_associate_alarm" : false
}
```

Example Responses

Status code: 200

IDs of alarm templates successfully deleted.

```
{
  "template_ids" : [ "at1628592157541dB1klWgY6" ]
}
```

Status Codes

Status Code	Description
200	IDs of alarm templates successfully deleted.
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.6.3 This API is used to modify a custom template.

Function

This API is used to modify a custom template.

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Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:customAlarmTemplates:put	Write	-	g:EnterpriseProjectId	-	-

URI

PUT /v2/{project_id}/alarm-templates/{template_id}

Table 6-122 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
template_id	Yes	String	ID of an alarm template.

Request Parameters

Table 6-123 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Tenant token.

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Table 6-124 Request body parameters

Parameter	Mandatory	Type	Description
template_name	Yes	String	**Definition** Alarm template name. **Constraints** N/A **Range** The value allows 1 to 128 characters. It must start with a letter and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
template_type	No	Integer	Type of a custom alarm template. **0** indicates an alarm template for metrics. **2** indicates an alarm template for events.
template_description	No	String	**Definition** Alarm template description. **Constraints** N/A **Range** [0,256] **Default Value** An empty string
policies	Yes	Array of **Policies** objects	Alarm policies in an alarm template.

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Table 6-125 Policies

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Service Namespaces**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
dimension_name	No	String	**Definition** Resource dimension. **Constraints** The **DimensionName** field of the event alarm template is empty. **Range** The value must start with a letter. Each dimension allows a maximum of 32 characters and can only contain digits, letters, underscores (_), and hyphens (-). Multiple dimensions are separated by commas (,). A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios and **instance_id,disk** for multi-dimension scenarios. **Default Value** N/A

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Parameter	Mandatory	Type	Description
metric_name	Yes	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A
extra_info	No	**MetricExtraInfo** object	**Definition** Additional information about the alarm policy. **Constraints** N/A

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Parameter	Mandatory	Type	Description
period	Yes	Integer	**Definition** Interval (seconds) for checking whether the alarm rule conditions are met. **Constraints** N/A **Range** The value can be: • **0**: default value. This value can be used for event alarms. • **1**: original metric period. For example, if the original period of an RDS metric is 60s, the metric data is collected and calculated every 60s. • **300**: The metric data is collected and calculated every 5 minutes. • **1200**: The metric data is collected and calculated every 20 minutes. • **3600**: The metric data is collected and calculated every hour. • **14400**: The metric data is collected and calculated every 4 hours. • **86400**: The metric data is collected and calculated every day. **Default Value** N/A
filter	Yes	String	**Definition** Aggregation method. **Constraints** N/A **Range** **average**, **variance**, **min**, **max**, or **sum** **Default Value** N/A

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Parameter	Mandatory	Type	Description
comparison_operator	Yes	String	**Definition** Threshold symbol. **Constraints** The threshold symbols for metric alarms are >, >=, <, <=, =, !=, cycle_decrease, cycle_increase, and cycle_wave. The threshold symbols for event alarms are >, >=, <, <=, =, and !=. **Range** The value can be **>**, **<**, **>=**, **<=**, **=**, **!=**, **cycle_decrease**, **cycle_increase**, or **cycle_wave**. **cycle_decrease** indicates the decrease relative to the last period; **cycle_increase** indicates the increase relative to the last period; **cycle_wave** indicates the increase or decrease relative to the last period. **Default Value** N/A
value	No	Number	**Definition** Alarm threshold. **Constraints** If there is only one threshold, **value** and **alarm_level** are used in pairs. If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. **Range** N/A **Default Value** N/A

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Parameter	Mandatory	Type	Description
hierarchical_value	No	HierarchicalValue object	**Definition** Multi-level alarm threshold. **Constraints** If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. When you create or modify an alarm rule, you can set only one threshold in the following scenarios: 1. The alarm type is **Metric** and the alarm policy is **Trigger an alarm when all policies are met**. 2. The alarm type is **Event**.
unit	No	String	**Definition** Data unit. The value can contain a maximum of 32 characters. **Constraints** N/A **Range** [0,32] **Default Value** N/A
selected_unit	No	String	**Definition** The metric unit you selected. It is used for subsequent metric data display and calculation. **Constraints** N/A **Range** [0,64] **Default Value** N/A

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Parameter	Mandatory	Type	Description
count	Yes	Integer	**Definition** Number of times that the alarm triggering conditions are met. **Constraints** N/A **Range** For event alarms, the value ranges from **1** to **180**. For metric and website alarms, the value can be **1**, **2**, **3**, **4**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, or **180**. **Default Value** N/A
type	No	String	**Definition** Alarm policy type. This API has been deprecated. **Constraints** N/A **Range** The value can only be **auto**. **Default Value** N/A
alarm_level	No	Integer	**Definition** Alarm severity. **Constraints** N/A **Range** The value can be: • **1**: critical • **2**: major • **3**: minor • **4**: warning **Default Value** N/A

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Parameter	Mandatory	Type	Description
suppress_duration	No	Integer	**Definition** Alarm suppression interval, in seconds. **Constraints** N/A **Range** The value can be: • **0**: In the immediate triggering scenario, **0** indicates that the alarm is not suppressed. In the accumulated triggering scenario, **0** indicates that the alarm is generated only once. • **300**: An alarm is generated every 5 minutes once the alarm triggering condition is met. • **600**: An alarm is generated every 10 minutes once the alarm triggering condition is met. • **900**: An alarm is generated every 15 minutes once the alarm triggering condition is met. • **1800**: An alarm is generated every 30 minutes once the alarm triggering condition is met. • **3600**: An alarm is generated every 60 minutes once the alarm triggering condition is met. • **10800**: An alarm is generated every 3 hours once the alarm triggering condition is met. • **21600**: An alarm is generated every 6 hours after the alarm triggering condition is met. • **43200**: An alarm is generated every 12 hours

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Parameter	Mandatory	Type	Description
			once the alarm triggering condition is met. • **86000**: An alarm is generated once every day once the alarm triggering condition is met. **Default Value** N/A

Table 6-126 MetricExtraInfo

Parameter	Mandatory	Type	Description
origin_metric_name	Yes	String	**Definition** Original metric name. **Constraints** N/A **Range** 0 to 4,096 characters **Default Value** N/A
metric_prefix	No	String	**Definition** Metric name prefix. **Constraints** N/A **Range** 0 to 4,096 characters **Default Value** N/A
custom_proc_name	No	String	**Definition** Name of a process. **Constraints** N/A **Range** [0,250] **Default Value** N/A

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Parameter	Mandatory	Type	Description
metric_type	No	String	**Definition** Metric type. **Constraints** N/A **Range** 0 to 32 characters **Default Value** N/A

Table 6-127 HierarchicalValue

Parameter	Mandatory	Type	Description
critical	No	Double	**Definition** Threshold for critical alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
major	No	Double	**Definition** Threshold for major alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

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Parameter	Mandatory	Type	Description
minor	No	Double	**Definition** Threshold for minor alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
info	No	Double	**Definition** Threshold for warnings. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

Response Parameters

Status code: 204

No Content

Status code: 400

Table 6-128 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-129 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-130 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-131 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-132 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Example Requests

Modifying a custom template whose **template_name** is **my_template**.

```
{
  "template_name" : "my_template",
  "template_description" : "hello world",
  "policies" : [ {
    "namespace" : "SYS.ECS",
    "dimension_name" : "instance_id",
    "metric_name" : "cpu_util",
    "period" : 300,
    "filter" : "sum",
    "comparison_operator" : ">",
    "value" : 2,
    "unit" : "bit/s",
    "count" : 2,
    "alarm_level" : 2,
    "suppress_duration" : 300
  } ]
}
```

Example Responses

None

Status Codes

Status Code	Description
204	No Content
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
404	Resource not found.
500	Internal system error.

Error Codes

See **Error Codes**.

6.6.4 Querying Alarm Templates

Function

This API is used to query the alarm template list.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

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Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:customAlarmTemplates:list	List	-	g:EnterpriseProjectId	-	-

URI

GET /v2/{project_id}/alarm-templates

Table 6-133 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Table 6-134 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Start position for pagination query, indicating the sequence number of the data record where the query starts. The default value is **0**.
limit	No	Integer	Maximum number of query results. The value ranges from **1** to **100** (default).
namespace	No	String	Namespace of a service. For details about the namespace of each service, see **Namespace**.

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Parameter	Mandatory	Type	Description
dim_name	No	String	Resource dimension, which must start with a letter. A dimension allows a maximum of 32 characters and can only contain digits, letters, underscores (_), and hyphens (-). Multiple dimensions are separated by commas (,).
template_type	No	String	Alarm template type. **system** indicates default alarm templates for metrics, **custom** indicates the custom alarm templates for metrics, **system_event** indicates default event templates, **custom_event** indicates the custom event templates, and **system_custom_event** indicates all default and custom event templates. If this parameter is not specified, all metric templates are returned.
template_name	No	String	Name of an alarm template. The name must start with a letter and can contain 1 to 128 characters, including letters, digits, underscores (_), and hyphens (-). Fuzzy match is supported.
product_name	No	String	Alarm templates can be queried by product name. Generally, the product name format is **Service namespace,First-level dimension of the service**, for example, **SYS.ECS,instance_id**.

Request Parameters

Table 6-135 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Tenant token.

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Response Parameters

Status code: 200

Table 6-136 Response body parameters

Parameter	Type	Description
alarm_templates	Array of **AlarmTemplates** objects	Alarm template list.
count	Integer	Total number of alarm templates.

Table 6-137 AlarmTemplates

Parameter	Type	Description
template_id	String	ID of an alarm template. The ID starts with **at** and is followed by up to 64 characters, including letters and digits.
template_name	String	**Definition** Alarm template name. **Constraints** N/A **Range** The value allows 1 to 128 characters. It must start with a letter and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
template_type	String	Type of an alarm template. **custom** indicates custom alarm templates, and **system** indicates default alarm templates.
create_time	String	Time when an alarm template was created.

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Parameter	Type	Description
template_description	String	**Definition** Alarm template description. **Constraints** N/A **Range** [0,256] **Default Value** An empty string

Status code: 400

Table 6-138 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-139 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-140 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.

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Parameter	Type	Description
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-141 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Querying alarm templates.

```
/v2/{project_id}/alarm-templates?offset=0&limit=100
```

Example Responses

Status code: 200

OK

```
{
  "alarm_templates" : [ {
    "template_id" : "at1628592157541dB1klWgY6",
    "template_name" : "my_template",
    "template_type" : "custom",
    "create_time" : "2006-01-02T15:04:05.000Z",
    "template_description" : "hello world"
  } ],
  "count" : 100
}
```

Status Codes

Status Code	Description
200	OK
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.

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Status Code	Description
500	Internal system error.

Error Codes

See **Error Codes**.

6.6.5 Querying Details of an Alarm Template

Function

This API is used to query details of an alarm template.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:customAlarmTemplates:get	Read	-	g:EnterpriseProjectId	• ces:customAlarmTemplates:list	-

URI

GET /v2/{project_id}/alarm-templates/{template_id}

Table 6-142 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Parameter	Mandatory	Type	Description
template_id	Yes	String	ID of an alarm template. The ID starts with **at** and is followed by up to 64 characters, including letters and digits.

Request Parameters

Table 6-143 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Tenant token.

Response Parameters

Status code: 200

Table 6-144 Response body parameters

Parameter	Type	Description
template_id	String	ID of an alarm template. The ID starts with **at** and is followed by up to 64 characters, including letters and digits.
template_name	String	**Definition** Alarm template name. **Constraints** N/A **Range** The value allows 1 to 128 characters. It must start with a letter and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
template_type	String	Type of an alarm template. **custom** indicates custom alarm templates, and **system** indicates default alarm templates.
create_time	String	Time when an alarm template was created.

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Parameter	Type	Description
template_description	String	**Definition** Alarm template description. **Constraints** N/A **Range** [0,256] **Default Value** An empty string
policies	Array of **AlarmTemplatePolicies** objects	Alarm policies in an alarm template.

Table 6-145 AlarmTemplatePolicies

Parameter	Type	Description
namespace	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Service Namespaces**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A

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Parameter	Type	Description
dimension_name	String	**Definition** Resource dimension. **Constraints** The **DimensionName** field of the event alarm template is empty. **Range** The value must start with a letter. Each dimension allows a maximum of 32 characters and can only contain digits, letters, underscores (_), and hyphens (-). Multiple dimensions are separated by commas (,). A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios and **instance_id,disk** for multi-dimension scenarios. **Default Value** N/A
metric_name	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A
period	Integer	Interval (seconds) for checking whether the alarm rule conditions are met.
filter	String	Data rollup method.

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Parameter	Type	Description
comparison_operator	String	**Definition** Threshold symbol. **Constraints** The threshold symbols for metric alarms are >, >=, <, <=, =, !=, cycle_decrease, cycle_increase, and cycle_wave. The threshold symbols for event alarms are >, >=, <, <=, =, and !=. **Range** The value can be **>**, **<**, **>=**, **<=**, **=**, **!=**, **cycle_decrease**, **cycle_increase**, or **cycle_wave**. **cycle_decrease** indicates the decrease relative to the last period; **cycle_increase** indicates the increase relative to the last period; **cycle_wave** indicates the increase or decrease relative to the last period. **Default Value** N/A
value	Number	Alarm threshold. If there is only one threshold, **value** and **alarm_level** are used in pairs. If there are both **hierarchical_value** and **value**, **hierarchical_value** prevails.
hierarchical_value	**HierarchicalValue** object	**Definition** Multi-level alarm threshold. **Constraints** If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. When you create or modify an alarm rule, you can set only one threshold in the following scenarios: 1. The alarm type is **Metric** and the alarm policy is **Trigger an alarm when all policies are met**. 2. The alarm type is **Event**.
unit	String	Data unit. The value can contain up to 32 characters.

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Parameter	Type	Description
count	Integer	**Definition** Number of times that the alarm triggering conditions are met. **Constraints** N/A **Range** For event alarms, the value ranges from **1** to **180**. For metric and website alarms, the value can be **1**, **2**, **3**, **4**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, or **180**. **Default Value** N/A
alarm_level	Integer	**Definition** Alarm severity. **Constraints** N/A **Range** The value can be: ● **1**: critical ● **2**: major ● **3**: minor ● **4**: warning **Default Value** N/A
suppress_duration	Integer	Alarm suppression period, in seconds. When the period is **0**, only one alarm is generated.
selected_unit	String	**Definition** The metric unit you selected. It is used for subsequent metric data display and calculation. **Constraints** N/A **Range** [0,64] **Default Value** N/A

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Table 6-146 HierarchicalValue

Parameter	Type	Description
critical	Double	**Definition** Threshold for critical alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
major	Double	**Definition** Threshold for major alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
minor	Double	**Definition** Threshold for minor alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
info	Double	**Definition** Threshold for warnings. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

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Status code: 400

Table 6-147 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-148 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-149 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-150 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.

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Parameter	Type	Description
request_id	String	Request ID.

Status code: 500

Table 6-151 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Querying details of an alarm template.

```
/v2/{project_id}/alarm-templates/{template_id}
```

Example Responses

Status code: 200

OK

```
{
  "template_id" : "at1628592157541dB1klWgY6",
  "template_name" : "my_template",
  "template_type" : "custom",
  "create_time" : "2006-01-02T15:04:05.000Z",
  "template_description" : "hello world",
  "policies" : [ {
    "namespace" : "SYS.ECS",
    "dimension_name" : "instance_id",
    "metric_name" : "cpu_util",
    "period" : 300,
    "filter" : "sum",
    "comparison_operator" : ">",
    "value" : 2,
    "hierarchical_value" : {
      "major" : 85
    },
    "unit" : "bit/s",
    "selected_unit" : "",
    "count" : 2,
    "alarm_level" : 2,
    "suppress_duration" : 300
  } ]
}
```

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Status Codes

Status Code	Description
200	OK
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
404	Resource not found.
500	Internal system error.

Error Codes

See **Error Codes**.

6.7 Alarm Rules Associated with an Alarm Template

6.7.1 Querying Alarm Rules Associated with an Alarm Template

Function

This API is used to query alarm rules associated with the alarm template.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:customAlarmTemplates:listAssociatedAlarms	List	-	g:EnterpriseProjectId	-	-

URI

GET /v2/{project_id}/alarm-templates/{template_id}/association-alarms

Table 6-152 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
template_id	Yes	String	ID of an alarm template. The ID starts with **at** and is followed by up to 64 characters, including letters and digits.

Table 6-153 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Start position for pagination query, indicating the sequence number of the data record where the query starts. The default value is **0**.
limit	No	Integer	Maximum number of query results. The value ranges from **1** to **100** (default).

Request Parameters

Table 6-154 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Tenant token.

Response Parameters

Status code: 200

Table 6-155 Response body parameters

Parameter	Type	Description
alarms	Array of **alarms** objects	Alarm rule list.
count	Integer	Total number of alarm rules.

Table 6-156 alarms

Parameter	Type	Description
alarm_id	String	Alarm rule ID.
name	String	Alarm rule name.
description	String	Description of the alarm rule.

Status code: 400

Table 6-157 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-158 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Status code: 403

Table 6-159 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-160 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Query alarm rules associated with an alarm template.

```
/v2/{project_id}/alarm-templates/{template_id}/association-alarms
```

Example Responses

Status code: 200

OK

```
{
  "alarms" : [ {
    "alarm_id" : "al12345678901234567890",
    "name" : "test",
    "description" : "Alarm rule list."
  } ],
  "count" : 100
}
```

Status Codes

Status Code	Description
200	OK

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Status Code	Description
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.8 Resource Groups

6.8.1 Creating a Resource Group (Recommended)

Function

This API is used to create a resource group.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:resourceGroups:create	Write	-	g:EnterpriseProjectId	-	-

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URI

POST /v2/{project_id}/resource-groups

Table 6-161 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Request Parameters

Table 6-162 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	**Definition** User token. **Constraints** N/A **Range** 1 to 16,384 characters **Default Value** N/A

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Table 6-163 Request body parameters

Parameter	Mandatory	Type	Description
group_name	Yes	String	**Definition** Resource group name. **Constraints** N/A **Range** The value allows 1 to 128 characters. It can only contain letters, digits, hyphens (-), and underscores (_). **Default Value** N/A
enterprise_project_id	No	String	**Definition** ID of the enterprise project that a resource group belongs to. **Constraints** N/A **Range** The value can be **0** (default enterprise project ID) or consists of digits, letters, or hyphens (-). **Default Value** N/A

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Parameter	Mandatory	Type	Description
type	No	String	**Definition** Method for adding resources to a resource group. **Constraints** N/A **Range** The value can only be **EPS** (synchronizing resources from enterprise projects), **TAG** (dynamic tag matching), **NAME** (matching resources by instance name), or **COMB** (matching resources by multiple criteria). If this parameter is not specified, resources are manually added. **Default Value** N/A
tags	No	Array of **ResourceGroupTagRelation** objects	**Definition** Associated tags during dynamic tag matching. **Constraints** This parameter is mandatory when **type** is set to **TAG**. A maximum of 50 tags are allowed.
association_ep_ids	No	Array of strings	**Definition** ID of the enterprise project from which resources in the resource group come. **Constraints** This parameter is mandatory when **type** is set to **EPS**. The value can contain a maximum of 50 enterprise project IDs.

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Parameter	Mandatory	Type	Description
providers	No	String	**Definition** Cloud service name in the **dcs,ecs** format. For details about supported cloud services (**providers**), see section "Supported Services and Resource Types" in Config API Reference. **Constraints** N/A **Range** [0,512] **Default Value** N/A
enterprise_project_id_and_tags	No	Array of **EnterpriseProjectIdAndTags** objects	**Definition** Parameter for matching resources by enterprise project or tag. **Constraints** A maximum of 50 conditions are allowed.
resources	No	Array of **Resource** objects	**Definition** Resource details when resources are manually added. **Constraints** Max. 1,000 resources
product_resources	No	Array of **ProductResource** objects	**Definition** Resource details when the resource level is cloud product and resources are manually added. **Constraints** A maximum of 50 resources are allowed.

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Parameter	Mandatory	Type	Description
instances	No	Array of **Instance** objects	**Definition** Parameter transferred for matching resources by instance name. **Constraints** This parameter is mandatory when **type** is set to **NAME**. The value can contain a maximum of 50 instances.
product_names	No	String	Name of a cloud product when the resource level is cloud product. Generally, the value format is *Service namespace,First-level dimension of the service*, for example, **SYS.ECS,instance_id**. Multiple cloud products are separated by semicolons (;), for example, **SERVICE.BMS,instance_id;SYS.ECS,instance_id**. **Constraints**: N/A **Range** [0,10,240] **Default Value** N/A
resource_level	No	String	**Definition** Resource level, which indicates the effective resource scope. If you select **Cloud product** for **Resource Level**, resources from the selected cloud product and its dimensions will be added to the resource group. If you select **Specific dimension** for **Resource Level**, only resources from the specific sub-dimension will be added. **Constraints** N/A **Range** **product**: cloud product • **dimension**: specific dimension **Default Value** N/A

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Parameter	Mandatory	Type	Description
comb_relation	No	CombRelation object	**Definition** Matching resources by combined conditions. **Constraints** N/A

Table 6-164 ResourceGroupTagRelation

Parameter	Mandatory	Type	Description
key	Yes	String	**Definition** TMS tag key specifications. **Constraints** N/A **Range** [1,128] **Default Value** N/A
operator	No	String	**Definition** Tag operator, which indicates the relationship between the tag key and value. **Constraints** N/A **Range** • **include**: include • **prefix**: prefix • **suffix**: suffix • **notInclude**: not included • **equal**: equal. If **operator** is **equal** and **value** is an empty string, all tag values of the key are matched. • **all**: all **Default Value** N/A

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Parameter	Mandatory	Type	Description
value	No	String	**Definition** TMS tag value specifications. **Constraints** N/A **Range** [0,255] **Default Value** N/A

Table 6-165 EnterpriseProjectIdAndTags

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	**Definition** Enterprise project ID. **Constraints** N/A **Range** The value allows 1 to 128 characters and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
tag	No	**ResourceGroupTagRelation** object	**Definition** Tag matching rule. **Constraints** N/A

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Table 6-166 Resource

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespace**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
dimensions	Yes	Array of **ResourceDimension** objects	**Definition** Resource dimension information. **Constraints** A maximum of four dimensions are allowed.

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Table 6-167 ResourceDimension

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Dimension of a resource. For example, the dimension of an ECS can be **instance_id**. A maximum of four dimensions are supported. For the metric dimension of each resource, see **Service Metric Dimensions**. **Constraints** N/A **Range** The value starts with a letter and allows 1 to 32 characters. It can contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
value	Yes	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

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Table 6-168 ProductResource

Parameter	Mandatory	Type	Description
product_name	Yes	String	**Definition** Cloud product that the resource belongs to. Generally, the value format is *Service namespace,First-level dimension name of the service*, for example, **SYS.ECS,instance_id**. **Constraints** N/A **Range** [0,128] **Default Value** N/A
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespace**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
product_instances	Yes	Array of **ProductInstance** objects	**Definition** Product instance details. **Constraints** N/A **Range** Max. 1,000 instances

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Table 6-169 ProductInstance

Parameter	Mandatory	Type	Description
first_dimension_name	Yes	String	**Definition** First-level dimension of the resource. For example, the dimension of an ECS is **instance_id**. **Constraints** N/A **Range** Resource dimension. The value must start with a letter and allows a maximum of 32 characters. It can only contain digits, letters, underscores (_), and hyphens (-). **Default Value** N/A
first_dimension_value	Yes	String	**Definition** First-level dimension value of the resource, which is the resource ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A
resource_name	Yes	String	**Definition** Resource name. **Constraints** N/A **Range** 1 to 128 characters **Default Value** N/A

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Table 6-170 Instance

Parameter	Mandatory	Type	Description
product_name	Yes	String	**Definition** Cloud product name. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A
logical_operator	Yes	String	**Definition** Logical operator. **Constraints** N/A **Range** **ALL**: All conditions are matched. **ANY**: Any condition is matched. **Default Value** N/A
instance_names	Yes	Array of **ResourceNameItem** objects	**Definition** Parameter array for matching resources by resource name. **Constraints** Max. 10 names

Table 6-171 ResourceNameItem

Parameter	Mandatory	Type	Description
resource_name	No	String	**Definition** Resource name condition value. **Constraints** N/A **Range** [0,128] **Default Value** N/A

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Parameter	Mandatory	Type	Description
operator	Yes	String	**Definition** Instance operator, which indicates the operation relationship between the actual resource name and the resource name condition value. **Constraints** N/A **Range** • **include**: include • **prefix**: prefix • **suffix**: suffix • **notInclude**: not included • **equal**: equal • **all**: all **Default Value** N/A
resource_name_is_ignore_case	No	Boolean	**Definition** Resource name (case insensitive). **Constraints** N/A **Range** • **true**: case insensitive • **false**: case sensitive **Default Value** false

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Table 6-172 CombRelation

Parameter	Mandatory	Type	Description
logical_operator	Yes	String	**Definition** Logical operator. **Constraints** N/A **Range** • **ALL**: All conditions are matched. • **ANY**: Any condition is matched. **Default Value** N/A
conditions	Yes	Array of **Condition** objects	**Definition** Combined matching conditions for resource groups. **Constraints** A maximum of 50 conditions are allowed.

Table 6-173 Condition

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	**Definition** Enterprise project ID. **Constraints** N/A **Range** The value can be **0** (ID of the default enterprise project) or consists of digits, letters, or hyphens (-). **Default Value** N/A
instance_name	No	**CombResourceName** object	Matching resources by resource name.
tag	No	**ResourceGroupTagRelation** object	**Definition** Tag matching rule. **Constraints** N/A

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Table 6-174 CombResourceName

Parameter	Mandatory	Type	Description
resource_name	No	String	**Definition** Resource name condition value. **Constraints** N/A **Range** 1 to 128 characters **Default Value** N/A
operator	Yes	String	**Definition** Instance operator, which indicates the operation relationship between the actual resource name and the resource name condition value. **Constraints** N/A **Range** • **include**: include • **prefix**: prefix • **suffix**: suffix • **notInclude**: not included • **equal**: equal **Default Value** N/A

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Parameter	Mandatory	Type	Description
resource_name_is_ignore_case	No	Boolean	**Definition** Resource name (case insensitive). **Constraints** N/A **Range** • **true**: The name is case insensitive. • **false**: The name is case sensitive. **Default Value** false

Response Parameters

Status code: 200

Table 6-175 Response body parameters

Parameter	Type	Description
group_id	String	**Definition** Resource group ID. **Constraints** N/A **Range** The value starts with rg and is followed by 22 characters that may include letters, digits, or a combination of both. It can contain 2 to 24 characters. **Default Value** N/A

Status code: 400

Table 6-176 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.

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Parameter	Type	Description
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-177 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-178 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-179 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Creating a resource group whose **group _name** is **rg_test** and **type** is **TAG**.

```
{
  "group_name" : "rg_test",
  "enterprise_project_id" : "0",
  "type" : "TAG",
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  } ],
  "association_ep_ids" : [ "d61d4705-5658-42f5-8e0c-70eb34d17b02" ]
}
```

Example Responses

Status code: 200

Created

```
{
  "group_id" : "rg0123456789xxx"
}
```

Status Codes

Status Code	Description
200	Created
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.8.2 This API is used to delete resource groups in batches.

Function

This API is used to delete resource groups in batches.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

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- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:resourceGroups:delete	Write	-	g:EnterpriseProjectId	-	-

URI

POST /v2/{project_id}/resource-groups/batch-delete

Table 6-180 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 6-181 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Tenant token.

Table 6-182 Request body parameters

Parameter	Mandatory	Type	Description
group_ids	Yes	Array of strings	IDs of resource groups to be deleted in batches.

Response Parameters

Status code: 200

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Table 6-183 Response body parameters

Parameter	Type	Description
group_ids	Array of strings	IDs of resource groups that were successfully deleted.

Status code: 400

Table 6-184 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-185 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-186 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-187 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Batch deleting resource groups.

```
{
  "group_ids" : [ "rg0123456789xxxx" ]
}
```

Example Responses

Status code: 200

IDs of resource groups that were successfully deleted.

```
{
  "group_ids" : [ "rg0123456789xxxx" ]
}
```

Status Codes

Status Code	Description
200	IDs of resource groups that were successfully deleted.
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.8.3 Modifying a Resource Group

Function

This API is used to modify a resource group.

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Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:resourceGroups:put	Write	-	g:EnterpriseProjectId	-	-

URI

PUT /v2/{project_id}/resource-groups/{group_id}

Table 6-188 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
group_id	Yes	String	Resource group ID, which starts with **rg** and is followed by 22 characters, including letters and digits.

Request Parameters

Table 6-189 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Tenant token.

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Table 6-190 Request body parameters

Parameter	Mandatory	Type	Description
group_name	Yes	String	Resource group name. The value can contain up to 128 characters, including letters, digits, hyphens (-), and underscores (_).
tags	No	Array of **ResourceGroupTagRelation** objects	Associated tag during dynamic tag matching. This parameter must be specified when **type** is set to **TAG**.
enterprise_project_id_and_tags	No	Array of **EnterpriseProjectIdAndTags** objects	Parameter transferred when **Matching Resource By** is set to **Multiple criteria**.
extend_relation_ids	No	Array of strings	Parameter transferred for matching resources by enterprise project when **Add Resources** is set to **Automatically**.
instances	No	Array of **Instance** objects	Parameter transferred for matching resources by instance name.
product_names	No	String	Value of a cloud product when the resource level is changed to cloud product. Generally, the value format is *Service namespace,First-level dimension of the service*, for example, **SYS.ECS,instance_id**. Multiple cloud products are separated by semicolons (;), for example, **SERVICE.BMS,instance_id;SYS.ECS,instance_id**.
comb_relation	No	**CombRelation** object	**Definition** Matching resources by combined conditions. **Constraints** N/A

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Table 6-191 ResourceGroupTagRelation

Parameter	Mandatory	Type	Description
key	Yes	String	**Definition** TMS tag key specifications. **Constraints** N/A **Range** [1,128] **Default Value** N/A
operator	No	String	**Definition** Tag operator, which indicates the relationship between the tag key and value. **Constraints** N/A **Range** • **include**: include • **prefix**: prefix • **suffix**: suffix • **notInclude**: not included • **equal**: equal. If **operator** is **equal** and **value** is an empty string, all tag values of the key are matched. • **all**: all **Default Value** N/A
value	No	String	**Definition** TMS tag value specifications. **Constraints** N/A **Range** [0,255] **Default Value** N/A

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Table 6-192 EnterpriseProjectIdAndTags

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	**Definition** Enterprise project ID. **Constraints** N/A **Range** The value allows 1 to 128 characters and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
tag	No	**ResourceGroupTagRelation** object	**Definition** Tag matching rule. **Constraints** N/A

Table 6-193 Instance

Parameter	Mandatory	Type	Description
product_name	Yes	String	**Definition** Cloud product name. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A

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Parameter	Mandatory	Type	Description
logical_operator	Yes	String	**Definition** Logical operator. **Constraints** N/A **Range** **ALL**: All conditions are matched. **ANY**: Any condition is matched. **Default Value** N/A
instance_names	Yes	Array of **ResourceNameItem** objects	**Definition** Parameter array for matching resources by resource name. **Constraints** Max. 10 names

Table 6-194 ResourceNameItem

Parameter	Mandatory	Type	Description
resource_name	No	String	**Definition** Resource name condition value. **Constraints** N/A **Range** [0,128] **Default Value** N/A

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Parameter	Mandatory	Type	Description
operator	Yes	String	**Definition** Instance operator, which indicates the operation relationship between the actual resource name and the resource name condition value. **Constraints** N/A **Range** • **include**: include • **prefix**: prefix • **suffix**: suffix • **notInclude**: not included • **equal**: equal • **all**: all **Default Value** N/A
resource_name_is_ignore_case	No	Boolean	**Definition** Resource name (case insensitive). **Constraints** N/A **Range** • **true**: case insensitive • **false**: case sensitive **Default Value** false

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Table 6-195 CombRelation

Parameter	Mandatory	Type	Description
logical_operator	Yes	String	**Definition** Logical operator. **Constraints** N/A **Range** • **ALL**: All conditions are matched. • **ANY**: Any condition is matched. **Default Value** N/A
conditions	Yes	Array of **Condition** objects	**Definition** Combined matching conditions for resource groups. **Constraints** A maximum of 50 conditions are allowed.

Table 6-196 Condition

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	**Definition** Enterprise project ID. **Constraints** N/A **Range** The value can be **0** (ID of the default enterprise project) or consists of digits, letters, or hyphens (-). **Default Value** N/A
instance_name	No	**CombResourceName** object	Matching resources by resource name.
tag	No	**ResourceGroupTagRelation** object	**Definition** Tag matching rule. **Constraints** N/A

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Table 6-197 CombResourceName

Parameter	Mandatory	Type	Description
resource_name	No	String	**Definition** Resource name condition value. **Constraints** N/A **Range** 1 to 128 characters **Default Value** N/A
operator	Yes	String	**Definition** Instance operator, which indicates the operation relationship between the actual resource name and the resource name condition value. **Constraints** N/A **Range** • **include**: include • **prefix**: prefix • **suffix**: suffix • **notInclude**: not included • **equal**: equal **Default Value** N/A

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Parameter	Mandatory	Type	Description
resource_name_is_ignore_case	No	Boolean	**Definition** Resource name (case insensitive). **Constraints** N/A **Range** • **true**: The name is case insensitive. • **false**: The name is case sensitive. **Default Value** false

Response Parameters

Status code: 204

No Content

Status code: 400

Table 6-198 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-199 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Status code: 403

Table 6-200 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-201 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-202 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Modify the resource group named **rg_test**.

```
{
  "group_name" : "test",
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  } ]
}
```

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Example Responses

None

Status Codes

Status Code	Description
204	No Content
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
404	Resource not found.
500	Internal system error.

Error Codes

See **Error Codes**.

6.8.4 Querying Details of a Resource Group

Function

This API is used to query details of a resource group.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:resourceGroups:get	Read	-	g:EnterpriseProjectId	-	-

URI

GET /v2/{project_id}/resource-groups/{group_id}

Table 6-203 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
group_id	Yes	String	Resource group ID, which starts with **rg** and is followed by 22 characters, including letters and digits.

Request Parameters

Table 6-204 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Tenant token.

Response Parameters

Status code: 200

Table 6-205 Response body parameters

Parameter	Type	Description
group_name	String	Resource group name.
group_id	String	Resource group ID, which starts with **rg** and is followed by 22 characters, including letters and digits.
create_time	String	Time when a resource group was created.

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Parameter	Type	Description
enterprise_project_id	String	ID of the enterprise project that a resource group belongs to.
type	String	Resource adding/matching mode. The value can only be EPS (matching enterprise projects), TAG (matching tags), NAME (matching instance names), COMB (combination matching), or Manual (manual adding).
association_ep_ids	Array of strings	ID of the enterprise project from which resources in the resource group come. This parameter is mandatory when **type** is set to **EPS**.
tags	Array of **ResourceGroupTagRelation** objects	Specified tag rule when the resource matching rule is tag matching.
instances	Array of **Instance** objects	Parameter transferred for matching resources by instance name.
comb_relation	**CombRelation** object	**Definition** Matching resources by combined conditions. **Constraints** N/A
related_ep_ids	Array of strings	List of specified enterprise projects when the resource matching rule is enterprise project matching.
enterprise_project_id_and_tags	Array of **EnterpriseProjectIdAndTags** objects	Parameter for matching resources by enterprise project or tag.
status	String	Metric alarm status. The value can be health (alarming), unhealthy (triggered), or no_alarm_rule (no alarm rule is set).
event_status	String	Event alarm status. The value can be health (alarming), unhealthy (triggered), or no_alarm_rule (no alarm rule is set).
resource_statistics	**resource_statistics** object	Resource quantity statistics.

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Parameter	Type	Description
resource_level	String	**dimension** indicates the sub-dimension, and **product** indicates the cloud product.
product_names	String	Value of a cloud product when the resource level is cloud product. Generally, the value consists of the service namespace and the first-level dimension name of the service, for example, SYS.ECS,instance_id. Use semicolons (;) to separate multiple cloud products, for example, "SERVICE.BMS,instance_id;SYS.ECS,instance_id".
ep_resource_statistics	Array of **EpResourceStatistics** objects	Status of resources associated with each enterprise project

Table 6-206 ResourceGroupTagRelation

Parameter	Type	Description
key	String	**Definition** TMS tag key specifications. **Constraints** N/A **Range** [1,128] **Default Value** N/A

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Parameter	Type	Description
operator	String	**Definition** Tag operator, which indicates the relationship between the tag key and value. **Constraints** N/A **Range** • **include**: include • **prefix**: prefix • **suffix**: suffix • **notInclude**: not included • **equal**: equal. If **operator** is **equal** and **value** is an empty string, all tag values of the key are matched. • **all**: all **Default Value** N/A
value	String	**Definition** TMS tag value specifications. **Constraints** N/A **Range** [0,255] **Default Value** N/A

Table 6-207 Instance

Parameter	Type	Description
product_name	String	**Definition** Cloud product name. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A

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Parameter	Type	Description
logical_operator	String	**Definition** Logical operator. **Constraints** N/A **Range** **ALL**: All conditions are matched. **ANY**: Any condition is matched. **Default Value** N/A
instance_names	Array of **ResourceNameItem** objects	**Definition** Parameter array for matching resources by resource name. **Constraints** Max. 10 names

Table 6-208 ResourceNameItem

Parameter	Type	Description
resource_name	String	**Definition** Resource name condition value. **Constraints** N/A **Range** [0,128] **Default Value** N/A

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Parameter	Type	Description
operator	String	**Definition** Instance operator, which indicates the operation relationship between the actual resource name and the resource name condition value. **Constraints** N/A **Range** • **include**: include • **prefix**: prefix • **suffix**: suffix • **notInclude**: not included • **equal**: equal • **all**: all **Default Value** N/A
resource_name_is_ignore_case	Boolean	**Definition** Resource name (case insensitive). **Constraints** N/A **Range** • **true**: case insensitive • **false**: case sensitive **Default Value** false

Table 6-209 CombRelation

Parameter	Type	Description
logical_operator	String	**Definition** Logical operator. **Constraints** N/A **Range** • **ALL**: All conditions are matched. • **ANY**: Any condition is matched. **Default Value** N/A

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Parameter	Type	Description
conditions	Array of **Condition** objects	**Definition** Combined matching conditions for resource groups. **Constraints** A maximum of 50 conditions are allowed.

Table 6-210 Condition

Parameter	Type	Description
enterprise_project_id	String	**Definition** Enterprise project ID. **Constraints** N/A **Range** The value can be **0** (ID of the default enterprise project) or consists of digits, letters, or hyphens (-). **Default Value** N/A
instance_name	**CombResourceName** object	Matching resources by resource name.
tag	**ResourceGroupTagRelation** object	**Definition** Tag matching rule. **Constraints** N/A

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Table 6-211 CombResourceName

Parameter	Type	Description
resource_name	String	**Definition** Resource name condition value. **Constraints** N/A **Range** 1 to 128 characters **Default Value** N/A
operator	String	**Definition** Instance operator, which indicates the operation relationship between the actual resource name and the resource name condition value. **Constraints** N/A **Range** • **include**: include • **prefix**: prefix • **suffix**: suffix • **notInclude**: not included • **equal**: equal **Default Value** N/A
resource_name_is_ignore_case	Boolean	**Definition** Resource name (case insensitive). **Constraints** N/A **Range** • **true**: The name is case insensitive. • **false**: The name is case sensitive. **Default Value** false

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Table 6-212 EnterpriseProjectIdAndTags

Parameter	Type	Description
enterprise_project_id	String	**Definition** Enterprise project ID. **Constraints** N/A **Range** The value allows 1 to 128 characters and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
tag	**ResourceGroupTagRelation** object	**Definition** Tag matching rule. **Constraints** N/A

Table 6-213 resource_statistics

Parameter	Type	Description
unhealthy	Integer	Number of resources in the alarm
total	Integer	Total number of resources.
event_unhealthy	Integer	Number of triggered resources
namespaces	Integer	Resource Types

Table 6-214 EpResourceStatistics

Parameter	Type	Description
extend_relation_id	String	Enterprise project ID
unhealthy	Integer	Number of resources in the alarm
total	Integer	Total number of resources.
event_unhealthy	Integer	Number of triggered resources
namespaces	Integer	Resource Types

Status code: 400

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Table 6-215 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-216 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-217 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-218 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Status code: 500

Table 6-219 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Query details of a resource group.

```
/v2/{project_id}/resource-groups/{group_id}
```

Example Responses

Status code: 200

OK

```
{
  "group_name" : "band",
  "type" : "TAG",
  "tags" : [ {
    "key" : "Resource",
    "value" : "VPC"
  }, {
    "key" : "Usage",
    "value" : "Tmp"
  } ],
  "create_time" : "2006-01-02T15:04:05.000Z",
  "group_id" : "rg0123456789xxxx",
  "enterprise_project_id" : "0"
}
```

Status Codes

Status Code	Description
200	OK
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
404	Resource not found.
500	Internal system error.

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Error Codes

See **Error Codes**.

6.8.5 Querying Resource Groups

Function

This API is used to query resource groups.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:resourceGroups:list	List	-	g:EnterpriseProjectId	• ces:resourceGroups:get	-

URI

GET /v2/{project_id}/resource-groups

Table 6-220 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Table 6-221 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of the enterprise project that a resource group belongs to.
group_name	No	String	Resource group name. Fuzzy search is supported.
group_id	No	String	Resource group ID, which starts with **rg** and is followed by 22 characters, including letters and digits.
offset	No	Integer	Start position for pagination query, indicating the sequence number of the data record where the query starts. The default value is **0**.
limit	No	Integer	Number of items on each page during pagination query. The value ranges from **1** to **100** (default).
type	No	String	Method for adding resources to a resource group. The value can only be **EPS** (synchronizing resources from enterprise projects), **TAG** (dynamic tag matching), **Manual** (manually adding resources), COMB (automatically adding resources – matching by multiple criteria), or **NAME** (fuzzy matching by resource name). If this parameter is not specified, all resource groups are queried.

Request Parameters

Table 6-222 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Tenant token.

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Response Parameters

Status code: 200

Table 6-223 Response body parameters

Parameter	Type	Description
count	Integer	Total number of resource groups.
resource_groups	Array of **OneResourceGroupResp** objects	Resource group list.

Table 6-224 OneResourceGroupResp

Parameter	Type	Description
group_name	String	Resource group name.
group_id	String	Resource group ID, which starts with **rg** and is followed by 22 characters, including letters and digits.
create_time	String	Time when a resource group was created.
enterprise_project_id	String	ID of the enterprise project that a resource group belongs to.
type	String	Resource adding/matching mode. The value can only be EPS (matching enterprise projects), TAG (matching tags), NAME (matching instance names), COMB (combination matching), or Manual (manual adding).
status	String	Metric alarm status. The value can be health (alarming), unhealthy (triggered), or no_alarm_rule (no alarm rule is set).
event_status	String	Event alarm status. The value can be health (alarming), unhealthy (triggered), or no_alarm_rule (no alarm rule is set).
resource_statistics	**resource_statistics** object	Resource quantity statistics.
related_ep_ids	Array of strings	List of specified enterprise projects when the resource matching rule is enterprise project matching.

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Parameter	Type	Description
association_alarm_templates	Array of AssociationAlarmTemplate objects	List of associated alarm templates.

Table 6-225 resource_statistics

Parameter	Type	Description
unhealthy	Integer	Number of resources in the alarm
total	Integer	Total number of resources.
event_unhealthy	Integer	Number of triggered resources
namespaces	Integer	Resource Types

Table 6-226 AssociationAlarmTemplate

Parameter	Type	Description
template_id	String	ID of an alarm template.
template_name	String	Alarm template name

Status code: 400

Table 6-227 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-228 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.

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Parameter	Type	Description
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-229 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-230 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Query resource groups.

```
/v2/{project_id}/resource-groups?offset=0&limit=100
```

Example Responses

Status code: 200

OK

```
{
  "resource_groups" : [ {
    "group_name" : "group1",
    "create_time" : "2006-01-02T15:04:05.000Z",
    "group_id" : "rg0123456789xxxx",
    "enterprise_project_id" : "0",
    "type" : "Manual"
  }, {
```

```
  "group_name" : "band",
  "type" : "EPS",
  "create_time" : "2006-01-02T15:04:05.000Z",
  "group_id" : "rg0123456789xxxx",
  "enterprise_project_id" : "d61d4705-5658-42f5-8e0c-70eb34d17b02"
 }, {
  "group_name" : "group2",
  "type" : "TAG",
  "create_time" : "2006-01-02T15:04:05.000Z",
  "group_id" : "rg0123456789xxxx",
  "enterprise_project_id" : "0"
 } ],
 "count" : 3
}
```


Status Codes

Status Code	Description
200	OK
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.8.6 Asynchronously Associating a Resource Group with a Custom Alarm Template

Function

This API is used to submit an asynchronous task for batch associating a resource group with custom alarm templates. These tasks create or replace existing alarm rules. Each user can create up to 100 asynchronous tasks in the pending state. Each resource group allows only one pending task.

Constraints

This API is not supported in the following regions: AF-Cairo, CN North3, CN North-Ulanqab11, CN East2, CN East-Qingdao, CN South-Shenzhen, LA-Buenos Aires1, LA-Lima1, LA-Mexico City1, TR-Istanbul, CN North-Ulanqab201, CN Southwest-Guiyang-Qiche2, AP-Manila, and CN South-Guangzhou-InvitationOnly.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

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Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:resourceGroups:putAssociationAlarmTemplate	Write	-	g:EnterpriseProjectId	• ces:resourceGroups:put	-

URI

PUT /v2/{project_id}/resource-groups/{group_id}/alarm-templates/async-association

Table 6-231 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
group_id	Yes	String	Resource group ID, which starts with **rg** and is followed by 22 characters, including letters and digits.

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Request Parameters

Table 6-232 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-233 Request body parameters

Parameter	Mandatory	Type	Description
template_ids	Yes	Array of strings	Alarm template IDs. If the ID list is empty, the alarm rules created using the alarm templates associated with the resource group will be deleted.

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Parameter	Mandatory	Type	Description
notification_enabled	Yes	Boolean	**Definition** Whether to enable alarm notifications. **Constraints** N/A **Range** A boolean value. • **true**: enabled • **false**: disabled **Default Value** **true**
alarm_notifications	No	Array of **Notification** objects	Alarm notification list.
ok_notifications	No	Array of **Notification** objects	Alarm clearance notification list.
notification_begin_time	No	String	**Definition** Time when alarm notifications were enabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A
notification_end_time	No	String	**Definition** Time when alarm notifications were disabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A

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Parameter	Mandatory	Type	Description
effective_timezone	No	String	**Definition** Time zone, for example, **GMT-08:00**, **GMT+08:00**, or **GMT+0:00**. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A
enterprise_project_id	No	String	**Definition** Enterprise project ID. **Constraints** N/A **Range** Only lowercase letters, digits, and hyphens (-) are allowed. **Default Value** N/A
notification_manner	No	String	Notification mode, which can be **NOTIFICATION_GROUP** (notification groups), **TOPIC_SUBSCRIPTION** (topic subscriptions), or **NOTIFICATION_POLICY** (notification policies).
notification_policy_ids	No	Array of strings	Associated notification policy IDs.

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Table 6-234 Notification

Parameter	Mandatory	Type	Description
type	Yes	String	**Definition** Notification type. **Constraints** N/A **Range** The value can be: • **notification**: SMN notifications • **contact**: account contacts • **contactGroup**: notification groups • autoscaling: AS notifications. This value is used only for AS. • **groupwatch**: deprecated • **ecsRecovery**: deprecated • **iecAction**: This API has been deprecated and is not recommended. **Default Value** N/A

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Parameter	Mandatory	Type	Description
notification_list	Yes	Array of strings	**Definition** Recipients to be notified of the alarm status changes. The value of **topicUrn** can be obtained from SMN. For details, see section "Querying Topics". **Constraints** If **type** is set to **notification**, the value of **notificationList** cannot be left blank. If **type** is set to **autoscaling**, the value of **notification_list** must be left blank. If **notification_enabled** is set to **true**, you must specify either **alarm_notifications** or **ok_notifications**. If both **alarm_notifications** and **ok_notifications** are specified, their **notification_list** values must be the same. A maximum of 20 recipients are allowed.

Response Parameters

Status code: 200

Table 6-235 Response body parameters

Parameter	Type	Description
group_id	String	Resource group ID, which starts with **rg** and is followed by 22 characters, including letters and digits.
template_ids	Array of strings	IDs of associated alarm templates.

Status code: 400

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Table 6-236 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-237 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-238 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-239 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Status code: 500

Table 6-240 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
{
  "template_ids" : [ "at1628592157541dB1klWgY6", "at1628592157541dxcdfssfd" ],
  "notification_enabled" : false
}
```

Example Responses

Status code: 200

Response body returned after an asynchronous task for associating a resource group with alarm templates is delivered.

```
{
  "group_id" : "rg1619578505263QkW3b66yo",
  "template_ids" : [ "at1628592157541dB1klWgY6", "at1625452115254dB1kllll3" ]
}
```

Status Codes

Status Code	Description
200	Response body returned after an asynchronous task for associating a resource group with alarm templates is delivered.
400	Parameter verification failed.
401	Unauthenticated.
403	Authentication failed.
404	Resource not found.
500	Internal error.

Error Codes

See **Error Codes**.

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6.9 Resources in a Resource Group

6.9.1 Batch Adding Resources to a Resource Group

Function

This API is used to batch add resources to a resource group whose **type** is **Manual**.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:resourceGroups:addResources	Write	-	g:EnterpriseProjectId	• ces:resourceGroups:put	-

URI

POST /v2/{project_id}/resource-groups/{group_id}/resources/batch-create

Table 6-241 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Resource group ID, which starts with **rg** and is followed by 22 characters, including letters and digits.
project_id	Yes	String	Project ID.

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Request Parameters

Table 6-242 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Table 6-243 Request body parameters

Parameter	Mandatory	Type	Description
resources	No	Array of **Resource** objects	When the resource adding mode is manual creation and the resource level is sub-dimension, only the information about the new resource needs to be transferred when the resource is added to the resource group.
product_resources	No	Array of **ProductResource** objects	If the resource adding mode is manual creation and the resource level is cloud product, information about both existing and new resources needs to be transferred when resources are added to a resource group.

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Table 6-244 Resource

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespace**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
dimensions	Yes	Array of **ResourceDimension** objects	**Definition** Resource dimension information. **Constraints** A maximum of four dimensions are allowed.

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Table 6-245 ResourceDimension

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Dimension of a resource. For example, the dimension of an ECS can be **instance_id**. A maximum of four dimensions are supported. For the metric dimension of each resource, see **Service Metric Dimensions**. **Constraints** N/A **Range** The value starts with a letter and allows 1 to 32 characters. It can contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
value	Yes	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

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Table 6-246 ProductResource

Parameter	Mandatory	Type	Description
product_name	Yes	String	**Definition** Cloud product that the resource belongs to. Generally, the value format is *Service namespace,First-level dimension name of the service*, for example, **SYS.ECS,instance_id**. **Constraints** N/A **Range** [0,128] **Default Value** N/A
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespace**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
product_instances	Yes	Array of **ProductInstance** objects	**Definition** Product instance details. **Constraints** N/A **Range** Max. 1,000 instances

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Table 6-247 ProductInstance

Parameter	Mandatory	Type	Description
first_dimension_name	Yes	String	**Definition** First-level dimension of the resource. For example, the dimension of an ECS is **instance_id**. **Constraints** N/A **Range** Resource dimension. The value must start with a letter and allows a maximum of 32 characters. It can only contain digits, letters, underscores (_), and hyphens (-). **Default Value** N/A
first_dimension_value	Yes	String	**Definition** First-level dimension value of the resource, which is the resource ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A
resource_name	Yes	String	**Definition** Resource name. **Constraints** N/A **Range** 1 to 128 characters **Default Value** N/A

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Response Parameters

Status code: 200

Table 6-248 Response body parameters

Parameter	Type	Description
succeed_count	Integer	Number of resources that were added.

Status code: 400

Table 6-249 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-250 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-251 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Example Requests

Batch adding resources to a custom resource group.

```
{
  "resources" : [ {
    "namespace" : "SYS.ECS",
    "dimensions" : [ {
      "name" : "instace_id",
      "value" : "4270ff17-aba3-4138-89fa-820594c39755"
    } ]
  } ]
}
```

Example Responses

Status code: 200

Resources added.

```
{
  "succeed_count" : 4
}
```

Status Codes

Status Code	Description
200	Resources added.
400	Parameter verification failed.
404	Resource not found.
500	Internal system error.

Error Codes

See **Error Codes**.

6.9.2 Batch Deleting Resources from a Resource Group

Function

This API is used to batch delete resources from a resource group whose **type** is **Manual**.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

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Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:resourceGroups:deleteResources	Write	-	g:EnterpriseProjectId	• ces:resourceGroups:put	-

URI

POST /v2/{project_id}/resource-groups/{group_id}/resources/batch-delete

Table 6-252 Path Parameters

Parameter	Mandatory	Type	Description
group_id	Yes	String	Resource group ID, which starts with **rg** and is followed by 22 characters, including letters and digits.
project_id	Yes	String	Project ID.

Request Parameters

Table 6-253 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

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Table 6-254 Request body parameters

Parameter	Mandatory	Type	Description
resources	No	Array of **Resource** objects	When the resource adding mode is manual creation and the resource level is sub-dimension, only the information about the deleted resource needs to be transferred when the resource is deleted from the resource group.
product_resources	No	Array of **ProductResource** objects	When the resource adding mode is manual creation and the resource level is cloud product, only the information about the deleted resource needs to be transferred when the resource is deleted from the resource group.

Table 6-255 Resource

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespace**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A

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Parameter	Mandatory	Type	Description
dimensions	Yes	Array of **ResourceDimension** objects	**Definition** Resource dimension information. **Constraints** A maximum of four dimensions are allowed.

Table 6-256 ResourceDimension

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Dimension of a resource. For example, the dimension of an ECS can be **instance_id**. A maximum of four dimensions are supported. For the metric dimension of each resource, see **Service Metric Dimensions**. **Constraints** N/A **Range** The value starts with a letter and allows 1 to 32 characters. It can contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
value	Yes	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

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Table 6-257 ProductResource

Parameter	Mandatory	Type	Description
product_name	Yes	String	**Definition** Cloud product that the resource belongs to. Generally, the value format is *Service namespace,First-level dimension name of the service*, for example, **SYS.ECS,instance_id**. **Constraints** N/A **Range** [0,128] **Default Value** N/A
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespace**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
product_instances	Yes	Array of **ProductInstance** objects	**Definition** Product instance details. **Constraints** N/A **Range** Max. 1,000 instances

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Table 6-258 ProductInstance

Parameter	Mandatory	Type	Description
first_dimension_name	Yes	String	**Definition** First-level dimension of the resource. For example, the dimension of an ECS is **instance_id**. **Constraints** N/A **Range** Resource dimension. The value must start with a letter and allows a maximum of 32 characters. It can only contain digits, letters, underscores (_), and hyphens (-). **Default Value** N/A
first_dimension_value	Yes	String	**Definition** First-level dimension value of the resource, which is the resource ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A
resource_name	Yes	String	**Definition** Resource name. **Constraints** N/A **Range** 1 to 128 characters **Default Value** N/A

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Response Parameters

Status code: 200

Table 6-259 Response body parameters

Parameter	Type	Description
succeed_count	Integer	Number of resources that were successfully deleted.

Status code: 400

Table 6-260 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-261 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-262 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Example Requests

Batch delete resources from a custom resource group.

```
{
  "resources" : [ {
    "namespace" : "SYS.ECS",
    "dimensions" : [ {
      "name" : "instace_id",
      "value" : "4270ff17-aba3-4138-89fa-820594c39755"
    } ]
  } ]
}
```

Example Responses

Status code: 200

Resources deleted.

```
{
  "succeed_count" : 4
}
```

Status Codes

Status Code	Description
200	Resources deleted.
400	Parameter verification failed.
404	Resource not found.
500	Internal system error.

Error Codes

See **Error Codes**.

6.9.3 Querying Resources of a Specified Dimension and a Specified Service Type in a Resource Group

Function

This API is used to query resources of a specified dimension for a specified resource type in a resource group.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

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Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:resourceGroups:getServiceResources	Read	-	g:EnterpriseProjectId	• ces:resourceGroups:get	-

URI

GET /v2/{project_id}/resource-groups/{group_id}/services/{service}/resources

Table 6-263 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
group_id	Yes	String	Resource group ID, which starts with **rg** and is followed by 22 characters, including letters and digits.
service	Yes	String	Service type, for example, **SYS.ECS**.

Table 6-264 Query Parameters

Parameter	Mandatory	Type	Description
dim_name	No	String	Resource dimension. Multiple dimensions are separated with commas (,) in alphabetical order.
limit	No	String	Number of items on each page during pagination query. The value ranges from **1** to **100** (default).

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Parameter	Mandatory	Type	Description
offset	No	Integer	Start position for pagination query, indicating the sequence number of the data record where the query starts. The default value is **0**.
status	No	String	Resource health status. The value can only be **health**, **unhealthy**, or **no_alarm_rule**. **health**: An alarm rule has been created for the resource and there is no alarm triggered. **unhealthy**: An alarm rule has been created for the resource and there are alarms triggered. **no_alarm_rule**: No alarm rule has been created for the resource.
dim_value	No	String	Resource dimension value. Fuzzy match is not supported. If a resource has multiple dimensions, you can specify one of them.
tag	No	String	Resource tag information. The format is *"[key]":"[value]"*, for example: **"ssss":"1111"**.
extend_relation_id	No	String	Enterprise project ID.
product_name	No	String	Cloud product of the resource group. Generally, the value format is *Service namespace,First-level dimension name of the service*, for example, **SYS.ECS,instance_id**.
resource_name	No	String	Resource name.

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Parameter	Mandatory	Type	Description
event_status	No	String	Resource health status. The value can only be **health**, **unhealthy**, or **no_alarm_rule**. **health**: An event alarm rule has been created for the resource and there is no alarm triggered. **unhealthy**: An event alarm rule has been created for the resource and there are alarms triggered. **no_alarm_rule**: No event alarm rule has been created for the resource.

Request Parameters

Table 6-265 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Tenant token.

Response Parameters

Status code: 200

Table 6-266 Response body parameters

Parameter	Type	Description
count	Integer	Total number of resources.
resources	Array of **GetResourceGroupResources** objects	Resources in a resource group.

Table 6-267 GetResourceGroupResources

Parameter	Type	Description
status	String	Metric alarm status. The value can be health (alarming), unhealthy (triggered), or no_alarm_rule (no alarm rule is set).

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Parameter	Type	Description
dimensions	Array of **ResourceDimension** objects	Resource dimension information.
tags	String	Resource tag information. The value is a JSON character string in the format of *key/value*, for example, **"{"sss":"aaa"}"**.
enterprise_project_id	String	Enterprise Project ID.
event_status	String	Event alarm status. The value can be health (alarming), unhealthy (triggered), or no_alarm_rule (no alarm rule is set).
resource_name	String	Resource name

Table 6-268 ResourceDimension

Parameter	Type	Description
name	String	**Definition** Dimension of a resource. For example, the dimension of an ECS can be **instance_id**. A maximum of four dimensions are supported. For the metric dimension of each resource, see **Service Metric Dimensions**. **Constraints** N/A **Range** The value starts with a letter and allows 1 to 32 characters. It can contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A

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Parameter	Type	Description
value	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

Status code: 400

Table 6-269 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-270 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

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Table 6-271 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-272 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-273 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

Query resources of a specified dimension for a specified resource type in a resource group.

```
'/v2/{project_id}/resource-groups/{group_id}/services/{service}/resources'
```

Example Responses

Status code: 200

OK

```
{
  "count" : 1000,
```

```
 "resources" : [ {
   "status" : "health",
   "dimensions" : [ {
     "name" : "instance_id",
     "value" : "4270ff17-aba3-4138-89fa-820594c39755"
   } ]
 } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
404	Resource not found.
500	Internal system error.

Error Codes

See **Error Codes**.

6.10 One-Click Monitoring

6.10.1 Enabling One-Click Monitoring

Function

This API is used to enable one-click monitoring.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:createOneClickAlarms	Write	-	g:EnterpriseProjectId	• ces:oneClickAlarms:post	-

URI

POST /v2/{project_id}/one-click-alarms

Table 6-274 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

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Request Parameters

Table 6-275 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-276 Request body parameters

Parameter	Mandatory	Type	Description
one_click_alarm_id	Yes	String	**Definition** One-click monitoring rule ID. **Constraints** N/A **Range** The value allows only letters and digits and can contain 1 to 64 characters. **Default Value** N/A

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Parameter	Mandatory	Type	Description
dimension_names	Yes	**DimensionNames** object	Dimensions in metric and event alarm rules that have one-click monitoring enabled. One-click monitoring must be enabled for at least one type of alarm rules.
notification_enabled	Yes	Boolean	**Definition** Whether to enable alarm notifications. **Constraints** N/A **Range** A boolean value. • **true**: enabled • **false**: disabled **Default Value** **true**
alarm_notifications	No	Array of **Notification** objects	**Definition** Notification group or topic subscription for alarm notifications. **Constraints** N/A **Range** A maximum of 10 notification groups or topic subscriptions **Default Value** N/A
ok_notifications	No	Array of **Notification** objects	**Definition** Information about the notification group or topic subscription when the alarm is cleared. **Constraints** N/A **Range** A maximum of 10 notification groups or topic subscriptions **Default Value** N/A

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Parameter	Mandatory	Type	Description
notification_begin_time	No	String	**Definition** Time when alarm notifications were enabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A
notification_end_time	No	String	**Definition** Time when alarm notifications were disabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A
effective_timezone	No	String	**Definition** Time zone, for example, **GMT-08:00**, **GMT+08:00**, or **GMT+0:00**. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A
notification_manner	No	String	Notification mode, which can be **NOTIFICATION_GROUP** (notification groups), **TOPIC_SUBSCRIPTION** (topic subscriptions), or **NOTIFICATION_POLICY** (notification policies).
notification_policy_ids	No	Array of strings	Associated notification policy IDs.

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Parameter	Mandatory	Type	Description
is_reset	No	Boolean	Whether to reset the default policy of one-click monitoring.
enabled_alarm_ids	No	Array of strings	**Definition** IDs of the one-click monitoring rules to be enabled. The default value is the IDs of all one-click monitoring rules of the service with one-click monitoring enabled. **Constraints** 0 to 50 array elements **Range** N/A **Default Value** All one-click monitoring rules of the service.
one_click_update_alarms	No	Array of **one_click_update_alarms** objects	Parameters required when alarm policies and notifications need to be modified at the same time when one-click monitoring is enabled. Currently, you can only modify the notification policies.

Table 6-277 DimensionNames

Parameter	Mandatory	Type	Description
metric	Yes	Array of strings	Dimensions in metric alarm rules that have one-click monitoring enabled. One-click monitoring are disabled by default for unspecified dimensions.
event	Yes	Array of strings	Dimensions in event alarm rules that have one-click monitoring enabled. One-click monitoring are disabled by default for unspecified dimensions. "" indicates enable one-click monitoring for all dimensions.

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Table 6-278 Notification

Parameter	Mandatory	Type	Description
type	Yes	String	**Definition** Notification type. **Constraints** N/A **Range** The value can be: • **notification**: SMN notifications • **contact**: account contacts • **contactGroup**: notification groups • autoscaling: AS notifications. This value is used only for AS. • **groupwatch**: deprecated • **ecsRecovery**: deprecated • **iecAction**: This API has been deprecated and is not recommended. **Default Value** N/A

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Parameter	Mandatory	Type	Description
notification_list	Yes	Array of strings	**Definition** Recipients to be notified of the alarm status changes. The value of **topicUrn** can be obtained from SMN. For details, see section "Querying Topics". **Constraints** If **type** is set to **notification**, the value of **notificationList** cannot be left blank. If **type** is set to **autoscaling**, the value of **notification_list** must be left blank. If **notification_enabled** is set to **true**, you must specify either **alarm_notifications** or **ok_notifications**. If both **alarm_notifications** and **ok_notifications** are specified, their **notification_list** values must be the same. A maximum of 20 recipients are allowed.

Table 6-279 one_click_update_alarms

Parameter	Mandatory	Type	Description
alarm_id	No	String	**Definition** Alarm rule ID. **Constraints** N/A **Range** The value starts with **al** and is followed by 22 characters that may include letters, digits, or a combination of both. **Default Value** N/A

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Parameter	Mandatory	Type	Description
name	No	String	**Definition** This field has been deprecated. Alarm name. **Constraints** N/A **Range** The value allows 1 to 128 characters and can only contain digits, letters, underscores (_), and hyphens (-). **Default Value** N/A
description	No	String	**Definition** This field has been deprecated. Alarm description. **Constraints** N/A **Range** 0 to 256 characters **Default Value** N/A
namespace	No	String	Namespace of a service. For details about the namespace of each service, see **Namespace**.
policies	No	Array of **Policy** objects	Alarm policies.
resources	No	Array<Array< **Dimension**>>	This field has been deprecated. Resource list. Associated resources can be obtained by calling the API for querying resources in an alarm rule.

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Parameter	Mandatory	Type	Description
type	No	String	**Definition** This field has been deprecated. Alarm rule type. **Constraints** N/A **Range** The value can be: • **ALL_INSTANCE**: alarms for all resources • **RESOURCE_GROUP**: alarms for resource groups • **MULTI_INSTANCE**: alarms for specified resources • **EVENT.SYS**: system event alarms • **EVENT.CUSTOM**: custom event alarms • **DNSHealthCheck**: health check alarms **Default Value** N/A
enabled	No	Boolean	**Definition** Whether to enable the alarm rule. **Constraints** N/A **Range** A boolean value. • **true**: enabled • **false**: disabled **Default Value** **true**

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Parameter	Mandatory	Type	Description
notification_enabled	No	Boolean	**Definition** Whether to enable alarm notifications. Whether to enable alarm notifications for one-click monitoring is determined by the outer-layer parameter **notification_enabled**. The inner-layer parameter is discarded. **Constraints** N/A **Range** A boolean value, which can be: • **true**: enable • **false**: disable **Default Value** true
alarm_notifications	No	Array of **Notification** objects	**Definition** Notification group or topic subscription for alarm notifications. Whether to enable alarm notifications for one-click monitoring is determined by the outer-layer parameter **alarm_notifications**. The inner-layer parameter is discarded. **Constraints** N/A **Range** A maximum of 10 notification groups or topic subscriptions can be configured. **Default Value** N/A

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Parameter	Mandatory	Type	Description
ok_notifications	No	Array of **Notification** objects	**Definition** Information about the notification group or topic subscription when the alarm is cleared. Whether to enable alarm notifications for one-click monitoring is determined by the outer-layer parameter **ok_notifications**. The inner-layer parameter is discarded. **Constraints** N/A **Range** A maximum of 10 notification groups or topic subscriptions can be configured. **Default Value** N/A
notification_begin_time	No	String	**Definition** Time when alarm notifications were enabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A
notification_end_time	No	String	**Definition** Time when alarm notifications were disabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A

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Parameter	Mandatory	Type	Description
notification_manner	No	String	**Definition** Notification method. **NOTIFICATION_POLICY** indicates notification policies, **NOTIFICATION_GROUP** indicates notification groups, and **TOPIC_SUBSCRIPTION** indicates topic subscriptions. Whether to enable alarm notifications for one-click monitoring is determined by the outer-layer parameter **notification_manner**. The inner-layer parameter is discarded. **Constraints** N/A **Range** The value can be **NOTIFICATION_POLICY**, **NOTIFICATION_GROUP**, or **TOPIC_SUBSCRIPTION**. It allows 1 to 64 characters. **Default Value** N/A
notification_policy_ids	No	Array of strings	**Definition** Associated notification policy IDs. Whether to enable alarm notifications for one-click monitoring is determined by the outer-layer parameter **notification_policy_ids**. The inner-layer parameter is discarded. **Constraints** N/A **Range** ^([a-z]|[A-Z]|[0-9]|-){2,64}$ The value contains 2 to 64 characters. **Default Value** N/A

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Table 6-280 Policy

Parameter	Mandatory	Type	Description
metric_name	Yes	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A

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Parameter	Mandatory	Type	Description
period	Yes	Integer	**Definition** Metric period, in seconds. For details about the original metric period for each cloud service, see **Supported Services**. **Constraints** N/A **Range** The value can be: • **0**: The alarm is triggered immediately for event scenarios only. • **1**: original metric period. For example, if the original period of an RDS metric is 60s, the metric data is collected and calculated every 60s. • **300**: The metric data is collected and calculated every 5 minutes. • **1200**: The metric data is collected and calculated every 20 minutes. • **3600**: The metric data is collected and calculated every hour. • **14400**: The metric data is collected and calculated every 4 hours. • **86400**: The metric data is collected and calculated every day. **Default Value** N/A

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Parameter	Mandatory	Type	Description
filter	Yes	String	**Definition** Aggregation method. **Constraints** N/A **Range** **average**, **variance**, **min**, **max**, or **sum** **Default Value** N/A
comparison_operator	Yes	String	**Definition** Threshold symbol. **Constraints** The threshold symbols for metric alarms are >, >=, <, <=, =, !=, cycle_decrease, cycle_increase, and cycle_wave. The threshold symbols for event alarms are >, >=, <, <=, =, and !=. **Range** The value can be **>**, **<**, **>=**, **<=**, **=**, **!=**, **cycle_decrease**, **cycle_increase**, or **cycle_wave**. **cycle_decrease** indicates the decrease relative to the last period; **cycle_increase** indicates the increase relative to the last period; **cycle_wave** indicates the increase or decrease relative to the last period. **Default Value** N/A

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Parameter	Mandatory	Type	Description
value	No	Number	**Definition** Alarm threshold. For specific thresholds, see the value range of each metric in the appendix. **Constraints** If there is only one threshold, **value** and **alarm_level** are used in pairs. If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. **Range** The value ranges from **-1.7976931348623157e+108** to **1.7976931348623157e+108**. **Default Value** N/A
hierarchical_value	No	**HierarchicalValue** object	**Definition** Multi-level alarm threshold. **Constraints** If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. When you create or modify an alarm rule, you can set only one threshold in the following scenarios: 1. The alarm type is **Metric** and the alarm policy is **Trigger an alarm when all policies are met**. 2. The alarm type is **Event**.
unit	No	String	**Definition** Data unit. **Constraints** N/A **Range** [0,32] **Default Value** N/A

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Parameter	Mandatory	Type	Description
count	Yes	Integer	**Definition** Number of times that the alarm triggering conditions are met. **Constraints** N/A **Range** For event alarms, the value ranges from **1** to **180**. For metric and website alarms, the value can be **1**, **2**, **3**, **4**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, or **180**. **Default Value** N/A

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Parameter	Mandatory	Type	Description
suppress_duration	No	Integer	**Definition** Alarm suppression duration, in seconds. This parameter corresponds to the last field in the alarm policy when you create an alarm rule. This field is used to mitigate frequent alarm occurrences. **Constraints** N/A **Range** The value can be: • **0**: In the immediate triggering scenario, **0** indicates that the alarm is not suppressed. In the accumulated triggering scenario, **0** indicates that the alarm is generated only once. • **300**: An alarm is generated every 5 minutes once the alarm triggering condition is met. • **600**: An alarm is generated every 10 minutes once the alarm triggering condition is met. • **900**: An alarm is generated every 15 minutes once the alarm triggering condition is met. • **1800**: An alarm is generated every 30 minutes once the alarm triggering condition is met. • **3600**: An alarm is generated every 60 minutes once the alarm triggering condition is met. • **10800**: An alarm is generated every 3 hours once the alarm triggering condition is met. • **21600**: An alarm is generated every 6 hours

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Parameter	Mandatory	Type	Description
			after the alarm triggering condition is met. • **43200**: An alarm is generated every 12 hours once the alarm triggering condition is met. • **86000**: An alarm is generated once every day once the alarm triggering condition is met. **Default Value** N/A
level	No	Integer	**Definition** Alarm severity. **Constraints** N/A **Range** The value can be: **1** (critical), ** 2** (major), **3** (minor), or **4** (warning) **Default Value** 2

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Parameter	Mandatory	Type	Description
namespace	No	String	**Definition** **namespace** and **dimension_name** need to be specified for cloud product-level rules. This is to specify the resources that the policies apply to. For details about the namespace of each service, see **Service Namespaces**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 0 to 32 characters. **Default Value** N/A
dimension_name	No	String	**Definition** Metric dimension name. For details, see **Service Dimension Names**. **namespace** and **dimension_name** need to be specified for cloud product-level rules. This is to specify the resources that the policies apply to. **Constraints** N/A **Range** A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios. **Default Value** N/A

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Parameter	Mandatory	Type	Description
enabled	No	Boolean	**Definition** Whether the alarm policy is enabled. The value can be **true** (enabled) or **false** (disabled). **Constraints** N/A **Range** N/A **Default Value** N/A

Table 6-281 HierarchicalValue

Parameter	Mandatory	Type	Description
critical	No	Double	**Definition** Threshold for critical alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
major	No	Double	**Definition** Threshold for major alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

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Parameter	Mandatory	Type	Description
minor	No	Double	**Definition** Threshold for minor alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
info	No	Double	**Definition** Threshold for warnings. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

Table 6-282 Dimension

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Dimension of the resource. For example, the dimension of an ECS is **instance_id**. For details about the metric dimension name of each service resource, see **Service Dimension Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A

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Parameter	Mandatory	Type	Description
value	No	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

Response Parameters

Status code: 201

Table 6-283 Response body parameters

Parameter	Type	Description
one_click_alarm_id	String	**Definition** One-click monitoring rule ID. **Constraints** N/A **Range** The value allows only letters and digits and can contain 1 to 64 characters. **Default Value** N/A

Status code: 400

Table 6-284 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Status code: 401

Table 6-285 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-286 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-287 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
/v2/{project_id}/one-click-alarms

{
  "one_click_alarm_id" : "o1234567890123456789012",
  "dimension_names" : {
    "metric" : [ "disk", "instance_id" ],
    "event" : [ "resource_id" ]
  },
  "notification_enabled" : true,
  "alarm_notifications" : [ {
    "type" : "notification",
    "notification_list" : [ "urn:smn:123" ]
```

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```
 } ],
 "ok_notifications" : [ {
   "type" : "notification",
   "notification_list" : [ "urn:smn:123" ]
 } ],
 "notification_begin_time" : "00:00",
 "notification_end_time" : "23:59",
 "notification_manner" : "NOTIFICATION_POLICY",
 "notification_policy_ids" : [ "np15563156337845e8A2Wv63" ]
}
```

Example Responses

Status code: 201

Created

```
{
 "one_click_alarm_id" : "o1234567890123456789012"
}
```

Status Codes

Status Code	Description
201	Created
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.10.2 Querying Services and Resources That Support One-Click Monitoring

Function

This API is used to query services and resources that support one-click monitoring.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

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- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:listOneClickAlarms	List	-	g:EnterpriseProjectId	• ces:oneClickAlarms:list	-

URI

GET /v2/{project_id}/one-click-alarms

Table 6-288 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

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Request Parameters

Table 6-289 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Response Parameters

Status code: 200

Table 6-290 Response body parameters

Parameter	Type	Description
one_click_alarms	Array of **one_click_alarms** objects	Services and resources that support one-click monitoring.

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Table 6-291 one_click_alarms

Parameter	Type	Description
one_click_alarm_id	String	**Definition** One-click monitoring rule ID. **Constraints** N/A **Range** The value allows only letters and digits and can contain 1 to 64 characters. **Default Value** N/A
namespace	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Service Namespaces**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
description	String	Supplementary information about one-click monitoring. The description can contain 0 to 256 characters and is left blank by default.
enabled	Boolean	Whether to enable one-click alarm reporting. true: enabled; false: disabled.

Status code: 400

Table 6-292 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.

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Parameter	Type	Description
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-293 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-294 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-295 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

None

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Example Responses

Status code: 200

OK

```
{
  "one_click_alarms" : [ {
    "one_click_alarm_id" : "o1234567890123456789012",
    "namespace" : "SYS.ECS",
    "description" : "hello world",
    "enabled" : true
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.10.3 Querying Alarm Rules of a Service in One-Click Monitoring

Function

This API is used to query alarm rules of a service in one-click monitoring.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:listOneClickAlarms	List	-	g:EnterpriseProjectId	• ces:oneClickAlarms:list	-

URI

GET /v2/{project_id}/one-click-alarms/{one_click_alarm_id}/alarms

Table 6-296 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
one_click_alarm_id	Yes	String	One-click monitoring ID for a service.

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Request Parameters

Table 6-297 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Response Parameters

Status code: 200

Table 6-298 Response body parameters

Parameter	Type	Description
alarms	Array of **alarms** objects	Alarm rule list.

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Table 6-299 alarms

Parameter	Type	Description
alarm_id	String	**Definition** Alarm rule ID. **Constraints** N/A **Range** The value starts with **al** and is followed by 22 characters that may include letters, digits, or a combination of both. **Default Value** N/A
name	String	**Definition** Alarm name. **Constraints** N/A **Range** The value allows 1 to 128 characters and can only contain digits, letters, underscores (_), and hyphens (-). **Default Value** N/A
description	String	**Definition** Alarm description. **Constraints** N/A **Range** [0,256] **Default Value** N/A

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Parameter	Type	Description
namespace	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Service Namespaces**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
policies	Array of **OneClickAlarmPolicy** objects	Alarm policies.
resources	Array of **ResourcesInListResp** objects	Resource list. Associated resources can be obtained by calling the API for querying resources in an alarm rule.
type	String	**Definition** Alarm rule type. **Constraints** N/A **Range** The value can be: • **ALL_INSTANCE**: alarms for all resources • **RESOURCE_GROUP**: alarms for resource groups • **MULTI_INSTANCE**: alarms for specified resources • **EVENT.SYS**: system event alarms • **EVENT.CUSTOM**: custom event alarms • **DNSHealthCheck**: health check alarms **Default Value** N/A

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Parameter	Type	Description
enabled	Boolean	**Definition** Whether to enable the alarm rule. **Constraints** N/A **Range** A boolean value. • **true**: enabled • **false**: disabled **Default Value** **true**
notification_enabled	Boolean	**Definition** Whether to enable alarm notifications. **Constraints** N/A **Range** A boolean value. • **true**: enabled • **false**: disabled **Default Value** **true**
alarm_notifications	Array of **Notification** objects	**Definition** Notification group or topic subscription for alarm notifications. **Constraints** N/A **Range** A maximum of 10 notification groups or topic subscriptions **Default Value** N/A

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Parameter	Type	Description
ok_notifications	Array of **Notification** objects	**Definition** Information about the notification group or topic subscription when the alarm is cleared. **Constraints** N/A **Range** A maximum of 10 notification groups or topic subscriptions **Default Value** N/A
notification_begin_time	String	**Definition** Time when alarm notifications were enabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A
notification_end_time	String	**Definition** Time when alarm notifications were disabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A

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Parameter	Type	Description
effective_timezone	String	**Definition** Time zone, for example, **GMT-08:00**, **GMT+08:00**, or **GMT+0:00**. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A
notification_manner	String	Notification mode, which can be **NOTIFICATION_GROUP** (notification groups), **TOPIC_SUBSCRIPTION** (topic subscriptions), or **NOTIFICATION_POLICY** (notification policies).
notification_policy_ids	Array of strings	Associated notification policy IDs.

Table 6-300 OneClickAlarmPolicy

Parameter	Type	Description
alarm_policy_id	String	Alarm policy ID.
metric_name	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A

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Parameter	Type	Description
period	Integer	**Definition** Interval (seconds) for checking whether the alarm rule conditions are met. **Constraints** N/A **Range** The value can be: • **0**: default value. This value can be used for event alarms. • **1**: original metric period. For example, if the original period of an RDS metric is 60s, the metric data is collected and calculated every 60s. • **300**: The metric data is collected and calculated every 5 minutes. • **1200**: The metric data is collected and calculated every 20 minutes. • **3600**: The metric data is collected and calculated every hour. • **14400**: The metric data is collected and calculated every 4 hours. • **86400**: The metric data is collected and calculated every day. **Default Value** N/A
filter	String	**Definition** Aggregation method. **Constraints** N/A **Range** **average**, **variance**, **min**, **max**, or **sum** **Default Value** N/A

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Parameter	Type	Description
comparison_operator	String	**Definition** Threshold symbol. **Constraints** The threshold symbols for metric alarms are >, >=, <, <=, =, !=, cycle_decrease, cycle_increase, and cycle_wave. The threshold symbols for event alarms are >, >=, <, <=, =, and !=. **Range** The value can be **>**, **<**, **>=**, **<=**, **=**, **!=**, **cycle_decrease**, **cycle_increase**, or **cycle_wave**. **cycle_decrease** indicates the decrease relative to the last period; **cycle_increase** indicates the increase relative to the last period; **cycle_wave** indicates the increase or decrease relative to the last period. **Default Value** N/A
value	Number	**Definition** Alarm threshold. For specific thresholds, see the value range of each metric in the appendix. **Constraints** If there is only one threshold, **value** and **alarm_level** are used in pairs. If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. **Range** The value ranges from **-1.7976931348623157e+108** to **1.7976931348623157e+108**. **Default Value** N/A

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Parameter	Type	Description
hierarchical_value	**HierarchicalValue** object	**Definition** Multi-level alarm threshold. **Constraints** If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. When you create or modify an alarm rule, you can set only one threshold in the following scenarios: 1. The alarm type is **Metric** and the alarm policy is **Trigger an alarm when all policies are met**. 2. The alarm type is **Event**.
unit	String	**Definition** Data unit. **Constraints** N/A **Range** [0,32] **Default Value** N/A
count	Integer	**Definition** Number of times that the alarm triggering conditions are met. **Constraints** N/A **Range** For event alarms, the value ranges from **1** to **180**. For metric and website alarms, the value can be **1**, **2**, **3**, **4**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, or **180**. **Default Value** N/A

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Parameter	Type	Description
suppress_duration	Integer	**Definition** Alarm suppression duration, in seconds. This parameter corresponds to the last field in the alarm policy when you create an alarm rule. This field is used to mitigate frequent alarm occurrences. **Constraints** N/A **Range** The value can be: • **0**: A metric alarm is generated only once. An event alarm is not suppressed in the immediate triggering scenario, and is generated only once in the accumulated triggering scenario. • **300**: An alarm is generated every 5 minutes once the alarm triggering condition is met. • **600**: An alarm is generated every 10 minutes once the alarm triggering condition is met. • **900**: An alarm is generated every 15 minutes once the alarm triggering condition is met. • **1800**: An alarm is generated every 30 minutes once the alarm triggering condition is met. • **3600**: An alarm is generated every 60 minutes once the alarm triggering condition is met. • **10800**: An alarm is generated every 3 hours once the alarm triggering condition is met. • **21600**: An alarm is generated every 6 hours once the alarm triggering condition is met. • **43200**: An alarm is generated every 12 hours once the alarm triggering condition is met. • **86000**: An alarm is generated once every day once the alarm triggering condition is met. **Default Value**

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Parameter	Type	Description
		N/A
level	Integer	**Definition** Alarm severity. **Constraints** N/A **Range** The value can be: **1** (critical), ** 2** (major), **3** (minor), or **4** (warning) **Default Value** 2
enabled	Boolean	Whether to enable one-click alarm reporting. true: enabled; false: disabled.
selected_unit	String	**Definition** The metric unit you selected. It is used for subsequent metric data display and calculation. **Constraints** N/A **Range** [0,64] **Default Value** N/A

Table 6-301 HierarchicalValue

Parameter	Type	Description
critical	Double	**Definition** Threshold for critical alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

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Parameter	Type	Description
major	Double	**Definition** Threshold for major alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
minor	Double	**Definition** Threshold for minor alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
info	Double	**Definition** Threshold for warnings. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

Table 6-302 ResourcesInListResp

Parameter	Type	Description
resource_group_id	String	**Definition** Resource group ID. This parameter is available when the monitoring scope is **Resource groups**. **Range** The value starts with **rg** and is followed by 22 characters of letters, digits, or a combination of both.

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Parameter	Type	Description
resource_group_name	String	**Definition** Resource group name. This parameter is available when the monitoring scope is **Resource groups**. **Range** 1 to 128 characters
dimensions	Array of **MetricDimensionResp** objects	**Definition** Dimension information.

Table 6-303 MetricDimensionResp

Parameter	Type	Description
name	String	**Definition** Metric dimension name. **Range** The value must start with a letter and can contain 1 to 32 characters.
value	String	**Definition** Metric dimension value. **Range** [0,256]

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Table 6-304 Notification

Parameter	Type	Description
type	String	**Definition** Notification type. **Constraints** N/A **Range** The value can be: • **notification**: SMN notifications • **contact**: account contacts • **contactGroup**: notification groups • autoscaling: AS notifications. This value is used only for AS. • **groupwatch**: deprecated • **ecsRecovery**: deprecated • **iecAction**: This API has been deprecated and is not recommended. **Default Value** N/A
notification_list	Array of strings	**Definition** Recipients to be notified of the alarm status changes. The value of **topicUrn** can be obtained from SMN. For details, see section "Querying Topics". **Constraints** If **type** is set to **notification**, the value of **notificationList** cannot be left blank. If **type** is set to **autoscaling**, the value of **notification_list** must be left blank. If **notification_enabled** is set to **true**, you must specify either **alarm_notifications** or **ok_notifications**. If both **alarm_notifications** and **ok_notifications** are specified, their **notification_list** values must be the same. A maximum of 20 recipients are allowed.

Status code: 400

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Table 6-305 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-306 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-307 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-308 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Example Requests

None

Example Responses

Status code: 200

OK


```
{
  "alarms" : [ {
    "alarm_id" : "al123232232341232132",
    "name" : "alarm1",
    "description" : "hello world",
    "namespace" : "SYS.ECS",
    "policies" : [ {
      "alarm_policy_id" : "alxdxxxdsw12321321",
      "metric_name" : "cpu_util",
      "period" : 0,
      "filter" : "max",
      "comparison_operator" : "",
      "value" : 1.7976931348623156E108,
      "unit" : "%",
      "count" : 100,
      "suppress_duration" : 0,
      "level" : 2,
      "enabled" : true
    } ],
    "resources" : [ {
      "dimensions" : [ {
        "name" : "string",
        "value" : "string"
      } ]
    } ],
    "type" : "EVENT.SYS",
    "enabled" : true,
    "notification_enabled" : true,
    "alarm_notifications" : [ {
      "type" : "notification",
      "notification_list" : [ "urn:smn:123" ]
    } ],
    "ok_notifications" : [ {
      "type" : "notification",
      "notification_list" : [ "urn:smn:123" ]
    } ],
    "notification_begin_time" : "00:00",
    "notification_end_time" : "23:59",
    "notification_manner" : "NOTIFICATION_POLICY",
    "notification_policy_ids" : [ "np15563156337845e8A2Wv63" ]
  } ]
}
```


Status Codes

Status Code	Description
200	OK
400	Parameter verification failed.
401	Not authenticated.

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Status Code	Description
403	Authentication failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.10.4 Batch Enabling or Disabling Alarm Rules for One Service in One-Click Monitoring

Function

This API is used to batch enable or disable alarm rules for one service that has one-click monitoring enabled.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:putOneClickAlarms	Write	-	g:EnterpriseProjectId	• ces:oneClickAlarms:put	-

URI

PUT /v2/{project_id}/one-click-alarms/{one_click_alarm_id}/alarm-rules/action

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Table 6-309 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
one_click_alarm_id	Yes	String	**Definition** One-click monitoring rule ID. **Constraints** N/A **Range** The value allows only letters and digits and can contain 1 to 64 characters. **Default Value** N/A

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Request Parameters

Table 6-310 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-311 Request body parameters

Parameter	Mandatory	Type	Description
alarm_ids	Yes	Array of strings	**Definition** IDs of alarm rules to be enabled or disabled in batches. **Constraints** At least one and a maximum of 100 alarm rule IDs can be configured.

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Parameter	Mandatory	Type	Description
alarm_enabled	Yes	Boolean	**Definition** Whether to enable the alarm rule. **Constraints** N/A **Range** A boolean value. • **true**: enabled • **false**: disabled **Default Value** **true**

Response Parameters

Status code: 200

Table 6-312 Response body parameters

Parameter	Type	Description
alarm_ids	Array of strings	**Definition** IDs of alarm rules that were enabled or disabled.

Status code: 400

Table 6-313 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

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Table 6-314 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-315 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-316 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-317 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Example Requests

```
{
  "alarm_ids" : [ "al123232232341232132" ],
  "alarm_enabled" : true
}
```

Example Responses

Status code: 200

Alarm rules enabled or disabled.

```
{
  "alarm_ids" : [ "al123232232341232132" ]
}
```

Status Codes

Status Code	Description
200	Alarm rules enabled or disabled.
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
404	Resource not found.
500	Internal system error.

Error Codes

See **Error Codes**.

6.10.5 Batch Disabling One-Click Motoring

Function

This API is used to batch disable one-click monitoring.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.

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- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:deleteOneClickAlarms	Write	-	g:EnterpriseProjectId	• ces:oneClickAlarms:delete	-

URI

POST /v2/{project_id}/one-click-alarms/batch-delete

Table 6-318 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Request Parameters

Table 6-319 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-320 Request body parameters

Parameter	Mandatory	Type	Description
one_click_alarm_ids	Yes	Array of strings	**Definition** IDs of one-click monitoring rules to be deleted in batches. **Constraints** There can be 1 to 100 one-click monitoring rule IDs.

Response Parameters

Status code: 200

Table 6-321 Response body parameters

Parameter	Type	Description
one_click_alarm_ids	Array of strings	**Definition** One-click monitoring rule IDs that are deleted.

Status code: 400

Table 6-322 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-323 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-324 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

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Table 6-325 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
{
  "one_click_alarm_ids" : [ "o1619578505263QkW3b66yo" ]
}
```

Example Responses

Status code: 200

IDs of services for which one-click monitoring was disabled.

```
{
  "one_click_alarm_ids" : [ "o1619578505263QkW3b66yo" ]
}
```

Status Codes

Status Code	Description
200	IDs of services for which one-click monitoring was disabled.
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.10.6 Batch Modifying Alarm Notifications in Alarm Rules for One Service with One-Click Monitoring Enabled

Function

This API is used to batch modify alarm notifications in alarm rules for one service that has one-click monitoring enabled.

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Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:putOneClickAlarmNotifications	Write	-	g:EnterpriseProjectId	• ces:oneClickAlarms:updateNotifications	-

URI

PUT /v2/{project_id}/one-click-alarms/{one_click_alarm_id}/notifications

Table 6-326 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

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Parameter	Mandatory	Type	Description
one_click_alarm_id	Yes	String	One-click monitoring ID for a service.

Request Parameters

Table 6-327 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

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Table 6-328 Request body parameters

Parameter	Mandatory	Type	Description
notification_enabled	Yes	Boolean	**Definition** Whether to enable alarm notifications. **Constraints** If the value is **true**, other fields are mandatory. If the value is **false**, other fields are optional. **Range** A boolean value, which can be: • **true**: enable • **false**: disable **Default Value** N/A
alarm_notifications	No	Array of **Notification** objects	**Definition** Notification group or topic subscription for alarm notifications. **Constraints** N/A **Range** A maximum of 10 notification groups or topic subscriptions **Default Value** N/A
ok_notifications	No	Array of **Notification** objects	**Definition** Information about the notification group or topic subscription when the alarm is cleared. **Constraints** N/A **Range** A maximum of 10 notification groups or topic subscriptions **Default Value** N/A

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Parameter	Mandatory	Type	Description
notification_begin_time	No	String	**Definition** Time when alarm notifications were enabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A
notification_end_time	No	String	**Definition** Time when alarm notifications were disabled. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain digits and colons (:). **Default Value** N/A
effective_timezone	No	String	**Definition** Time zone, for example, **GMT-08:00**, **GMT+08:00**, or **GMT+0:00**. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A
notification_manner	No	String	Notification mode, which can be **NOTIFICATION_GROUP** (notification groups), **TOPIC_SUBSCRIPTION** (topic subscriptions), or **NOTIFICATION_POLICY** (notification policies).
notification_policy_ids	No	Array of strings	Associated notification policy IDs.

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Table 6-329 Notification

Parameter	Mandatory	Type	Description
type	Yes	String	**Definition** Notification type. **Constraints** N/A **Range** The value can be: • **notification**: SMN notifications • **contact**: account contacts • **contactGroup**: notification groups • autoscaling: AS notifications. This value is used only for AS. • **groupwatch**: deprecated • **ecsRecovery**: deprecated • **iecAction**: This API has been deprecated and is not recommended. **Default Value** N/A

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Parameter	Mandatory	Type	Description
notification_list	Yes	Array of strings	**Definition** Recipients to be notified of the alarm status changes. The value of **topicUrn** can be obtained from SMN. For details, see section "Querying Topics". **Constraints** If **type** is set to **notification**, the value of **notificationList** cannot be left blank. If **type** is set to **autoscaling**, the value of **notification_list** must be left blank. If **notification_enabled** is set to **true**, you must specify either **alarm_notifications** or **ok_notifications**. If both **alarm_notifications** and **ok_notifications** are specified, their **notification_list** values must be the same. A maximum of 20 recipients are allowed.

Response Parameters

Status code: 204

No Content

Status code: 400

Table 6-330 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

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Table 6-331 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-332 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-333 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-334 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Example Requests

```
{
  "notification_enabled" : true,
  "alarm_notifications" : [ {
    "type" : "notification",
    "notification_list" : [ "urn:smn:123" ]
  } ],
  "ok_notifications" : [ {
    "type" : "notification",
    "notification_list" : [ "urn:smn:123" ]
  } ],
  "notification_begin_time" : "00:00",
  "notification_end_time" : "23:59",
  "notification_manner" : "NOTIFICATION_POLICY",
  "notification_policy_ids" : [ "np15563156337845e8A2Wv63" ]
}
```

Example Responses

None

Status Codes

Status Code	Description
204	No Content
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.
404	Resource not found.
500	Internal system error.

Error Codes

See **Error Codes**.

6.10.7 Batch Enabling or Disabling Alarm Rules for One Service with One-Click Monitoring Enabled

Function

This API is used to batch enable or disable alarm rules for one service with one-click monitoring enabled.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

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Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:putOneClickAlarmPolicies	Write	-	g:EnterpriseProjectId	• ces:oneClickAlarms:put	-

URI

PUT /v2/{project_id}/one-click-alarms/{one_click_alarm_id}/alarms/{alarm_id}/policies/action

Table 6-335 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
one_click_alarm_id	Yes	String	One-click monitoring ID for a service.
alarm_id	Yes	String	Alarm rule ID.

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Request Parameters

Table 6-336 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-337 Request body parameters

Parameter	Mandatory	Type	Description
alarm_policy_ids	Yes	Array of strings	IDs of alarm policies to be enabled or disabled in batches in an alarm rule.
enabled	Yes	Boolean	Whether to enable the alarm policy. true: enabled; false: disabled.

Response Parameters

Status code: 200

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Table 6-338 Response body parameters

Parameter	Type	Description
alarm_policy_ids	Array of strings	IDs of alarm policies that were enabled or disabled in batches in an alarm rule.

Status code: 400

Table 6-339 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-340 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 403

Table 6-341 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

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Table 6-342 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-343 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
{
  "alarm_policy_ids" : [ "alxdxxxdsw12321321" ],
  "enabled" : true
}
```

Example Responses

Status code: 200

Alarm rules enabled or disabled.

```
{
  "alarm_policy_ids" : [ "alxdxxxdsw12321321" ]
}
```

Status Codes

Status Code	Description
200	Alarm rules enabled or disabled.
400	Parameter verification failed.
401	Not authenticated.
403	Authentication failed.

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Status Code	Description
404	Resource not found.
500	Internal system error.

Error Codes

See **Error Codes**.

6.11 Alarm Masking Rules

6.11.1 Creating Alarm Masking Rules in Batches

Function

This API is used to create alarm masking rules in batches.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:putNotificationMaskRules	Write	-	g:EnterpriseProjectId	• ces:notificationMasks:update	-

URI

PUT /v2/{project_id}/notification-masks

Table 6-344 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Request Parameters

Table 6-345 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.

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Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-346 Request body parameters

Parameter	Mandatory	Type	Description
mask_name	No	String	**Definition** Masking rule name. **Constraints** N/A **Range** The value allows 1 to 64 characters. It can only contain letters, digits, hyphens (-), and underscores (_). **Default Value** N/A

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Parameter	Mandatory	Type	Description
relation_type	Yes	String	**Definition** Method for masking alarm notifications or calculation. **Constraints** N/A **Range** The value allows 1 to 32 characters and can only be: • **ALARM_RULE**: masking alarm notifications by alarm rule • **RESOURCE**: masking alarm notifications by resource • **RESOURCE_POLICY_NOTIFICATION**: masking alarm notifications by resource or alarm policy • **RESOURCE_POLICY_ALARM**: masking alarm calculation by resource or alarm policy **Default Value** N/A
relation_ids	Yes	Array of strings	Alarm rule or alarm policy ID. If you set **relation_type** to **ALARM_RULE**, set this parameter to the ID of the masked alarm rule. If you set **relation_type** to **RESOURCE_POLICY_NOTIFICATION** or **RESOURCE_POLICY_ALARM**, set this parameter to the ID of the masked alarm policy.
resources	No	Array of **Resource** objects	Associated resource. It is required when you set **relation_type** to **RESOURCE**, **RESOURCE_POLICY_NOTIFICATION**, or **RESOURCE_POLICY_ALARM**.

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Parameter	Mandatory	Type	Description
metric_names	No	Array of strings	Name of the associated metric. This parameter is optional when **relation_type** is set to **RESOURCE**. If this parameter is left blank, the masking rule will be applied to all metrics of the resource.
product_metrics	No	Array of **ProductMetric** objects	Metric information when the masking rule is applied by cloud product.
resource_level	No	String	**dimension** indicates the sub-dimension, and **product** indicates the cloud product.
product_name	No	String	Cloud product name specified when **Cloud product** is selected for **Resource Level**.
mask_type	Yes	String	**Definition** Masking type. **Constraints** N/A **Range** The value can be: • **START_END_TIME**: Alarms are masked by start time and end time. • **FOREVER_TIME**: Alarms are masked permanently. • **CYCLE_TIME**: Alarms are masked by period. **Default Value** N/A
start_date	No	String	**Definition** Masking start date. **Constraints** N/A **Range** The value contains 10 characters and is in the yyyy-MM-dd format. **Default Value** N/A

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Parameter	Mandatory	Type	Description
start_time	No	String	**Definition** Masking start time. **Constraints** N/A **Range** The value contains eight characters in the HH:mm:ss format. **Default Value** N/A
end_date	No	String	**Definition** Masking end date. **Constraints** N/A **Range** The value contains 10 characters and is in the yyyy-MM-dd format. **Default Value** N/A
end_time	No	String	**Definition** Masking end time. **Constraints** N/A **Range** The value contains eight characters in the HH:mm:ss format. **Default Value** N/A

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Parameter	Mandatory	Type	Description
effective_timezone	No	String	**Definition** Time zone, for example, **GMT-08:00**, **GMT+08:00**, or **GMT+0:00**. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A

Table 6-347 Resource

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespace**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
dimensions	Yes	Array of **ResourceDimension** objects	**Definition** Resource dimension information. **Constraints** A maximum of four dimensions are allowed.

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Table 6-348 ResourceDimension

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Dimension of a resource. For example, the dimension of an ECS can be **instance_id**. A maximum of four dimensions are supported. For the metric dimension of each resource, see **Service Metric Dimensions**. **Constraints** N/A **Range** The value starts with a letter and allows 1 to 32 characters. It can contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
value	Yes	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

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Table 6-349 ProductMetric

Parameter	Mandatory	Type	Description
dimension_name	Yes	String	**Definition** Metric dimensions when the masking rule is applied by cloud product. **Constraints** N/A **Range** The value contains 0 to 128 characters. Multiple dimensions are separated by commas (,). **Default Value** N/A
metric_name	Yes	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A

Response Parameters

Status code: 201

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Table 6-350 Response body parameters

Parameter	Type	Description
relation_ids	Array of strings	IDs of associated alarm rules or policies that were successfully created.
notification_mask_id	String	Masking rule ID.

Status code: 400

Table 6-351 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-352 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
{
  "mask_name" : "mn_test",
  "relation_type" : "ALARM_RULE",
  "relation_ids" : [ "al123232232341232132" ],
  "resources" : [ {
    "namespace" : "SYS.ECS",
    "dimensions" : [ {
      "name" : "instance_id",
      "value" : "4270ff17-aba3-4138-89fa-820594c39755"
    } ]
  } ],
  "mask_type" : "START_END_TIME",
  "start_date" : "yyyy-MM-dd",
  "start_time" : "HH:mm:ss",
  "end_date" : "yyyy-MM-dd",
```

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```
  "end_time" : "HH:mm:ss"
}
```

Example Responses

Status code: 201

Notification masking rules created.

```
{
  "relation_ids" : [ "al1232322323412321 32" ],
  "notification_mask_id" : "nm1232322323412321 32"
}
```

Status Codes

Status Code	Description
201	Notification masking rules created.
400	Parameter verification failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.11.2 Modifying the Masking Time of Alarm Masking Rules in Batches

Function

Modify the masking time of alarm masking rules in batches.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:putNotificationMaskRules	Write	-	g:EnterpriseProjectId	• ces:notificationMasks:update	-

URI

POST /v2/{project_id}/notification-masks/batch-update

Table 6-353 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Request Parameters

Table 6-354 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-355 Request body parameters

Parameter	Mandatory	Type	Description
notification_mask_ids	Yes	Array of strings	Association ID.

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Parameter	Mandatory	Type	Description
mask_type	Yes	String	**Definition** Masking type. **Constraints** N/A **Range** The value can be: • **START_END_TIME**: Alarms are masked by start time and end time. • **FOREVER_TIME**: Alarms are masked permanently. • **CYCLE_TIME**: Alarms are masked by period. **Default Value** N/A
start_date	No	String	**Definition** Masking start date. **Constraints** N/A **Range** The value contains 10 characters and is in the yyyy-MM-dd format. **Default Value** N/A
start_time	No	String	**Definition** Masking start time. **Constraints** N/A **Range** The value contains eight characters in the HH:mm:ss format. **Default Value** N/A

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Parameter	Mandatory	Type	Description
end_date	No	String	**Definition** Masking end date. **Constraints** N/A **Range** The value contains 10 characters and is in the yyyy-MM-dd format. **Default Value** N/A
end_time	No	String	**Definition** Masking end time. **Constraints** N/A **Range** The value contains eight characters in the HH:mm:ss format. **Default Value** N/A
effective_timezone	No	String	**Definition** Time zone, for example, **GMT-08:00**, **GMT+08:00**, or **GMT+0:00**. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A

Response Parameters

Status code: 204

Masking time modified.

Status code: 400

Table 6-356 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-357 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
{
  "notification_mask_ids" : [ "nm1232322323412321 32" ],
  "mask_type" : "START_END_TIME",
  "start_date" : "yyyy-MM-dd",
  "start_time" : "HH:mm:ss",
  "end_date" : "yyyy-MM-dd",
  "end_time" : "HH:mm:ss"
}
```

Example Responses

None

Status Codes

Status Code	Description
204	Masking time modified.
400	Parameter verification failed.
500	Internal system error.

Error Codes

See **Error Codes**.

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6.11.3 Modifying an Alarm Masking Rule

Function

This API is used to modify an alarm masking rule.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:putNotificationMaskRules	Write	-	g:EnterpriseProjectId	• ces:notificationMasks:update	-

URI

PUT /v2/{project_id}/notification-masks/{notification_mask_id}

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Table 6-358 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
notification_mask_id	Yes	String	**Definition** Masking rule ID. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain letters and digits. **Default Value** N/A

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Request Parameters

Table 6-359 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-360 Request body parameters

Parameter	Mandatory	Type	Description
mask_name	Yes	String	**Definition** Masking rule name. **Constraints** N/A **Range** The value allows 1 to 64 characters. It can only contain letters, digits, hyphens (-), and underscores (_). **Default Value** N/A

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Parameter	Mandatory	Type	Description
relation_ids	No	Array of strings	**Definition** Relation ID. **Constraints** Array length: [1,100] If you set **relation_type** to **ALARM_RULE**, set this parameter to the ID of the masked alarm rule. If you set **relation_type** to **RESOURCE_POLICY_NOTIFICATION** or **RESOURCE_POLICY_ALARM**, set this parameter to the ID of the masked alarm policy.
relation_type	No	String	**Definition** Method for masking alarm notifications or calculation. **Constraints** N/A **Range** The value allows 1 to 32 characters and can only be: • **ALARM_RULE**: masking alarm notifications by alarm rule • **RESOURCE**: masking alarm notifications by resource • **RESOURCE_POLICY_NOTIFICATION**: masking alarm notifications by resource or alarm policy • **RESOURCE_POLICY_ALARM**: masking alarm calculation by resource or alarm policy **Default Value** N/A
metric_names	No	Array of strings	Name of the associated metric. This parameter is optional when **relation_type** is set to **RESOURCE**. If this parameter is left blank, the masking rule will be applied to all metrics of the resource.

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Parameter	Mandatory	Type	Description
product_metrics	No	Array of **ProductMetric** objects	Metric information when the masking rule is applied by cloud product.
resource_level	No	String	**dimension** indicates the sub-dimension, and **product** indicates the cloud product.
product_name	No	String	Cloud product name specified when **Cloud product** is selected for **Resource Level**.
resources	Yes	Array of **Resource** objects	**Definition** Associated resources. **Constraints** Array length: [1,100]
mask_type	Yes	String	**Definition** Masking type. **Constraints** N/A **Range** The value can be: • **START_END_TIME**: Alarms are masked by start time and end time. • **FOREVER_TIME**: Alarms are masked permanently. • **CYCLE_TIME**: Alarms are masked by period. **Default Value** N/A
start_date	No	String	**Definition** Masking start date. **Constraints** N/A **Range** The value contains 10 characters and is in the yyyy-MM-dd format. **Default Value** N/A

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Parameter	Mandatory	Type	Description
start_time	No	String	**Definition** Masking start time. **Constraints** N/A **Range** The value contains eight characters in the HH:mm:ss format. **Default Value** N/A
end_date	No	String	**Definition** Masking end date. **Constraints** N/A **Range** The value contains 10 characters and is in the yyyy-MM-dd format. **Default Value** N/A
end_time	No	String	**Definition** Masking end time. **Constraints** N/A **Range** The value contains eight characters in the HH:mm:ss format. **Default Value** N/A

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Parameter	Mandatory	Type	Description
effective_timezone	No	String	**Definition** Time zone, for example, **GMT-08:00**, **GMT+08:00**, or **GMT+0:00**. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A

Table 6-361 ProductMetric

Parameter	Mandatory	Type	Description
dimension_name	Yes	String	**Definition** Metric dimensions when the masking rule is applied by cloud product. **Constraints** N/A **Range** The value contains 0 to 128 characters. Multiple dimensions are separated by commas (,). **Default Value** N/A

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Parameter	Mandatory	Type	Description
metric_name	Yes	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A

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Table 6-362 Resource

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespace**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
dimensions	Yes	Array of **ResourceDimension** objects	**Definition** Resource dimension information. **Constraints** A maximum of four dimensions are allowed.

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Table 6-363 ResourceDimension

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Dimension of a resource. For example, the dimension of an ECS can be **instance_id**. A maximum of four dimensions are supported. For the metric dimension of each resource, see **Service Metric Dimensions**. **Constraints** N/A **Range** The value starts with a letter and allows 1 to 32 characters. It can contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
value	Yes	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

Response Parameters

Status code: 204

No Content

Status code: 400

Table 6-364 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-365 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
{
  "mask_name" : "mn_test",
  "relation_ids" : [ "al123232232341232132" ],
  "relation_type" : "ALARM_RULE",
  "resources" : [ {
    "namespace" : "SYS.ECS",
    "dimensions" : [ {
      "name" : "instance_id",
      "value" : "4270ff17-aba3-4138-89fa-820594c39755"
    } ]
  } ],
  "mask_type" : "START_END_TIME",
  "start_date" : "yyyy-MM-dd",
  "start_time" : "HH:mm:ss",
  "end_date" : "yyyy-MM-dd",
  "end_time" : "HH:mm:ss"
}
```

Example Responses

None

Status Codes

Status Code	Description
204	No Content

Status Code	Description
400	Parameter verification failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.11.4 Deleting Alarm Masking Rules in Batches

Function

This API is used to delete alarm masking rules in batches.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:deleteNotificationMaskRules	Write	-	g:EnterpriseProjectId	• ces:notificationMasks:delete	-

URI

POST /v2/{project_id}/notification-masks/batch-delete

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Table 6-366 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Request Parameters

Table 6-367 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.

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Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-368 Request body parameters

Parameter	Mandatory	Type	Description
notification_mask_ids	Yes	Array of strings	Masking rule ID.

Response Parameters

Status code: 200

Table 6-369 Response body parameters

Parameter	Type	Description
notification_mask_ids	Array of strings	ID of a masking rule that was successfully deleted.

Status code: 400

Table 6-370 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-371 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-372 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
{
  "notification_mask_ids" : [ "nm1232322323412321 32" ]
}
```

Example Responses

Status code: 200

Notification masking rules deleted.

```
{
  "notification_mask_ids" : [ "nm1232322323412321 32" ]
}
```

Status Codes

Status Code	Description
200	Notification masking rules deleted.
400	Parameter verification failed.
404	Resource not found.
500	Internal system error.

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Error Codes

See **Error Codes**.

6.11.5 Querying Alarm Masking Rules

Function

This API is used to query notification masking rules of a specified type in batches. Currently, a maximum of 100 notification masking rules can be queried in batches.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:listNotificationMaskRules	List	-	g:EnterpriseProjectId	• ces:notificationMasks:list	-

URI

POST /v2/{project_id}/notification-masks/batch-query

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Table 6-373 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Table 6-374 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Pagination offset.
limit	No	Integer	Number of records on each page.
sort_key	No	String	Sorting keyword, which is used together with **sort_dir**. The value can be **create_time** or **update_time**. **create_time** indicates sorting by creation time, and **update_time** indicates sorting by modification time.
sort_dir	No	String	Sorting order, which is used together with **sort_key**. **DESC** indicates the descending order, and **ASC** indicates the ascending order.

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Request Parameters

Table 6-375 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

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Table 6-376 Request body parameters

Parameter	Mandatory	Type	Description
relation_type	Yes	String	Method for masking alarm notifications or calculation. **ALARM_RULE**: masking alarm notifications by alarm rule. **RESOURCE**: masking alarm notifications by resource. **RESOURCE_POLICY_NOTIFICATION**: masking alarm notifications by resource or alarm policy. **RESOURCE_POLICY_ALARM**: masking alarm calculation by resource or alarm policy. **DEFAULT**: **RESOURCE** and **RESOURCE_POLICY_NOTIFICATION** (used only for querying alarm masking rules)
relation_ids	Yes	Array of strings	Associated ID (alarm rule ID).
metric_name	No	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A
resource_level	No	String	**dimension** indicates the sub-dimension, and **product** indicates the cloud product.
mask_id	No	String	(Optional) Masking rule ID.

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Parameter	Mandatory	Type	Description
mask_name	No	String	(Optional) Masking rule name. The value can contain up to 64 characters, including only letters, digits, hyphens (-), and underscores (_).
mask_status	No	String	Masking status. This parameter is optional. **MASK_EFFECTIVE**: The masking rule is in effect. **MASK_INEFFECTIVE**: The masking rule is not in effect.
resource_id	No	String	(Optional) Resource dimension value. You can specify one or more resource IDs from one dimension.
namespace	No	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Service Namespaces**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
dimensions	No	Array of **ResourceDimension** objects	Resource dimension information.

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Table 6-377 ResourceDimension

Parameter	Mandatory	Type	Description
name	Yes	String	**Definition** Dimension of a resource. For example, the dimension of an ECS can be **instance_id**. A maximum of four dimensions are supported. For the metric dimension of each resource, see **Service Metric Dimensions**. **Constraints** N/A **Range** The value starts with a letter and allows 1 to 32 characters. It can contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
value	Yes	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

Response Parameters

Status code: 200

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Table 6-378 Response body parameters

Parameter	Type	Description
notification_masks	Array of **notification_masks** objects	List of alarm notification masking rules.
count	Integer	Total number of alarm notification masking rules.

Table 6-379 notification_masks

Parameter	Type	Description
notification_mask_id	String	Masking rule ID.
mask_name	String	**Definition** Masking rule name. **Constraints** N/A **Range** The value allows 1 to 64 characters. It can only contain letters, digits, hyphens (-), and underscores (_). **Default Value** N/A

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Parameter	Type	Description
relation_type	String	**Definition** Method for masking alarm notifications or calculation. **Constraints** N/A **Range** The value allows 1 to 32 characters and can only be: • **ALARM_RULE**: masking alarm notifications by alarm rule • **RESOURCE**: masking alarm notifications by resource • **RESOURCE_POLICY_NOTIFICATION**: masking alarm notifications by resource or alarm policy • **RESOURCE_POLICY_ALARM**: masking alarm calculation by resource or alarm policy **Default Value** N/A
relation_id	String	**Definition** Relation ID. **Constraints** N/A **Range** The value can be an alarm rule ID or alarm policy ID. It allows 1 to 64 characters and can only contain letters, digits, and hyphens (-). **Default Value** N/A
resource_type	String	Masked resource type. The value can be **ALL_INSTANCE (all resources) or ** MULTI_INSTANCE** (multi-instance resources).
metric_names	Array of strings	Name of the associated metric. This parameter is available when **relation_type** is set to **RESOURCE**.
product_metrics	Array of **ProductMetric** objects	Metric information when the masking rule is applied by cloud product.

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Parameter	Type	Description
resource_level	String	**dimension** indicates the sub-dimension, and **product** indicates the cloud product.
product_name	String	Cloud product name specified when **Cloud product** is selected for **Resource Level**.
resources	Array of **ResourceCategory** objects	Associated resource type. This parameter is available when **relation_type** is set to **RESOURCE**. You only need to query the namespace and dimension name of the resource.
mask_status	String	Masking status. **UN_MASKED**: Alarm notifications are not masked. **MASK_EFFECTIVE**: Masking rules are in effect. **MASK_INEFFECTIVE**: Masking rules are not in effect.
mask_type	String	**Definition** Masking type. **Constraints** N/A **Range** The value can be: • **START_END_TIME**: Alarms are masked by start time and end time. • **FOREVER_TIME**: Alarms are masked permanently. • **CYCLE_TIME**: Alarms are masked by period. **Default Value** N/A
create_time	Integer	Time the alarm masking is created. The value is a UNIX timestamp and the unit is ms.
update_time	Integer	Time the alarm masking is updated. The value is a UNIX timestamp and the unit is ms.

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Parameter	Type	Description
start_date	String	**Definition** Masking start date. **Constraints** N/A **Range** The value contains 10 characters and is in the yyyy-MM-dd format. **Default Value** N/A
start_time	String	**Definition** Masking start time. **Constraints** N/A **Range** The value contains eight characters in the HH:mm:ss format. **Default Value** N/A
end_date	String	**Definition** Masking end date. **Constraints** N/A **Range** The value contains 10 characters and is in the yyyy-MM-dd format. **Default Value** N/A
end_time	String	**Definition** Masking end time. **Constraints** N/A **Range** The value contains eight characters in the HH:mm:ss format. **Default Value** N/A

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Parameter	Type	Description
effective_timezone	String	**Definition** Time zone, for example, **GMT-08:00**, **GMT+08:00**, or **GMT+0:00**. **Constraints** N/A **Range** 1 to 16 characters **Default Value** N/A
policies	Array of **PoliciesInListResp** objects	Alarm policy list.

Table 6-380 ProductMetric

Parameter	Type	Description
dimension_name	String	**Definition** Metric dimensions when the masking rule is applied by cloud product. **Constraints** N/A **Range** The value contains 0 to 128 characters. Multiple dimensions are separated by commas (,). **Default Value** N/A

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Parameter	Type	Description
metric_name	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A

Table 6-381 ResourceCategory

Parameter	Type	Description
namespace	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Service Namespaces**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
dimension_names	Array of strings	Resource dimension information. Multiple dimensions are sorted in alphabetical order and separated with commas (,).

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Table 6-382 PoliciesInListResp

Parameter	Type	Description
alarm_policy_id	String	Alarm policy ID.
metric_name	String	**Definition** Metric name of a resource. For details about the metrics of each service, see **Service Metric Names**. **Constraints** N/A **Range** The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). 1 to 96 characters For example, the ECS metric **cpu_util** indicates the CPU usage of an ECS. The DDS metric **mongo001_command_ps** indicates the command execution frequency. **Default Value** N/A
extra_info	**MetricExtraInfo** object	**Definition** Additional information about the alarm policy. **Constraints** N/A

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Parameter	Type	Description
period	Integer	**Definition** Interval (seconds) for checking whether the alarm rule conditions are met. **Constraints** N/A **Range** The value can be: • **0**: default value. This value can be used for event alarms. • **1**: original metric period. For example, if the original period of an RDS metric is 60s, the metric data is collected and calculated every 60s. • **300**: The metric data is collected and calculated every 5 minutes. • **1200**: The metric data is collected and calculated every 20 minutes. • **3600**: The metric data is collected and calculated every hour. • **14400**: The metric data is collected and calculated every 4 hours. • **86400**: The metric data is collected and calculated every day. **Default Value** N/A
filter	String	**Definition** Aggregation method. **Constraints** N/A **Range** **average**, **variance**, **min**, **max**, or **sum** **Default Value** N/A

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Parameter	Type	Description
comparison_operator	String	**Definition** Threshold symbol. **Constraints** The threshold symbols for metric alarms are >, >=, <, <=, =, !=, cycle_decrease, cycle_increase, and cycle_wave. The threshold symbols for event alarms are >, >=, <, <=, =, and !=. **Range** The value can be **>**, **<**, **>=**, **<=**, **=**, **!=**, **cycle_decrease**, **cycle_increase**, or **cycle_wave**. **cycle_decrease** indicates the decrease relative to the last period; **cycle_increase** indicates the increase relative to the last period; **cycle_wave** indicates the increase or decrease relative to the last period. **Default Value** N/A
value	Number	**Definition** Alarm threshold. For specific thresholds, see the value range of each metric in the appendix. **Constraints** If there is only one threshold, **value** and **alarm_level** are used in pairs. If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. **Range** The value ranges from **-1.7976931348623157e+108** to **1.7976931348623157e+108**. **Default Value** N/A

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Parameter	Type	Description
hierarchical_value	**HierarchicalValue** object	**Definition** Multi-level alarm threshold. **Constraints** If there are both **hierarchical_value** and **value**, **hierarchical_value** is used. When you create or modify an alarm rule, you can set only one threshold in the following scenarios: 1. The alarm type is **Metric** and the alarm policy is **Trigger an alarm when all policies are met**. 2. The alarm type is **Event**.
unit	String	**Definition** Data unit. **Constraints** N/A **Range** [0,32] **Default Value** N/A
count	Integer	**Definition** Number of times that the alarm triggering conditions are met. **Constraints** N/A **Range** For event alarms, the value ranges from **1** to **180**. For metric and website alarms, the value can be **1**, **2**, **3**, **4**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, or **180**. **Default Value** N/A
type	String	Alarm policy type. This API has been deprecated.

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Parameter	Type	Description
suppress_duration	Integer	**Definition** Alarm suppression duration, in seconds. This parameter corresponds to the last field in the alarm policy when you create an alarm rule. This field is used to mitigate frequent alarm occurrences. **Constraints** N/A **Range** The value can be: • **0**: A metric alarm is generated only once. An event alarm is not suppressed in the immediate triggering scenario, and is generated only once in the accumulated triggering scenario. • **300**: An alarm is generated every 5 minutes once the alarm triggering condition is met. • **600**: An alarm is generated every 10 minutes once the alarm triggering condition is met. • **900**: An alarm is generated every 15 minutes once the alarm triggering condition is met. • **1800**: An alarm is generated every 30 minutes once the alarm triggering condition is met. • **3600**: An alarm is generated every 60 minutes once the alarm triggering condition is met. • **10800**: An alarm is generated every 3 hours once the alarm triggering condition is met. • **21600**: An alarm is generated every 6 hours once the alarm triggering condition is met. • **43200**: An alarm is generated every 12 hours once the alarm triggering condition is met. • **86000**: An alarm is generated once every day once the alarm triggering condition is met. **Default Value**

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Parameter	Type	Description
		N/A
alarm_level	Integer	**Definition** Alarm severity. **Constraints** N/A **Range** The value can be: • **1**: critical • **2**: major • **3**: minor • **4**: warning **Default Value** N/A
selected_unit	String	**Definition** The metric unit you selected. It is used for subsequent metric data display and calculation. **Constraints** N/A **Range** [0,64] **Default Value** N/A

Table 6-383 MetricExtraInfo

Parameter	Type	Description
origin_metric_name	String	**Definition** Original metric name. **Constraints** N/A **Range** 0 to 4,096 characters **Default Value** N/A

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Parameter	Type	Description
metric_prefix	String	**Definition** Metric name prefix. **Constraints** N/A **Range** 0 to 4,096 characters **Default Value** N/A
custom_proc_name	String	**Definition** Name of a process. **Constraints** N/A **Range** [0,250] **Default Value** N/A
metric_type	String	**Definition** Metric type. **Constraints** N/A **Range** 0 to 32 characters **Default Value** N/A

Table 6-384 HierarchicalValue

Parameter	Type	Description
critical	Double	**Definition** Threshold for critical alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

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Parameter	Type	Description
major	Double	**Definition** Threshold for major alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
minor	Double	**Definition** Threshold for minor alarms. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A
info	Double	**Definition** Threshold for warnings. **Constraints** N/A **Range** [-1.7976931348623157e+108, 1.7976931348623157e+108] **Default Value** N/A

Status code: 400

Table 6-385 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

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Status code: 500

Table 6-386 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
{
  "relation_type" : "DEFAULT",
  "relation_ids" : [ "al1232322323412321 32" ],
  "mask_id" : "nm1689737291469aj38xNVLK",
  "mask_name" : "mn_test",
  "mask_status" : "MASK_EFFECTIVE",
  "resource_id" : "dse23xw43",
  "namespace" : "SYS.ECS",
  "dimensions" : [ {
    "name" : "instance_id",
    "value" : "4270ff17-aba3-4138-89fa-820594c39755"
  } ]
}
```

Example Responses

Status code: 200

Notification masking rules queried.

```
{
  "notification_masks" : [ {
    "notification_mask_id" : "nm1232322323412321 32",
    "mask_name" : "mn_test",
    "relation_type" : "ALARM_RULE",
    "relation_id" : "al1232322323412321 32",
    "resource_type" : "MULTI_INSTANCE",
    "resources" : [ {
      "namespace" : "SYS.ECS",
      "dimension_names" : [ "disk_utils,instance_id" ]
    } ],
    "mask_status" : "UN_MASKED",
    "mask_type" : "START_END_TIME",
    "start_date" : "yyyy-MM-dd",
    "start_time" : "HH:mm:ss",
    "end_date" : "yyyy-MM-dd",
    "end_time" : "HH:mm:ss",
    "policies" : [ {
      "alarm_policy_id" : "0f921f55-89b1-4534-ae54-7b40b597b5a6",
      "metric_name" : "cpu_util",
      "extra_info" : {
        "origin_metric_name" : "disk_usedPercent",
        "metric_prefix" : "SlAsh_",
        "custom_proc_name" : "proc_zombie_count1",
        "metric_type" : "string"
      },
      "period" : 300,
      "filter" : "average",
```

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```
    "comparison_operator" : ">",
    "value" : 0,
    "unit" : "%",
    "count" : 3,
    "type" : "string",
    "suppress_duration" : 300,
    "alarm_level" : 2
   } ]
 } ],
 "count" : 100
}
```


Status Codes

Status Code	Description
200	Notification masking rules queried.
400	Parameter verification failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.11.6 Querying Resources for Which an Alarm Masking Rule Is Applied

Function

This API is used to query resources for which an alarm masking rule is applied.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:alarms:listNotificationMaskResources	List	-	g:EnterpriseProjectId	• ces:notificationMasks:list	-

URI

GET /v2/{project_id}/notification-masks/{notification_mask_id}/resources

Table 6-387 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
notification_mask_id	Yes	String	**Definition** Masking rule ID. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain letters and digits. **Default Value** N/A

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Table 6-388 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Pagination offset.
limit	No	Integer	Number of records on each page.

Request Parameters

Table 6-389 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Response Parameters

Status code: 200

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Table 6-390 Response body parameters

Parameter	Type	Description
resources	Array of **Resource** objects	List of resources for which an alarm masking rule is applied.
count	Integer	Total number of resources.

Table 6-391 Resource

Parameter	Type	Description
namespace	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespace**. **Constraints** N/A **Range** The value is in the **service.item** format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters. **Default Value** N/A
dimensions	Array of **ResourceDimension** objects	**Definition** Resource dimension information. **Constraints** A maximum of four dimensions are allowed.

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Table 6-392 ResourceDimension

Parameter	Type	Description
name	String	**Definition** Dimension of a resource. For example, the dimension of an ECS can be **instance_id**. A maximum of four dimensions are supported. For the metric dimension of each resource, see **Service Metric Dimensions**. **Constraints** N/A **Range** The value starts with a letter and allows 1 to 32 characters. It can contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
value	String	**Definition** Resource dimension value, which is an instance ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints** N/A **Range** 1 to 256 characters **Default Value** N/A

Status code: 400

Table 6-393 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

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Table 6-394 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

None

Example Responses

Status code: 200

Resources queried.

```
{
  "resources" : [ {
    "namespace" : "SYS.ECS",
    "dimensions" : [ {
      "name" : "instance_id",
      "value" : "4270ff17-aba3-4138-89fa-820594c39755"
    } ]
  } ],
  "count" : 100
}
```

Status Codes

Status Code	Description
200	Resources queried.
400	Parameter verification failed.
500	Internal system error.

Error Codes

See **Error Codes**.

6.12 Dashboards

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6.12.1 Creating or Copying a Dashboard

Function

This API is used to create or copy a dashboard.

Constraints

This API is not supported in the following regions: CN East-Qingdao, LA-Mexico City1, TR-Istanbul, AP-Jakarta, ME-Riyadh, and AP-Manila.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:dashboards:create	Write	dashboard *	-	-	-
		-	g:EnterpriseProjectId		

URI

POST /v2/{project_id}/dashboards

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Table 6-395 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Request Parameters

Table 6-396 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.

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Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-397 Request body parameters

Parameter	Mandatory	Type	Description
dashboard_name	Yes	String	**Description** Custom dashboard name. **Constraints** N/A **Range** The value allows 1 to 128 characters and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
enterprise_id	No	String	**Definition** Enterprise project ID. **Constraints** N/A **Range** The value allows 36 characters. It can only contain lowercase letters, digits, hyphens (-), and underscores (_). You can customize an enterprise project ID. It can also be **0** (default enterprise project ID). **Default Value** N/A

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Parameter	Mandatory	Type	Description
dashboard_id	No	String	**Description** Dashboard ID. **Constraints** N/A **Range** The value starts with **db** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters. **Default Value** N/A
row_widget_num	No	Integer	**Description** How a graph is displayed. **Constraints** N/A **Range** • **0**: You can customize **top** and **left** of the graph. • **1**: one graph per row • **2**: two graphs per row • **3**: three graphs per row **Default Value** 3

Response Parameters

Status code: 201

Table 6-398 Response body parameters

Parameter	Type	Description
dashboard_id	String	**Description** Dashboard ID. **Range** The value starts with **db** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters.

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Status code: 400

Table 6-399 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-400 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-401 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
{
  "dashboard_name" : "dashboard_name",
  "enterprise_id" : "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
  "dashboard_id" : "dbxxxxxxxxxxxxxxxxxxxxxxx",
  "row_widget_num" : 3
}
```

Example Responses

Status code: 201

OK

```
{
  "dashboard_id" : "dbxxxxxxxxx"
}
```

Status Codes

Status Code	Description
201	OK
400	The server failed to process the request.
401	Token authentication is required.
500	Failed to complete the request because of an internal server error.

Error Codes

See **Error Codes**.

6.12.2 Querying Dashboards

Function

This API is used to query dashboards.

Constraints

This API is not supported in the following regions: CN East-Qingdao, LA-Mexico City1, TR-Istanbul, AP-Jakarta, ME-Riyadh, and AP-Manila.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:dashboards:list	List	dashboard *	-	-	-
		-	g:EnterpriseProjectId		

URI

GET /v2/{project_id}/dashboards

Table 6-402 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Table 6-403 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_id	No	String	**Definition** Enterprise project ID. **Constraints** N/A **Range** The value allows 36 characters. It can only contain lowercase letters, digits, hyphens (-), and underscores (_). You can customize an enterprise project ID. The value can also be **0** (default enterprise project ID) or **all_granted_eps** (all enterprise project IDs). **Default Value** N/A
is_favorite	No	Boolean	**Definition** Whether a dashboard in an enterprise project is added to favorites. **Constraints** If this parameter is specified, **enterprise_id** is mandatory. **Range** • **true**: added to favorites • **false**: not added to favorites **Default Value** N/A

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Parameter	Mandatory	Type	Description
dashboard_name	No	String	**Definition** Dashboard name. **Constraints** N/A **Range** The value allows 1 to 128 characters and can only contain letters, digits, underscores (_), and hyphens (-). **Default Value** N/A
dashboard_id	No	String	**Definition** Dashboard ID. **Constraints** N/A **Range** The value starts with **db** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters. **Default Value** N/A
dashboard_type	No	String	**Definition** Dashboard type. **Constraints** N/A **Range** • **monitor_dashboard**: dashboard • **other**: custom dashboard **Default Value** N/A

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Request Parameters

Table 6-404 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Response Parameters

Status code: 200

Table 6-405 Response body parameters

Parameter	Type	Description
dashboards	Array of **DashBoardInfo** objects	**Description** Dashboard list.

Table 6-406 DashBoardInfo

Parameter	Type	Description
dashboard_id	String	**Description** Dashboard ID. **Range** The value starts with **db** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters.

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Parameter	Type	Description
dashboard_name	String	**Definition** Custom dashboard name. **Range** The value allows 1 to 128 characters and can only contain letters, digits, underscores (_), and hyphens (-).
enterprise_id	String	**Definition** Enterprise project ID. **Range** The value allows 36 characters. It can only contain lowercase letters, digits, hyphens (-), and underscores (_). You can customize an enterprise project ID. It can also be **0** (default enterprise project ID).
creator_name	String	**Definition** Name of the user who created the dashboard. **Range** The value allows 1 to 128 characters and can only contain letters, digits, underscores (_), and hyphens (-).
create_time	Long	**Definition** Dashboard creation time. **Range** **1111111111111** to **9999999999999**
widgets_num	Integer	**Definition** Total number of graphs on the dashboard. **Range** **0** to **50**

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Parameter	Type	Description
namespace	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespaces**. **Range** The value is in the service.item format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters.
sub_product	String	**Definition** Sub-product ID. **Range** [1,128]
dashboard_template_id	String	**Definition** Dashboard template ID. **Range** The value starts with **mb** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters.
row_widget_num	Integer	**Definition** Number of graphs per row. **Range** • **0**: You can customize **top** and **left** of the graph. • **1**: one graph per row • **2**: two graphs per row • **3**: three graphs per row
is_favorite	Boolean	**Definition** Whether a dashboard is added to favorites. **Range** • **true**: added to favorites • **false**: not added to favorites

Status code: 400

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Table 6-407 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-408 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-409 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "dashboards" : [ {
    "dashboard_id" : "dbxxxxxxxxxxxxxxxxxxxxxx",
    "dashboard_name" : "dashboard_name",
    "enterprise_id" : "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
```

```
    "creator_name" : "creator_name",
    "create_time" : 1111111111111,
    "row_widget_num" : 3,
    "is_favorite" : false
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	The server failed to process the request.
401	Token authentication is required.
500	Failed to complete the request because of an internal server error.

Error Codes

See **Error Codes**.

6.12.3 Modifying a Dashboard

Function

This API is used to modify a dashboard.

Constraints

This API is not supported in the following regions: CN East-Qingdao, LA-Mexico City1, TR-Istanbul, AP-Jakarta, ME-Riyadh, and AP-Manila.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:dashboards:put	Write	dashboard *	g:EnterpriseProjectId	-	-

URI

PUT /v2/{project_id}/dashboards/{dashboard_id}

Table 6-410 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
dashboard_id	Yes	String	**Definition** Dashboard ID. **Constraints** N/A **Range** The value starts with **db** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters. **Default Value** N/A

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Request Parameters

Table 6-411 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-412 Request body parameters

Parameter	Mandatory	Type	Description
dashboard_name	No	String	Custom dashboard name.
is_favorite	No	Boolean	Whether a dashboard is added to favorites. The value can be **true** or **false**.
row_widget_num	Yes	Integer	How a graph is displayed. **0** indicates that you can customize **top** and **left** of the graph. **1** indicates one graph per row.
extend_info	No	**ExtendInfo** object	Extended information about the dashboard.

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Table 6-413 ExtendInfo

Parameter	Mandatory	Type	Description
filter	No	String	Metric aggregation mode. The value can be **average**, **min**, **max**, or **sum**.
period	No	String	Metric rollup period. {**1** indicates the original value, **60** indicates one minute, **300** indicates five minutes, **1200** indicates 20 minutes, **3600** indicates one hour, **14400** indicates four hours, and **86400** indicates one day.}
display_time	No	Integer	Display time. The value **0** indicates that you can customize a time. The value can be 5 minutes, 15 minutes, 30 minutes, 1 hour, 2 hours, 3 hours, 12 hours, 1 day, 7 days, or 30 days.
refresh_time	No	Integer	Refresh interval. The value can be **0** (not refreshed), 10s, 1 min, 5 mins, or 20 mins.
from	No	Long	Start time.
to	No	Long	End time.
screen_color	No	String	Background color of the dashboard.
enable_screen_auto_play	No	Boolean	Whether the monitoring dashboard can be automatically switched.
time_interval	No	Integer	Auto-switch interval for dashboard. The value can be **10000** (10s), **30000** (30s), and **60000** (1 min).
enable_legend	No	Boolean	Whether to display the legend.
full_screen_widget_num	No	Integer	Number of graphs displayed on the dashboard. The value must be consistent with an available one on the console.

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Response Parameters

Status code: 204

No Content

Status code: 400

Table 6-414 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-415 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-416 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
{
  "dashboard_name" : "dashboard_name_new",
  "is_favorite" : true,
  "row_widget_num" : 0
}
```

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Example Responses

None

Status Codes

Status Code	Description
204	No Content
400	The server failed to process the request.
401	Token authentication is required.
500	Failed to complete the request because of an internal server error.

Error Codes

See **Error Codes**.

6.12.4 Deleting Dashboards in Batches

Function

This API is used to delete dashboards in batches.

Constraints

This API is not supported in the following regions: CN East-Qingdao, LA-Mexico City1, TR-Istanbul, AP-Jakarta, ME-Riyadh, and AP-Manila.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:dashboards:delete	Write	dashboard *	g:EnterpriseProjectId	-	-

URI

POST /v2/{project_id}/dashboards/batch-delete

Table 6-417 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

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Request Parameters

Table 6-418 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-419 Request body parameters

Parameter	Mandatory	Type	Description
dashboard_ids	No	Array of strings	Dashboard ID list.

Response Parameters

Status code: 200

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Table 6-420 Response body parameters

Parameter	Type	Description
dashboards	Array of **BatchDeleteDashboardRespInfo** objects	Response body for deleting dashboards in batches.

Table 6-421 BatchDeleteDashboardRespInfo

Parameter	Type	Description
dashboard_id	String	**Description** Dashboard ID. **Constraints** N/A **Range** The value starts with **db** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters. **Default Value** N/A
ret_status	String	Operation result. The value can be **successful** or **error**.
error_msg	String	Error message.

Status code: 400

Table 6-422 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

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Table 6-423 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-424 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
{
  "dashboard_ids" : [ "dbxxxxxxxxxxxxxxxxxxxxxx", "dbXXXXXXXXXXXXXXXXXXXXX" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "dashboards" : [ {
    "dashboard_id" : "dbxxxxxxxxxxxxxxxxxxxxx",
    "ret_status" : "successful"
  }, {
    "dashboard_id" : "dbXXXXXXXXXXXXXXXXXXXX",
    "ret_status" : "error",
    "error_msg" : "record not found"
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	The server failed to process the request.

Status Code	Description
401	Token authentication is required.
500	Failed to complete the request because of an internal server error.

Error Codes

See **Error Codes**.

6.13 Graphs

6.13.1 Creating, Copying, or Batch Creating Graphs on a Dashboard

Function

This API is used to create, copy, or batch create graphs on a dashboard.

Constraints

This API is not supported in the following regions: CN East-Qingdao, LA-Mexico City1, TR-Istanbul, AP-Jakarta, ME-Riyadh, and AP-Manila.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:widgets:create	Write	-	ces:namespace	-	-

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URI

POST /v2/{project_id}/dashboards/{dashboard_id}/widgets

Table 6-425 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
dashboard_id	Yes	String	**Definition** Dashboard ID. **Constraints** N/A **Range** The value starts with **db** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters. **Default Value** N/A

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Request Parameters

Table 6-426 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-427 Request body parameters

Parameter	Mandatory	Type	Description
[items]	No	Array of **BaseWidgetInfo** objects	**Definition** Graph information. **Constraints** N/A

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Table 6-428 BaseWidgetInfo

Parameter	Mandatory	Type	Description
group_id	No	String	**Definition** Graph group ID. **Constraints** N/A **Range** The value must start with **dg** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters. **Default Value** N/A
metrics	Yes	Array of **WidgetMetric** objects	**Definition** Metric list. **Constraints** Up to 200 metrics may be included, with at least one required.
title	Yes	String	**Definition** Graph name. **Constraints** N/A **Range** The value allows 1 to 128 characters, and can contain digits, letters (including Latin letters), and the following special characters: "≤<>& %_:/;'? +,~()°[. - **Default Value** N/A

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Parameter	Mandatory	Type	Description
threshold	No	Double	**Definition** Threshold of metrics on the graph. **Constraints** N/A **Range** **0** to **1.7976931348623157e+308** **Default Value** N/A
threshold_enabled	Yes	Boolean	**Definition** Whether to display the threshold. **Constraints** N/A **Range** • **true**: display • **false**: not display **Default Value** N/A
view	Yes	String	**Definition** Graph type. **Constraints** N/A **Range** • **bar**: horizontal bar chart • **line**: line chart • **bar_chart**: bar chart • **table**: table • **circular_bar**: radial bar chart • **area_chart**: area chart **Default Value** N/A

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Parameter	Mandatory	Type	Description
metric_display_mode	Yes	String	**Definition** Metric display type. **Constraints** N/A **Range** • **single**: single-metric • **multiple**: multi-metric **Default Value** N/A
properties	No	**properties** object	**Definition** Additional information. **Constraints** N/A
location	Yes	**location** object	**Definition** Graph coordinates. **Constraints** N/A
unit	No	String	**Definition** Unit. **Constraints** N/A **Range** [0,32] **Default Value** N/A

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Table 6-429 WidgetMetric

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespaces**. **Constraints** N/A **Range** The value is in the service.item format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). It must contain 3 to 32 characters. **Default Value** N/A
dimensions	Yes	**DimensionInfo** object	**Description** Dimension list. **Constraints** N/A
metric_name	Yes	String	**Definition** Multiple metric names. **Constraints** N/A **Range** The value can contain 1 to 1,080 characters. Multiple metric names are separated by commas (,). **Default Value** N/A
alias	No	Array of strings	**Definition** Metric aliases of the graph. **Constraints** This parameter can be transferred only when the resource type is set to **Specified resources**.

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Parameter	Mandatory	Type	Description
extra_info	No	ExtraInfo object	**Definition** Metric information. **Constraints** N/A
rollup_enable	No	Boolean	**Definition** Whether to enable aggregation. **Constraints** If **rollup_enable** is enabled, **rollup_filter** and **rollup_dimension** are mandatory. **Range** • **true**: enabled • **false**: disabled **Default Value** false
rollup_filter	No	String	**Definition** Aggregation rule. **Constraints** If **rollup_enable** is enabled, **rollup_filter** and **rollup_dimension** are mandatory. **Range** • **last**: latest value • **max**: maximum value • **min**: minimum value • **average** • **sum** **Default Value** N/A

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Parameter	Mandatory	Type	Description
rollup_dimension	No	String	**Definition** Aggregation dimension. **Constraints** N/A **Range** 1 to 32 characters **Default Value** N/A
last_week_compare_enable	No	Boolean	**Definition** Whether to display comparison data (same period last week). **Constraints** N/A **Range** • **true**: display • **false**: not display **Default Value** N/A
yesterday_compare_enable	No	Boolean	**Definition** Whether to display comparison data (same period yesterday). **Constraints** N/A **Range** • **true**: display • **false**: not display **Default Value** N/A

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Parameter	Mandatory	Type	Description
metric_dimension	No	String	**Definition** Dimension name. For details about the dimensions supported by each service, see **Service Dimension Names**. The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). Multiple dimensions are separated by commas (,). Each dimension allows 32 characters. The total length is 1 to 131 characters. A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios. **Constraints** N/A **Range** 1 to 131 characters **Default Value** N/A
top_num	No	Integer	**Definition** Number of displayed data records. **Constraints** N/A **Range** 1 to 200 **Default Value** N/A
unit	No	String	**Definition** Unit. **Constraints** N/A **Range** [0,32] **Default Value** N/A

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Parameter	Mandatory	Type	Description
order	No	String	**Definition** Sorting field. **Constraints** N/A **Range** • **asc**: ascending • **desc**: descending **Default Value** N/A
topn_metric_name	No	String	**Definition** Metric name of a resource. The name must start with a letter and contain only digits, letters, and underscores. The length ranges from 1 to 64 characters. For example, **cpu_util** of an ECS indicates the CPU usage of the ECS. **mongo001_command_ps** in DDS indicates the command execution frequency. For details about the metric name of each service, see **Service Metric Names**. **Constraints** N/A **Range** 1 to 96 characters **Default Value** N/A

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Table 6-430 DimensionInfo

Parameter	Mandatory	Type	Description
name	Yes	String	**Description** Dimension name. **Constraints** N/A **Range** Multiple dimensions are separated using commas (,). For details about the dimensions supported by each cloud service, see **Services Interconnected with Cloud Eye**. The value must start with a letter. Each dimension allows 1 to 32 characters and can only contain letters, digits, underscores (_), and hyphens (-). Multiple dimensions are separated using commas (,). The value can contain 1 to 131 characters. A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios. **Default Value** N/A
filter_type	Yes	String	**Description** Resource type. **Constraints** N/A **Range** • **all_instances**: all resources • **specific_instances**: specified resources **Default Value** N/A
values	No	Array of strings	**Description** Dimension value list. **Constraints** N/A

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Table 6-431 ExtraInfo

Parameter	Mandatory	Type	Description
origin_metric_name	Yes	String	**Definition** Metric name. **Constraints** N/A **Range** 1 to 4,096 characters **Default Value** N/A
metric_prefix	No	String	**Definition** Metric name prefix. **Constraints** N/A **Range** 1 to 4,096 characters **Default Value** N/A
metric_type	No	String	**Definition** Metric type. **Constraints** N/A **Range** 1 to 32 characters **Default Value** N/A
custom_proc_name	No	String	**Definition** Custom process name. **Constraints** N/A **Range** 1 to 250 characters **Default Value** N/A

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Table 6-432 properties

Parameter	Mandatory	Type	Description
filter	No	String	**Definition** Aggregation type. **Constraints** This parameter is not available for line charts. **Range** The value can only be **TopN**. **Default Value** N/A
topN	No	Integer	**Definition** Top N values. In a line chart, this parameter indicates the number of time series data records that are randomly displayed. **Constraints** N/A **Range** **1** to **2147483647** **Default Value** 100
order	No	String	**Definition** Sorting field. **Constraints** This parameter is not available for line charts. **Range** • **asc**: ascending • **desc**: descending **Default Value** N/A

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Parameter	Mandatory	Type	Description
description	No	String	**Definition** Description of the graph. **Constraints** N/A **Range** 0 to 200 **Default Value** N/A
last_week_compare_enable	No	Boolean	**Definition** Whether to display comparison data (same period last week). **Constraints** N/A **Range** • **true**: display • **false**: not display **Default Value** N/A
yesterday_compare_enable	No	Boolean	**Definition** Whether to display comparison data (same period yesterday). **Constraints** N/A **Range** • **true**: display • **false**: not display **Default Value** N/A

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Parameter	Mandatory	Type	Description
legend_location	No	String	**Definition** Legend location. **Constraints** This parameter is not available for tables. **Range** • **hide**: Hide the legend. • **right**: Place the legend on the right of the graph. • **bottom**: Place the legend at the bottom of the graph. **Default Value** N/A
legend_values	No	Array of strings	**Definition** List of statistical values to be displayed in the legend for the current time series. **Constraints** This parameter is not available for tables. For horizontal bar charts and vertical bar charts, only **last** can be selected for this parameter.
thresholds	No	Array of **ThresholdInfo** objects	**Definition** Threshold line configured for the graph. **Constraints** N/A
is_all_compare_enable	No	Boolean	**Definition** Whether to enable PoP comparison. **Constraints** N/A **Range** • **true**: enable • **false**: disable **Default Value** N/A

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Table 6-433 ThresholdInfo

Parameter	Mandatory	Type	Description
threshold	Yes	Number	**Definition** Threshold of the threshold line configured for the graph. **Constraints** N/A **Range** The value ranges from **0** to **2147483647**. **Default Value** N/A
threshold_color	Yes	String	**Definition** Color of the threshold line for the graph. **Constraints** N/A **Range** • "#B50E65": purple • "#F23030": red • "#FF8800": orange • "#F2E70C": yellow **Default Value** N/A

Table 6-434 location

Parameter	Mandatory	Type	Description
top	Yes	Integer	**Definition** Grids between the graph and the top of the dashboard. **Constraints** N/A **Range** The value ranges from **0** to **2147483647**. **Default Value** N/A

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Parameter	Mandatory	Type	Description
left	Yes	Integer	**Definition** Grids between the graph and the left side of the dashboard. **Constraints** N/A **Range** **0** to **9** **Default Value** N/A
width	Yes	Integer	**Definition** Graph width. **Constraints** N/A **Range** **3** to **12** **Default Value** N/A
height	Yes	Integer	**Definition** Graph height. **Constraints** N/A **Range** The value ranges from **3** to **2147483647**. **Default Value** N/A

Response Parameters

Status code: 200

Table 6-435 Response body parameters

Parameter	Type	Description
widget_ids	Array of strings	**Definition** Response body for creating graphs in batches.

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Status code: 400

Table 6-436 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-437 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-438 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
[ {
  "metrics" : [ {
    "namespace" : "SYS.ECS",
    "dimensions" : {
      "name" : "instance_id",
      "filter_type" : "specific_instances",
      "values" : [ "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx" ]
    },
    "metric_name" : "cpu_util",
    "alias" : [ "cpuutilalias" ],
    "extra_info" : {
      "origin_metric_name" : "cpu_util",
```

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```
    "metric_prefix" : "cpu",
    "metric_type" : "type",
    "custom_proc_name" : "app.sh"
   }
  } ],
  "view" : "bar",
  "metric_display_mode" : "single",
  "threshold" : 0.7,
  "threshold_enabled" : true,
  "title" : "widget_title",
  "properties" : {
   "filter" : "topN",
   "topN" : 100,
   "order" : "desc"
  },
  "location" : {
   "left" : 0,
   "top" : 0,
   "width" : 4,
   "height" : 3
  },
  "unit" : "%"
} ]
```

Example Responses

Status code: 200

OK

```
{
  "widget_ids" : [ "wgx234567890123456789012" ]
}
```

Status Codes

Status Code	Description
200	OK
400	The server failed to process the request.
401	Token authentication is required.
500	Failed to complete the request because of an internal server error.

Error Codes

See **Error Codes**.

6.13.2 Querying Graphs Added to a Dashboard

Function

This API is used to query graphs on a dashboard.

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Constraints

This API is not supported in the following regions: CN East-Qingdao, LA-Mexico City1, TR-Istanbul, AP-Jakarta, ME-Riyadh, and AP-Manila.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:widgets:list	List	-	-	-	-

URI

GET /v2/{project_id}/dashboards/{dashboard_id}/widgets

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Table 6-439 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
dashboard_id	Yes	String	**Definition** Dashboard ID. **Constraints** N/A **Range** The value starts with **db** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters. **Default Value** N/A

Table 6-440 Query Parameters

Parameter	Mandatory	Type	Description
group_id	No	String	ID of the group that the graph belongs to.

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Request Parameters

Table 6-441 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Response Parameters

Status code: 200

Table 6-442 Response body parameters

Parameter	Type	Description
widgets	Array of **WidgetInfoWithId** objects	Graph list.

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Table 6-443 WidgetInfoWithId

Parameter	Type	Description
widget_id	String	**Definition** Graph ID. **Range** The value must start with **wg** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters.
group_id	String	**Definition** Graph group ID. **Range** The value must start with **dg** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters. The value can also be **default** (no grouping).
metrics	Array of **WidgetMetricResp** objects	**Definition** Metric list.
title	String	**Definition** Graph name. **Range** The value allows 1 to 128 characters, and can contain digits, letters (including Latin letters), and the following special characters: "≤<>& %_:/;'? +,~()°[. -
threshold	Double	**Definition** Threshold of metrics on the graph. **Range** **0** to **1.7976931348623157e+308**
threshold_enabled	Boolean	**Definition** Whether to display the threshold. **Range** • **true**: display • **false**: not display

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Parameter	Type	Description
view	String	**Definition** Graph type. **Range** • **bar**: horizontal bar chart • **line**: line chart • **bar_chart**: bar chart • **table**: table • **circular_bar**: radial bar chart • **area_chart**: area chart
metric_display_mode	String	**Definition** Metric display type. **Range** • **single**: single-metric • **multiple**: multi-metric
properties	**properties** object	**Definition** Additional information. **Range** N/A
location	**location** object	**Definition** Graph coordinates. **Range** N/A
unit	String	**Definition** Unit. **Range** [0,32]
create_time	Long	**Definition** Dashboard creation time. **Range** **1111111111111** to **9999999999999**

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Table 6-444 WidgetMetricResp

Parameter	Type	Description
namespace	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespaces**. **Range** The value is in the service.item format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters.
dimensions	**DimensionInfoResp** object	**Description** Dimension list.
metric_name	String	**Definition** Multiple metric names. **Range** The value can contain 1 to 1,080 characters. Multiple metric names are separated by commas (,).
alias	Array of strings	**Definition** Metric aliases of the graph.
extra_info	**ExtraInfoResp** object	**Definition** Metric information.
rollup_enable	Boolean	**Definition** Whether to enable aggregation. **Range** • **true**: enabled • **false**: disabled
rollup_filter	String	**Definition** Aggregation rule. **Range** • **last**: latest value • **max**: maximum value • **min**: minimum value • **average** • **sum**

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Parameter	Type	Description
rollup_dimension	String	**Definition** Aggregation dimension. **Range** 1 to 32 characters
last_week_compare_enable	Boolean	**Definition** Whether to display comparison data (same period last week). **Range** • **true**: display • **false**: not display
yesterday_compare_enable	Boolean	**Definition** Whether to display comparison data (same period yesterday). **Range** • **true**: display • **false**: not display
metric_dimension	String	**Definition** Dimension name. Multiple dimensions are separated using commas (,). For details about the dimensions supported by each cloud service, see **Services Interconnected with Cloud Eye**. **Range** The value must start with a letter. Each dimension allows 1 to 32 characters and can only contain letters, digits, underscores (_), and hyphens (-). Multiple dimensions are separated using commas (,). The value contains 1 to 131 characters. A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios.
top_num	Integer	**Definition** Number of displayed data records. **Range** 1 to 200

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Parameter	Type	Description
unit	String	**Definition** Unit. **Range** [0,32]
order	String	**Definition** Sorting field. **Range** • **asc**: ascending • **desc**: descending
topn_metric_name	String	**Definition** Metric name of a resource. The name must start with a letter and contain only digits, letters, and underscores. The length ranges from 1 to 64 characters. For example, **cpu_util** of an ECS indicates the CPU usage of the ECS. **mongo001_command_ps** in DDS indicates the command execution frequency. For details about the metric name of each service, see **Service Metric Names**. **Range** 1 to 96 characters

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Table 6-445 DimensionInfoResp

Parameter	Type	Description
name	String	**Description** Dimension name. **Range** Multiple dimensions are separated using commas (,). For details about the dimensions supported by each cloud service, see **Services Interconnected with Cloud Eye**. The value must start with a letter. Each dimension allows 1 to 32 characters and can only contain letters, digits, underscores (_), and hyphens (-). Multiple dimensions are separated using commas (,). The total length is 1 to 131 characters. A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios.
filter_type	String	**Description** Resource type. **Range** • **all_instances**: all resources • **specific_instances**: specified resources
values	Array of strings	**Description** Dimension value list.

Table 6-446 ExtraInfoResp

Parameter	Type	Description
origin_metric_name	String	**Definition** Metric name. **Range** 1 to 4,096 characters
metric_prefix	String	**Definition** Metric name prefix. **Range** 1 to 4,096 characters

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Parameter	Type	Description
metric_type	String	**Definition** Metric type. **Range** 1 to 32 characters
custom_proc_name	String	**Definition** Custom process name. **Range** 1 to 250 characters

Table 6-447 properties

Parameter	Type	Description
filter	String	**Definition** Aggregation type. **Range** The value can only be **TopN**. This parameter is not available for line charts.
topN	Integer	**Definition** Top N values. In a line chart, this parameter indicates the number of time series data records that are randomly displayed. **Range** **1** to **2147483647**
order	String	**Definition** Sorting field. **Range** • **asc**: ascending • **desc**: descending
description	String	**Definition** Description of the graph. **Range** [0,200]

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Parameter	Type	Description
last_week_compare_enable	Boolean	**Definition** Whether to display comparison data (same period last week). **Range** • **true**: display • **false**: not display
yesterday_compare_enable	Boolean	**Definition** Whether to display comparison data (same period yesterday). **Range** • **true**: display • **false**: not display
legend_location	String	**Definition** Legend location. **Range** • **hide**: Hide the legend. • **right**: Place the legend on the right of the graph. • **bottom**: Place the legend at the bottom of the graph.
legend_values	Array of strings	**Definition** List of statistical values to be displayed in the legend for the current time series.
thresholds	Array of **ThresholdInfoResp** objects	**Definition** Threshold line configured for the graph.
is_all_compare_enable	Boolean	**Definition** Whether to enable PoP comparison. **Range** • **true**: enable • **false**: disable

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Table 6-448 ThresholdInfoResp

Parameter	Type	Description
threshold	Number	**Definition** Threshold of the threshold line configured for the graph. **Range** **0** to **2147483647**
threshold_color	String	**Definition** Color of the threshold line for the graph. **Range** • "#B50E65": purple • "#F23030": red • "#FF8800": orange • "#F2E70C": yellow

Table 6-449 location

Parameter	Type	Description
top	Integer	**Definition** Grids between the graph and the top of the dashboard. **Range** The value ranges from **0** to **2147483647**.
left	Integer	**Definition** Grids between the graph and the left side of the dashboard. **Range** **0** to **9**
width	Integer	**Definition** Graph width. **Range** **3** to **12**
height	Integer	**Definition** Graph height. **Range** **3** to **2147483647**

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Status code: 400

Table 6-450 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-451 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-452 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

None

Example Responses

Status code: 200

OK

```
[ {
  "widget_id" : "wg123456789012345678901",
```

```
"metrics" : [ {
  "namespace" : "SYS.ECS",
  "dimensions" : {
    "name" : "instance_id",
    "filter_type" : "specific_instances",
    "values" : [ "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx" ],
    "metric_name" : "cpu_util",
    "alias" : [ "cpuutilalias" ],
    "extra_info" : {
      "origin_metric_name" : "cpu_util",
      "metric_prefix" : "cpu",
      "metric_type" : "type",
      "custom_proc_name" : "app.sh"
    }
  }
} ],
"view" : "bar",
"metric_display_mode" : "single",
"threshold" : 0.7,
"threshold_enabled" : true,
"title" : "widget_title",
"properties" : {
  "filter" : "topN",
  "topN" : 100,
  "order" : "desc"
},
"location" : {
  "left" : 0,
  "top" : 0,
  "width" : 4,
  "height" : 3
},
"unit" : "%",
"create_time" : 1111111111111
} ]
```


Status Codes

Status Code	Description
200	OK
400	The server failed to process the request.
401	Token authentication is required.
500	Failed to complete the request because of an internal server error.

Error Codes

See **Error Codes**.

6.13.3 Querying Information About a Graph

Function

This API is used to query information about a graph.

Constraints

This API is not supported in the following regions: CN East-Qingdao, LA-Mexico City1, TR-Istanbul, AP-Jakarta, ME-Riyadh, and AP-Manila.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:widgets:get	Read	-	-	-	-

URI

GET /v2/{project_id}/widgets/{widget_id}

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Table 6-453 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
widget_id	Yes	String	**Definition** Graph ID. **Constraints** N/A **Range** The value must start with **wg** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters. **Default Value** N/A

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Request Parameters

Table 6-454 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Response Parameters

Status code: 200

Table 6-455 Response body parameters

Parameter	Type	Description
widget_id	String	**Definition** Graph ID. **Range** The value must start with **wg** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters.

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Parameter	Type	Description
group_id	String	**Definition** Graph group ID. **Range** The value must start with **dg** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters. The value can also be **default** (no grouping).
metrics	Array of **WidgetMetricResp** objects	**Definition** Metric list.
title	String	**Definition** Graph name. **Range** The value allows 1 to 128 characters, and can contain digits, letters (including Latin letters), and the following special characters: "≤<>& %_:/;'? +,~()°[. -
threshold	Double	**Definition** Threshold of metrics on the graph. **Range** **0** to **1.7976931348623157e+308**
threshold_enabled	Boolean	**Definition** Whether to display the threshold. **Range** • **true**: display • **false**: not display
view	String	**Definition** Graph type. **Range** • **bar**: horizontal bar chart • **line**: line chart • **bar_chart**: bar chart • **table**: table • **circular_bar**: radial bar chart • **area_chart**: area chart

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Parameter	Type	Description
metric_display_mode	String	**Definition** Metric display type. **Range** • **single**: single-metric • **multiple**: multi-metric
properties	**properties** object	**Definition** Additional information. **Range** N/A
location	**location** object	**Definition** Graph coordinates. **Range** N/A
unit	String	**Definition** Unit. **Range** [0,32]
create_time	Long	**Definition** Dashboard creation time. **Range** **1111111111111** to **9999999999999**

Table 6-456 WidgetMetricResp

Parameter	Type	Description
namespace	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespaces**. **Range** The value is in the service.item format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). The value must contain 3 to 32 characters.

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Parameter	Type	Description
dimensions	**DimensionInfoResp** object	**Description** Dimension list.
metric_name	String	**Definition** Multiple metric names. **Range** The value can contain 1 to 1,080 characters. Multiple metric names are separated by commas (,).
alias	Array of strings	**Definition** Metric aliases of the graph.
extra_info	**ExtraInfoResp** object	**Definition** Metric information.
rollup_enable	Boolean	**Definition** Whether to enable aggregation. **Range** • **true**: enabled • **false**: disabled
rollup_filter	String	**Definition** Aggregation rule. **Range** • **last**: latest value • **max**: maximum value • **min**: minimum value • **average** • **sum**
rollup_dimension	String	**Definition** Aggregation dimension. **Range** 1 to 32 characters
last_week_compare_enable	Boolean	**Definition** Whether to display comparison data (same period last week). **Range** • **true**: display • **false**: not display

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Parameter	Type	Description
yesterday_compare_enable	Boolean	**Definition** Whether to display comparison data (same period yesterday). **Range** • **true**: display • **false**: not display
metric_dimension	String	**Definition** Dimension name. Multiple dimensions are separated using commas (,). For details about the dimensions supported by each cloud service, see **Services Interconnected with Cloud Eye**. **Range** The value must start with a letter. Each dimension allows 1 to 32 characters and can only contain letters, digits, underscores (_), and hyphens (-). Multiple dimensions are separated using commas (,). The value contains 1 to 131 characters. A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios.
top_num	Integer	**Definition** Number of displayed data records. **Range** 1 to 200
unit	String	**Definition** Unit. **Range** [0,32]
order	String	**Definition** Sorting field. **Range** • **asc**: ascending • **desc**: descending

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Parameter	Type	Description
topn_metric_name	String	**Definition** Metric name of a resource. The name must start with a letter and contain only digits, letters, and underscores. The length ranges from 1 to 64 characters. For example, **cpu_util** of an ECS indicates the CPU usage of the ECS. **mongo001_command_ps** in DDS indicates the command execution frequency. For details about the metric name of each service, see **Service Metric Names**. **Range** 1 to 96 characters

Table 6-457 DimensionInfoResp

Parameter	Type	Description
name	String	**Description** Dimension name. **Range** Multiple dimensions are separated using commas (,). For details about the dimensions supported by each cloud service, see **Services Interconnected with Cloud Eye**. The value must start with a letter. Each dimension allows 1 to 32 characters and can only contain letters, digits, underscores (_), and hyphens (-). Multiple dimensions are separated using commas (,). The total length is 1 to 131 characters. A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios.
filter_type	String	**Description** Resource type. **Range** • **all_instances**: all resources • **specific_instances**: specified resources

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Parameter	Type	Description
values	Array of strings	**Description** Dimension value list.

Table 6-458 ExtraInfoResp

Parameter	Type	Description
origin_metric_name	String	**Definition** Metric name. **Range** 1 to 4,096 characters
metric_prefix	String	**Definition** Metric name prefix. **Range** 1 to 4,096 characters
metric_type	String	**Definition** Metric type. **Range** 1 to 32 characters
custom_proc_name	String	**Definition** Custom process name. **Range** 1 to 250 characters

Table 6-459 properties

Parameter	Type	Description
filter	String	**Definition** Aggregation type. **Range** The value can only be **TopN**. This parameter is not available for line charts.

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Parameter	Type	Description
topN	Integer	**Definition** Top N values. In a line chart, this parameter indicates the number of time series data records that are randomly displayed. **Range** **1** to **2147483647**
order	String	**Definition** Sorting field. **Range** • **asc**: ascending • **desc**: descending
description	String	**Definition** Description of the graph. **Range** [0,200]
last_week_compare_enable	Boolean	**Definition** Whether to display comparison data (same period last week). **Range** • **true**: display • **false**: not display
yesterday_compare_enable	Boolean	**Definition** Whether to display comparison data (same period yesterday). **Range** • **true**: display • **false**: not display
legend_location	String	**Definition** Legend location. **Range** • **hide**: Hide the legend. • **right**: Place the legend on the right of the graph. • **bottom**: Place the legend at the bottom of the graph.

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Parameter	Type	Description
legend_values	Array of strings	**Definition** List of statistical values to be displayed in the legend for the current time series.
thresholds	Array of **ThresholdInfoResp** objects	**Definition** Threshold line configured for the graph.
is_all_compare_enable	Boolean	**Definition** Whether to enable PoP comparison. **Range** • **true**: enable • **false**: disable

Table 6-460 ThresholdInfoResp

Parameter	Type	Description
threshold	Number	**Definition** Threshold of the threshold line configured for the graph. **Range** **0** to **2147483647**
threshold_color	String	**Definition** Color of the threshold line for the graph. **Range** • "#B50E65": purple • "#F23030": red • "#FF8800": orange • "#F2E70C": yellow

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Table 6-461 location

Parameter	Type	Description
top	Integer	**Definition** Grids between the graph and the top of the dashboard. **Range** The value ranges from **0** to **2147483647**.
left	Integer	**Definition** Grids between the graph and the left side of the dashboard. **Range** **0** to **9**
width	Integer	**Definition** Graph width. **Range** **3** to **12**
height	Integer	**Definition** Graph height. **Range** **3** to **2147483647**

Status code: 400

Table 6-462 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

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Table 6-463 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-464 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "widget_id" : "wg123456789012345678901 2",
  "metrics" : [ {
    "namespace" : "SYS.ECS",
    "dimensions" : {
      "name" : "instance_id",
      "filter_type" : "all_instances"
    },
    "metric_name" : "cpu_util",
    "alias" : [ "cpuutilalias" ],
    "extra_info" : {
      "origin_metric_name" : "cpu_util",
      "metric_prefix" : "cpu",
      "metric_type" : "type",
      "custom_proc_name" : "app.sh"
    }
  } ],
  "view" : "bar",
  "metric_display_mode" : "single",
  "threshold" : 0.7,
  "threshold_enabled" : true,
  "title" : "widget_title",
  "properties" : {
    "filter" : "topN",
```

```
  "topN" : 100,
  "order" : "desc",
  "description" : "Simple example.",
  "last_week_compare_enable" : false,
  "yesterday_compare_enable" : false,
  "legend_location" : "right",
  "legend_values" : [ "max", "min" ],
  "thresholds" : [ {
    "threshold" : 90,
    "threshold_color" : "#F23030"
  } ]
 },
 "location" : {
  "left" : 0,
  "top" : 0,
  "width" : 4,
  "height" : 3
 },
 "unit" : "%",
 "create_time" : 1111111111111
}
```


Status Codes

Status Code	Description
200	OK
400	The server failed to process the request.
401	Token authentication is required.
500	Failed to complete the request because of an internal server error.

Error Codes

See **Error Codes**.

6.13.4 Deleting a Graph

Function

This API is used to delete a graph.

Constraints

This API is not supported in the following regions: CN East-Qingdao, LA-Mexico City1, TR-Istanbul, AP-Jakarta, ME-Riyadh, and AP-Manila.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

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Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:widgets:delete	Write	-	-	-	-

URI

DELETE /v2/{project_id}/widgets/{widget_id}

Table 6-465 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

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Parameter	Mandatory	Type	Description
widget_id	Yes	String	**Definition** Graph ID. **Constraints** N/A **Range** The value must start with **wg** and is followed by 22 characters of letters, digits, or a combination of both. The total length is 24 characters. **Default Value** N/A

Request Parameters

Table 6-466 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

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Response Parameters

Status code: 204

No Content

Status code: 400

Table 6-467 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-468 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-469 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

None

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Example Responses

None

Status Codes

Status Code	Description
204	No Content
400	The server failed to process the request.
401	Token authentication is required.
500	Failed to complete the request because of an internal server error.

Error Codes

See **Error Codes**.

6.13.5 Updating Graphs in Batches

Function

This API is used to update graphs in batches.

Constraints

This API is not supported in the following regions: CN East-Qingdao, LA-Mexico City1, TR-Istanbul, AP-Jakarta, ME-Riyadh, and AP-Manila.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:widgets:put	Write	-	ces:namespace	-	-

URI

POST /v2/{project_id}/widgets/batch-update

Table 6-470 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

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Request Parameters

Table 6-471 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Table 6-472 Request body parameters

Parameter	Mandatory	Type	Description
[items]	Yes	Array of **UpdateWidgetInfo** objects	List of graphs to be modified.

Table 6-473 UpdateWidgetInfo

Parameter	Mandatory	Type	Description
group_id	No	String	Graph partition ID.
widget_id	Yes	String	Graph ID.

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Parameter	Mandatory	Type	Description
metrics	No	Array of **WidgetMetric** objects	Metric list.
title	No	String	Graph name.
threshold	No	Double	Threshold of metrics on the graph.
threshold_enabled	No	Boolean	Whether to display thresholds of metrics. The value can be **true** (to display) and **false** (not to display).
view	No	String	Graph type. The value can be **bar**, **line**, **bar_chart**, **table**, **circular_bar**, or **area_chart**.
metric_display_mode	No	String	Metric display mode. The value can be **single** or **multiple**.
properties	No	**properties** object	Graph display configuration.
location	No	**location** object	Graph coordinates.
unit	No	String	**Definition** Unit. **Constraints** N/A **Range** [0,32] **Default Value** N/A

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Table 6-474 WidgetMetric

Parameter	Mandatory	Type	Description
namespace	Yes	String	**Definition** Namespace of a service. For details about the namespace of each service, see **Namespaces**. **Constraints** N/A **Range** The value is in the service.item format. The values of **service** and **item** must be a string, starting with a letter and containing only digits (0–9), letters (case-insensitive), and underscores (_). It must contain 3 to 32 characters. **Default Value** N/A
dimensions	Yes	**DimensionInfo** object	**Description** Dimension list. **Constraints** N/A
metric_name	Yes	String	**Definition** Multiple metric names. **Constraints** N/A **Range** The value can contain 1 to 1,080 characters. Multiple metric names are separated by commas (,). **Default Value** N/A
alias	No	Array of strings	**Definition** Metric aliases of the graph. **Constraints** This parameter can be transferred only when the resource type is set to **Specified resources**.

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Parameter	Mandatory	Type	Description
extra_info	No	ExtraInfo object	**Definition** Metric information. **Constraints** N/A
rollup_enable	No	Boolean	**Definition** Whether to enable aggregation. **Constraints** If **rollup_enable** is enabled, **rollup_filter** and **rollup_dimension** are mandatory. **Range** • **true**: enabled • **false**: disabled **Default Value** false
rollup_filter	No	String	**Definition** Aggregation rule. **Constraints** If **rollup_enable** is enabled, **rollup_filter** and **rollup_dimension** are mandatory. **Range** • **last**: latest value • **max**: maximum value • **min**: minimum value • **average** • **sum** **Default Value** N/A

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Parameter	Mandatory	Type	Description
rollup_dimension	No	String	**Definition** Aggregation dimension. **Constraints** N/A **Range** 1 to 32 characters **Default Value** N/A
last_week_compare_enable	No	Boolean	**Definition** Whether to display comparison data (same period last week). **Constraints** N/A **Range** • **true**: display • **false**: not display **Default Value** N/A
yesterday_compare_enable	No	Boolean	**Definition** Whether to display comparison data (same period yesterday). **Constraints** N/A **Range** • **true**: display • **false**: not display **Default Value** N/A

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Parameter	Mandatory	Type	Description
metric_dimension	No	String	**Definition** Dimension name. For details about the dimensions supported by each service, see **Service Dimension Names**. The value must start with a letter and can only contain digits, letters, underscores (_), and hyphens (-). Multiple dimensions are separated by commas (,). Each dimension allows 32 characters. The total length is 1 to 131 characters. A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios. **Constraints** N/A **Range** 1 to 131 characters **Default Value** N/A
top_num	No	Integer	**Definition** Number of displayed data records. **Constraints** N/A **Range** 1 to 200 **Default Value** N/A
unit	No	String	**Definition** Unit. **Constraints** N/A **Range** [0,32] **Default Value** N/A

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Parameter	Mandatory	Type	Description
order	No	String	**Definition** Sorting field. **Constraints** N/A **Range** • **asc**: ascending • **desc**: descending **Default Value** N/A
topn_metric_name	No	String	**Definition** Metric name of a resource. The name must start with a letter and contain only digits, letters, and underscores. The length ranges from 1 to 64 characters. For example, **cpu_util** of an ECS indicates the CPU usage of the ECS. **mongo001_command_ps** in DDS indicates the command execution frequency. For details about the metric name of each service, see **Service Metric Names**. **Constraints** N/A **Range** 1 to 96 characters **Default Value** N/A

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Table 6-475 DimensionInfo

Parameter	Mandatory	Type	Description
name	Yes	String	**Description** Dimension name. **Constraints** N/A **Range** Multiple dimensions are separated using commas (,). For details about the dimensions supported by each cloud service, see **Services Interconnected with Cloud Eye**. The value must start with a letter. Each dimension allows 1 to 32 characters and can only contain letters, digits, underscores (_), and hyphens (-). Multiple dimensions are separated using commas (,). The value can contain 1 to 131 characters. A maximum of four dimensions are supported. Example: **instance_id** for single-dimension scenarios; **instance_id,disk** for multi-dimension scenarios. **Default Value** N/A
filter_type	Yes	String	**Description** Resource type. **Constraints** N/A **Range** • **all_instances**: all resources • **specific_instances**: specified resources **Default Value** N/A
values	No	Array of strings	**Description** Dimension value list. **Constraints** N/A

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Table 6-476 ExtraInfo

Parameter	Mandatory	Type	Description
origin_metric_name	Yes	String	**Definition** Metric name. **Constraints** N/A **Range** 1 to 4,096 characters **Default Value** N/A
metric_prefix	No	String	**Definition** Metric name prefix. **Constraints** N/A **Range** 1 to 4,096 characters **Default Value** N/A
metric_type	No	String	**Definition** Metric type. **Constraints** N/A **Range** 1 to 32 characters **Default Value** N/A
custom_proc_name	No	String	**Definition** Custom process name. **Constraints** N/A **Range** 1 to 250 characters **Default Value** N/A

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Table 6-477 properties

Parameter	Mandatory	Type	Description
filter	No	String	Aggregation type. Currently, the value can only be **TopN**. A line chart does not support this parameter.
topN	No	Integer	Top *N* values. In a line chart, this parameter indicates the number of time series data records that are randomly displayed.
order	No	String	Sorting field. The value can be **asc** (ascending order) or **desc** (descending order). A line chart does not support this parameter.
description	No	String	Description of the graph.
last_week_compare_enable	No	Boolean	Whether to display comparison data (same period last week). The value can be **true** or **false**.
yesterday_compare_enable	No	Boolean	Whether to display comparison data (same period yesterday). The value can be **true** or **false**.
legend_location	No	String	Legend position flag. The value can be **hide**, **right**, or **bottom**. Tables do not support this parameter.
legend_values	No	Array of strings	List of statistical values to be displayed in the legend for the current time series. This parameter is not supported in tables. For bar charts and bar charts, only **last** can be selected.
thresholds	No	Array of **ThresholdInfo** objects	Threshold line configured for the graph.
is_all_compare_enable	No	Boolean	Whether to enable PoP comparison. The value can be **true** or **false**.

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Table 6-478 ThresholdInfo

Parameter	Mandatory	Type	Description
threshold	Yes	Number	**Definition** Threshold of the threshold line configured for the graph. **Constraints** N/A **Range** The value ranges from **0** to **2147483647**. **Default Value** N/A
threshold_color	Yes	String	**Definition** Color of the threshold line for the graph. **Constraints** N/A **Range** • "#B50E65": purple • "#F23030": red • "#FF8800": orange • "#F2E70C": yellow **Default Value** N/A

Table 6-479 location

Parameter	Mandatory	Type	Description
top	Yes	Integer	Grids between the graph and the top of the dashboard.
left	Yes	Integer	Grids between the graph and the left side of the dashboard.
width	Yes	Integer	Graph width.
height	Yes	Integer	Graph height.

Response Parameters

Status code: 200

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Table 6-480 Response body parameters

Parameter	Type	Description
widgets	Array of **BatchUpdateWidgetInfo** objects	Update result list.

Table 6-481 BatchUpdateWidgetInfo

Parameter	Type	Description
widget_id	String	Graph ID.
ret_status	String	Update result. The value can be **successful** or **error**.
error_msg	String	Error message when an operation fails.

Status code: 400

Table 6-482 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 401

Table 6-483 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

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Table 6-484 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
[ {
  "widget_id" : "wgXXXXXXXXXXXXXXXXXXXXXX",
  "metrics" : [ {
    "namespace" : "SYS.ECS",
    "dimensions" : {
      "name" : "instance_id",
      "filter_type" : "all_instances"
    },
    "metric_name" : "cpu_util",
    "alias" : [ "cpuutilalias" ],
    "extra_info" : {
      "origin_metric_name" : "cpu_util",
      "metric_prefix" : "cpu",
      "metric_type" : "type",
      "custom_proc_name" : "app.sh"
    }
  } ],
  "view" : "bar",
  "metric_display_mode" : "single",
  "threshold" : 500,
  "threshold_enabled" : false,
  "title" : "widget_title_new",
  "properties" : {
    "filter" : "topN",
    "topN" : 10,
    "order" : "asc"
  },
  "location" : {
    "left" : 0,
    "top" : 3,
    "width" : 4,
    "height" : 3
  },
  "unit" : "%"
} ]
```

Example Responses

Status code: 200

OK

```
{
  "widgets" : [ {
    "widget_id" : "wgXXXXXXXXXXXXXXXXXXXXXX",
    "ret_status" : "successful"
  }, {
    "widget_id" : "wg987654321012345678901 2",
    "ret_status" : "error",
    "error_msg" : "record not found"
```

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```
 }]
}
```

Status Codes

Status Code	Description
200	OK
400	The server failed to process the request.
401	Token authentication is required.
500	Failed to complete the request because of an internal server error.

Error Codes

See **Error Codes**.

6.14 Resource Tag Management

6.14.1 Querying Tags for a Specified Resource Type in a Cloud Eye Project

Function

This API is used to query tags of a type of resources in a Cloud Eye project.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

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Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:tags:list	List	-	-	• ces:projecttags:list	-

URI

GET /v2/{project_id}/{resource_type}/tags

Table 6-485 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
resource_type	Yes	String	**Definition** Resource type. **Constraints** N/A **Range** The value can only be **CES-alarm** (alarm rules). It contains 1 to 32 characters. **Default Value** N/A

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Request Parameters

Table 6-486 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

Response Parameters

Status code: 200

Table 6-487 Response body parameters

Parameter	Type	Description
tags	Array of **TagResp** objects	**Definition** Tenant tags.

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Table 6-488 TagResp

Parameter	Type	Description
key	String	**Definition** Tag name. **Range** Each tag key can contain a maximum of 128 Unicode characters.
values	Array of strings	**Definition** Tag value. **Range** It can contain a maximum of 255 Unicode characters. If **values** is not specified, any parameter value can be queried.

Status code: 404

Table 6-489 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

None

Example Responses

Status code: 200

OK

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

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Status Codes

Status Code	Description
200	OK
404	Resource not found.

Error Codes

See **Error Codes**.

6.15 Metric Management

6.15.1 Querying the Original Dimension Values in Server Monitoring

Function

This API is used to query the original dimension value based on the ECS/BMS resource ID and special dimension value for disks, mount points, processes, GPUs, and RAID controllers. This API is not required for other dimensions.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:namespacesDimensions:listAgentDimensions	List	-	-	• ces:namespacesDimensions:list	-

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URI

GET /v2/{project_id}/instances/{instance_id}/agent-dimensions

Table 6-490 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition** Project ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A
instance_id	Yes	String	**Description** Resource ID, for example, **4270ff17-aba3-4138-89fa-820594c39755**. **Constraints**: None **Value range**: The value can contain a maximum of 36 characters. **Default value**: None

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Table 6-491 Query Parameters

Parameter	Mandatory	Type	Description
dim_name	Yes	String	**Description** Dimension name. **Constraints**: None **Value range**: Enumerated values. The value can be **mount_point**, **disk**, **proc**, **gpu**, or **raid**. **Default value**: None
dim_value	No	String	**Description** Dimension value. Under the same **instance_id**, the same **dim_value** * corresponds to the same original dimension value **origin_value**, so you do not need to call this API for multiple times. You are advised to combine **instance_id** and **dim_value** as the key for data cache and reuse. **Constraints**: N/A **Range**: The value can contain a maximum of 32 characters, for example, **2e84018fc8b4484b94e89aae212fe615**. **Default value**: N/A
offset	No	Integer	**Description** Pagination offset. **Constraints**: None **Value range**: The value ranges from **0** to **2147483647**. **Default value**: 0

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Parameter	Mandatory	Type	Description
limit	No	Integer	**Description** Page size. **Constraints**: None **Value range**: The value ranges from **1** to **1000**. **Default value**: 1000

Request Parameters

Table 6-492 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints**: None **Value range**: The value can contain 1 to 64 characters. **Default value**: The default type is **application/json; charset=UTF-8**.
X-Auth-Token	No	String	**Definition** User token. **Constraints**: None **Value range**: The value can contain 1 to 16,384 characters. **Default value**: None

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Response Parameters

Status code: 200

Table 6-493 Response body parameters

Parameter	Type	Description
dimensions	Array of AgentDimension objects	**Definition**: Dimension information.
count	Integer	**Definition**: Total number of dimensions. **Value range**: The value is an integer from **0** to **2147483647**.

Table 6-494 AgentDimension

Parameter	Type	Description
name	String	**Definition**: Dimension name. **Value range**: Enumerated values. The value can be **mount_point**, **disk**, **proc**, **gpu**, or **raid**.
value	String	**Definition**: Dimension value. **Value range**: The value can contain 32 characters.
origin_value	String	**Definition**: Actual dimension information. **Range** The value can contain 1 to 1,024 characters.

Status code: 400

Table 6-495 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.

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Parameter	Type	Description
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 404

Table 6-496 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Status code: 500

Table 6-497 Response body parameters

Parameter	Type	Description
error_code	String	Status codes customized by each cloud service when a request error occurs.
error_msg	String	Request error message.
request_id	String	Request ID.

Example Requests

```
/v2/{project_id}/instances/4270ff17-aba3-4138-89fa-820594c39755/agent-dimensions?offset=0&limit=10
```

Example Responses

Status code: 200

Query succeeded.

```
{
  "dimensions" : [ {
    "name" : "disk",
    "value" : "2e84018fc8b4484b94e89aae212fe615",
    "origin_value" : "vda"
  }, {
    "name" : "disk",
    "value" : "6a1b2de69eeb9a037ea23de6b529394d",
    "origin_value" : "vdc"
  } ],
```

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```
 "count" : 10
}
```

Status Codes

Status Code	Description
200	Query succeeded.
400	Parameter verification failed.
404	Resource not found.
500	Internal system error.

Error Codes

See **Error Codes**.

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7 API V3

7.1 Agent Statuses

7.1.1 Querying Agent Statuses in Batches

Function

This API is used to query the Agent (including the uniagent) statuses.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:agent:listStatuses	List	-	-	• ces:agentStatus:get • ces:agentStatus:list	-

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URI

POST /v3/{project_id}/agent-status/batch-query

Table 7-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Tenant ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Range**: 1 to 64 characters **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Request Parameters

Table 7-2 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints** N/A **Range** 1 to 64 characters **Default Value** application/json; charset=UTF-8

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Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Specifies the user token. It is a response to the API for obtaining a user token. This API is the only one that does not require authentication. The value of **X-Subject-Token** in the response header is the token.

Table 7-3 Request body parameters

Parameter	Mandatory	Type	Description
instance_ids	Yes	Array of strings	**Definition** Server ID list. **Constraints** The number of server instance IDs ranges from 1 to 2,000.
uniagent_status	No	String	**Definition** UniAgent running status. If this parameter is not specified, all states are queried. **Constraints** N/A **Range** • **none**: not installed • **running** • **silent**: silent state, which is used for emergency workaround during large-scale plug-in failures. The system forcefully stops the telescope process and retains only the UniAgent heartbeat function. • **unknown**: heartbeat fault. No heartbeat data is reported. This is a type of connection loss. **Default Value** N/A

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Parameter	Mandatory	Type	Description
extension_name	No	String	**Definition** Plug-in name. If this parameter is not specified, all plug-ins are queried. **Constraints** Only the telescope plug-in can be queried. **Range** • **telescope**: server monitoring plug-in **Default Value** **telescope**
extension_status	No	String	**Definition** Plug-in status. If this parameter is not specified, all states are queried. **Constraints** N/A **Range** • **none**: not installed • **running** • **stopped** • **fault**: process fault. The desired plug-in is not running. This is a fault from the client. • **unknown**: heartbeat fault. No heartbeat data is reported. This is a type of connection loss. **Default Value** N/A

Response Parameters

Status code: 200

Table 7-4 Response body parameters

Parameter	Type	Description
agent_status	Array of **AgentStatusInfo** objects	**Definition** Agent statuses.

Table 7-5 AgentStatusInfo

Parameter	Type	Description
instance_id	String	**Definition** Server ID. **Range** The value allows 1 to 64 characters and can only contain letters, digits, and hyphens (-).
uniagent_status	String	**Definition** UniAgent status. **Range** • **none**: not installed • **running** • **silent**: silent state, which is used for emergency workaround during large-scale plug-in failures. The system forcefully stops the telescope process and retains only the UniAgent heartbeat function. • **unknown**: heartbeat fault. No heartbeat data is reported. This is a type of connection loss.
extensions	Array of **ExtensionInfo** objects	**Definition** Agent information list.

Table 7-6 ExtensionInfo

Parameter	Type	Description
name	String	**Definition** Plug-in name. **Range** 1 to 64 characters

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Parameter	Type	Description
status	String	**Definition** Plug-in status. **Range** • **none**: not installed • **running** • **stopped** • **fault**: process exception • **unknown**: connection exception
version	String	**Definition** Plug-in version. **Range** 1 to 32 characters

Status code: 400

Table 7-7 Response body parameters

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

Status code: 401

Table 7-8 Response body parameters

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

Status code: 403

Table 7-9 Response body parameters

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

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Status code: 500

Table 7-10 Response body parameters

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

Example Requests

```
{
  "instance_ids" : [ "111111111111" ],
  "uniagent_status" : "none",
  "extension_name" : "telescope",
  "extension_status" : "none"
}
```

Example Responses

Status code: 200

Specifies the response body for querying the Agent statuses in batches.

```
{
  "agent_status" : [ {
    "instance_id" : "111111111111",
    "uniagent_status" : "none",
    "extensions" : [ {
      "name" : "telescope",
      "status" : "none",
      "version" : "2.5.6"
    } ]
  } ]
}
```

Status Codes

Status Code	Description
200	Specifies the response body for querying the Agent statuses in batches.
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See **Error Codes**.

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7.2 Agent maintenance tasks

7.2.1 Querying the Agent Maintenance Tasks

Function

This API is used to querying the Agent maintenance tasks.

Constraints

Currently, this API is not supported in the **LA-Buenos Aires1** and **LA-Lima1** regions. This API can only be used to query the Agent tasks within three months.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:agent:listTaskInvocations	List	-	-	• ces:taskInvocation:get	-

URI

GET /v3/{project_id}/agent-invocations

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Table 7-11 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Tenant ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Range**: 1 to 64 characters **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Table 7-12 Query Parameters

Parameter	Mandatory	Type	Description
instance_id	No	String	**Definition** Server ID. **Constraints** N/A **Range** The value allows 1 to 64 characters and can only contain letters, digits, and hyphens (-). **Default Value** N/A

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Parameter	Mandatory	Type	Description
instance_type	No	String	**Definition** Server type. Only ECSs and BMSs are supported. **Constraints** N/A **Range** • **ECS** • **BMS** **Default Value** N/A
invocation_id	No	String	**Definition** Task ID. **Constraints** N/A **Range** The value must start with a letter or digit and can be followed by letters, digits, underscores (_), or hyphens (-). It must contain at least one character. **Default Value** N/A

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Parameter	Mandatory	Type	Description
invocation_type	No	String	**Definition** Task type. The options are **INSTALL**, **UPDATE**, **ROLLBACK**, **RETRY**, **SET_REMOTE_INSTALLER**, and **REMOTE_INSTALL**. **Constraints** N/A **Range** • **INSTALL** • **UPDATE** • **ROLLBACK** • **RETRY** • **SET_REMOTE_INSTALLER**: setting the remote installation host • **REMOTE_INSTALL**: remote installation **Default Value** N/A
invocation_target	No	String	**Definition** Task object. **telescope** is supported. **Constraints** N/A **Range** • **telescope**: server monitoring plug-in **Default Value** **telescope**
offset	No	Long	**Definition** Pagination offset. **Constraints** N/A **Range** [0,9999999999999] **Default Value** 0

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Parameter	Mandatory	Type	Description
limit	No	Integer	**Definition** Number of records displayed on each page. **Constraints** N/A **Range** [1,100] **Default Value** 100

Request Parameters

Table 7-13 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints** N/A **Range** 1 to 64 characters **Default Value** application/json; charset=UTF-8
X-Auth-Token	No	String	Specifies the user token. It is a response to the API for obtaining a user token. This API is the only one that does not require authentication. The value of **X-Subject-Token** in the response header is the token.

Response Parameters

Status code: 200

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Table 7-14 Response body parameters

Parameter	Type	Description
invocations	Array of **InvocationInfo** objects	**Definition** Task list.
count	Long	**Definition** Total number of tasks in the task list. **Range** [0,9999999999999]

Table 7-15 InvocationInfo

Parameter	Type	Description
invocation_id	String	**Definition** Task ID. **Range** The value must start with a letter or digit and can only contain letters, digits, underscores (_), and hyphens (-). It must contain at least one character.
instance_id	String	**Definition** Server ID. **Range** The value allows 1 to 64 characters and can only contain letters, digits, and hyphens (-).
instance_name	String	**Definition** Server name. **Range** 1 to 128 characters
instance_type	String	**Definition** Server type. Only ECSs and BMSs are supported. **Range** • **ECS** • **BMS**
intranet_ips	Array of strings	**Definition** Private IP address list.

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Parameter	Type	Description
elastic_ips	Array of strings	**Definition** EIP list.
invocation_type	String	**Definition** Task type. **Range** • **INSTALL**: install • **UPDATE**: upgrade • **ROLLBACK**: rollback • **RETRY**: retry
invocation_status	String	**Definition** Task status. **Range** • **PENDING**: pending execution • **RUNNING**: running • **TIMEOUT**: timeout • **FAILED**: failed • **SUCCEEDED**: succeeded • **CANCELED**: canceled • **ROLLBACKED**: rolled back
invocation_target	String	**Definition** Task object. **telescope** is supported. **Range** • **telescope**: server monitoring plug-in
create_time	Long	**Definition** Time when the task was created. **Range** [1111111111111,9999999999999]
update_time	Long	**Definition** Time when the task was updated. **Range** [1111111111111,9999999999999]
current_version	String	**Definition** Current version. **Range** [1, 64]

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Parameter	Type	Description
target_version	String	**Definition** Target version. **Range** [1, 64]
result_msg	String	**Definition** Task execution results. **Range** 1 to 5,000 characters

Status code: 400

Table 7-16 Response body parameters

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

Status code: 401

Table 7-17 Response body parameters

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

Status code: 403

Table 7-18 Response body parameters

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

Status code: 500

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Table 7-19 Response body parameters

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

Example Requests

None

Example Responses

Status code: 200

OK

```
{
  "invocations" : [ {
    "invocation_id" : "invocationxxx001",
    "instance_id" : "instancexxx001",
    "instance_name" : "xxxx",
    "instance_type" : "ECS",
    "intranet_ips" : [ "10.xxx.xx.1" ],
    "elastic_ips" : [ "1.xx.xx.1" ],
    "invocation_type" : "INSTALL",
    "invocation_status" : "RUNNING",
    "invocation_target" : "telescope",
    "current_version" : "2.5.1",
    "target_version" : "2.6.1",
    "create_time" : 1678070008306,
    "update_time" : 1678070008306,
    "result_msg" : "xxx"
  } ],
  "count" : 1
}
```

Status Codes

Status Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See **Error Codes**.

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7.2.2 Creating Agent maintenance Tasks in Batches

Function

This API is used to create Agent maintenance tasks in batches.

Constraints

Currently, this API is not supported in the **LA-Buenos Aires1** and **LA-Lima1** regions.

Debugging

You can debug this API through automatic authentication in **API Explorer** or use the SDK sample code generated by API Explorer.

Authorization Information

Each account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions.

- If you are using role/policy-based authorization, see **Permissions Policies and Supported Actions** for details on the required permissions.
- If you are using identity policy-based authorization, the following identity policy-based permissions are required.

Action	Access Level	Resource Type (*: required)	Condition Key	Alias	Dependencies
ces:agent:createAgentInvocations	Write	-	-	• ces:taskInvocation:post	-

URI

POST /v3/{project_id}/agent-invocations/batch-create

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Table 7-20 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	**Definition**: Tenant ID. It is used to specify the project that an asset belongs to. You can query the assets of a project by project ID. You can obtain the project ID from the API or console. For details, see **Obtaining a Project ID**. **Range**: 1 to 64 characters **Constraints** N/A **Range** 1 to 64 characters **Default Value** N/A

Request Parameters

Table 7-21 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	**Definition** MIME type of the request body. **Constraints** N/A **Range** 1 to 64 characters **Default Value** application/json; charset=UTF-8
X-Auth-Token	No	String	Specifies the user token. It is a response to the API for obtaining a user token. This API is the only one that does not require authentication. The value of **X-Subject-Token** in the response header is the token.

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Table 7-22 Request body parameters

Parameter	Mandatory	Type	Description
instance_ids	No	Array of strings	**Definition** Server ID list. (This parameter is mandatory when the task type is **INSTALL** or **UPDATE**.) **Range** The array length ranges from 1 to 100.
invocation_type	Yes	String	Task type. The options are **INSTALL**, **UPDATE**, **ROLLBACK**, **RETRY**, **SET_REMOTE_INSTALLER**, and **REMOTE_INSTALL**.
invocation_target	No	String	**Definition** Task object. The value can only be **telescope**. **Range** • **telescope**: server monitoring plug-in
invocation_ids	No	Array of strings	**Definition** Task ID list. This parameter is mandatory when the task type is **ROLLBACK** or **RETRY**. **Range** The array length ranges from 1 to 100.
version_type	No	String	**Definition** Version that the Agent will be upgraded to. **Range** • **BASIC_VERSION**: basic version • **ADVANCE_VERSION**: enhanced version

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Parameter	Mandatory	Type	Description
origin	No	String	**Definition** Source for calling the Agent task APIs. **Range** • **CES**: Cloud Eye console • **APICOM_BMS**: BMS • **ADMIN_SERVER**: O&M platform
version	No	String	**Definition** Version number. **Range** [0,64]
remote_install_meta	No	Array of **RemoteInstallHostInfo** objects	**Definition** Information about the server for remotely installing the Agent when a remote installation task is created. **Range** [0,100]

Table 7-23 RemoteInstallHostInfo

Parameter	Mandatory	Type	Description
instance_name	No	String	**Definition** Name of the server for remotely installing the Agent. **Range** [1,128]
remote_ip	No	String	**Definition** IP address of the server for remotely installing the Agent. **Range** The value allows 1 to 15 characters and can only contain digits and dots (.).

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Parameter	Mandatory	Type	Description
user_name	No	String	**Definition** Username for logging in to the server for remotely installing the Agent. **Range** [1,16]
port	No	String	**Definition** Port for logging in to the server for remotely installing the Agent. **Range** [1,5]
password	No	String	**Definition** Password for logging in to the server for remotely installing the Agent. **Range** [1,3000]
remote_use_pem	No	Boolean	Whether a key pair is used to connect to the server for remotely installing the Agent. If the value is false, a password is used.

Response Parameters

Status code: 201

Table 7-24 Response body parameters

Parameter	Type	Description
invocations	Array of **BatchCreateInvocationInfo** objects	**Definition** Information list of the created task. **Range** [0,100]

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Table 7-25 BatchCreateInvocationInfo

Parameter	Type	Description
instance_id	String	**Definition** Server ID. **Range** The value allows 1 to 64 characters and can only contain letters, digits, and hyphens (-).
invocation_id	String	**Definition** Task ID. **Range** The value allows 1 to 64 characters and can only contain letters, digits, and hyphens (-).
ret_status	String	**Definition** Task result. The value can be **successful** or **error**. **Range** • **successful**: succeeded • **error**: failed
error_code	String	**Definition** Error code. **Range** The value starts with "invocationmgr." and is followed by four digits.
error_msg	String	**Definition** Error message. **Range** [1,128]

Status code: 400

Table 7-26 Response body parameters

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

Status code: 401

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Table 7-27 Response body parameters

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

Status code: 403

Table 7-28 Response body parameters

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

Status code: 500

Table 7-29 Response body parameters

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

Example Requests

```
{
  "instance_ids" : [ "instancexxx001", "instancexxx002" ],
  "invocation_type" : "INSTALL",
  "invocation_target" : "telescope"
}
```

Example Responses

Status code: 201

Created

```
[ {
  "instance_id" : "instancexxx001",
  "ret_status" : "successful"
}, {
  "instance_id" : "instancexxx002",
  "ret_status" : "error",
  "error_msg" : "do not meet the installation conditions"
} ]
```

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Status Codes

Status Code	Description
201	Created
400	Bad Request
401	Unauthorized
403	Forbidden
500	Internal Server Error

Error Codes

See **Error Codes**.

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8 Permissions Policies and Supported Actions

8.1 Introduction

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

Policies: A type of fine-grained authorization mechanism that defines permissions required to perform operations on specific cloud resources under certain conditions. This mechanism allows for more flexible policy-based authorization, meeting requirements for secure access control. By default, new IAM users do not have any permissions assigned. You need to add a user to one or more groups, and assign permissions policies to these groups. The user then inherits permissions from the groups it is a member of. This process is called authorization. After authorization, the user can perform specified operations on Cloud Eye based on the permissions. For details, see **Permissions Management**.

You can grant users permissions by using roles and policies. A policy consists of permissions for an entire service. Users with such a policy assigned are granted all of the permissions required for that service. Policies define API-based permissions for operations on specific resources, allowing for more fine-grained, secure access control of cloud resources.

NOTE

If you want to allow or deny the access to an API, use policies for authorization.

An account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API successfully. For example, if an IAM user queries the alarm rule list using an API, the user must have been granted permissions that allow the **ces:alarms:list** action.

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Supported Actions

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

- Permissions: Defined by actions in a custom policy.
- Actions: Added to a custom policy to control permissions for specific operations.
- Related actions: Actions on which a specific action depends to take effect. When assigning permissions for the action to a user, you also need to assign permissions for the dependent actions.
- Authorization Scope: 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. For details about the differences between IAM and enterprise management, see **What Are the Differences Between IAM and Enterprise Management?**
- APIs: REST APIs that can be called in a custom policy

Cloud Eye supports the following actions that can be defined in custom policies:

NOTE

√ indicates that the item is supported, and × indicates that the item is not supported.

8.2 Supported Actions of the API Version Management APIs

8.3 Supported Actions of the Metric Management API

8.4 Supported Actions of the Alarm Rule Management APIs

8.5 Supported Actions of the Monitoring Data Management APIs

8.6 Supported Actions of the Quota Management API

8.7 Supported Actions of the Event Monitoring API

8.2 Supported Actions of the API Version Management APIs

Permission	API	Action	IAM Project	Enterprise Project
Query all API versions supported by Cloud Eye.	GET /	ces:versions:get	√	×

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Permission	API	Action	IAM Project	Enterprise Project
Query a specified Cloud Eye API version.	GET /{api_version}	ces:versions:get	√	×

8.3 Supported Actions of the Metric Management API

Permission	API	Action	IAM Project	Enterprise Project
Query the metric list. You can specify the namespace, metric name, dimension, sorting order, start records, and the maximum number of records when using this API to query metrics.	GET /V1.0/{project_id}/metrics	ces:metrics:list	√	×

8.4 Supported Actions of the Alarm Rule Management APIs

Permission	API	Action	IAM Project	Enterprise Project
Query the alarm rule list. You can specify the paging parameters to limit the number of query results displayed on a page. You can also set the sorting order of query results.	GET /V1.0/{project_id}/alarms	ces:alarms:list	√	√
Query an alarm rule based on the alarm rule ID.	GET /V1.0/{project_id}/alarms/{alarm_id}	ces:alarms:get	√	√
Enable or disable an alarm rule.	PUT /V1.0/{project_id}/alarms/{alarm_id}/action	ces:alarmsOnOff:put	√	√
Delete an alarm rule.	DELETE /V1.0/{project_id}/alarms/{alarm_id}	ces:alarms:delete	√	√
Create an alarm rule.	POST /V1.0/{project_id}/alarms	ces:alarms:create	√	√

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8.5 Supported Actions of the Monitoring Data Management APIs

Permission	API	Action	IAM Project	Enterprise Project
Query the monitoring data at a specified granularity for a specified metric in a specified period of time. You can specify the dimension of data to be queried.	GET /V1.0/{project_id}/metric-data?namespace={namespace}&metric_name={metric_name}&dim.{i}=key,value&from={from}&to={to}&period={period}&filter={filter}	ces:metricData:list	√	×
Add one or more pieces of custom metric monitoring data to solve the problem that the system metrics cannot meet specific service requirements.	POST /V1.0/{project_id}/metric-data	ces:metricData:create	√	×
Query the monitoring data of specified metrics within a specified time range and specified granularities in batches. At present, you can query the monitoring data of a maximum of 10 metrics in batches.	POST /V1.0/{project_id}/batch-query-metric-data	ces:metricData:list	√	×

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Permission	API	Action	IAM Project	Enterprise Project
Query the host configuration for a specified event type in a specified period of time. You can specify the dimension of data to be queried. (This API is provided for SAP Monitor to query the host configuration in the HANA scenario. In other scenarios, the host configuration cannot be queried with this API.)	GET /V1.0/{project_id}/event-data	ces:sapEventData:list	√	×

8.6 Supported Actions of the Quota Management API

Permission	API	Action	IAM Project	Enterprise Project
Query a resource quota and the used amount. Currently, the resource refers to alarm rules only.	GET /V1.0/{project_id}/quotas	ces:quotas:get	√	×

8.7 Supported Actions of the Event Monitoring API

Permission	API	Action	IAM Project	Enterprise Project
Report custom events.	POST /V1.0/{project_id}/events	ces:events:post	√	×

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9 Common Parameters

9.1 Status Codes

- Normal

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

- Abnormal

Returned Value	Description
400 Bad Request	The server failed to process the request.
401 Unauthorized	You must enter a username and password to access the requested page.
403 Forbidden	You are forbidden to access the requested page.
404 Not Found	The server cannot find the requested page.
405 Method Not Allowed	You are not allowed to use the method specified in the request.
406 Not Acceptable	The response generated by the server cannot be accepted by the client.

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Returned Value	Description
407 Proxy Authentication Required	You must use the proxy server for authentication so that the request can be processed.
408 Request Timeout	The request timed out.
409 Conflict	The request could not be processed due to a conflict.
500 Internal Server Error	Failed to complete the request because of a service error.
501 Not Implemented	Failed to complete the request because the server does not support the requested function.
502 Bad Gateway	Failed to complete the request because the request is invalid.
503 Service Unavailable	Failed to complete the request. The service is unavailable.
504 Gateway Timeout	A gateway timeout error occurred.

9.2 Error Codes

Function

If an error occurs during API calling, the system returns error information. This section describes the error codes contained in the error information for Cloud Eye APIs.

v1 Example Response

```
{
    "http_code":"403",
    "message": {
        "details":"Policy doesn't allow [ces:alarms:get] to be performed",
        "code":"403"
    }
}
```

Example Response of a v2 API

```
{
  "error_code": "ces.0001",
  "error_msg": "The content must be specified."
}
```

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Glossary

Glossary	Description
Cloud Eye	Cloud Eye
Built-in metric	Each service has its own built-in metrics and dimensions. For example, an ECS (SYS.ECS) supports **cpu_util**.
Metric	A metric consists of the namespace, dimension (optional), and metric name. A metric name solely does not identify any object.

Error Code Description

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

Module	HTTP Status Code	Error Code	Error Code Description	Error Message	Measure
Cloud Eye	500	ces.0007	Internal service error	Internal service error.	Contact technical support.
API	400	ces.0001	The request content cannot be empty.	The content must be specified.	Specify the request content.
	400	ces.0003	The project ID is left blank or is incorrect.	The tenant ID is left blank or incorrect.	Add or use the correct tenant ID.
	400	ces.0004	The API version is not specified.	The API version must be specified.	Specify the API version in the request URL.
	400	ces.0005	The API version is incorrect.	The API version is incorrect.	Use the correct API version.
	400	ces.0006	The paging address is incorrect.	The paging address is incorrect.	Use correct pagination information.
	403	ces.0009	System metrics cannot be added.	Adding SYS metric is not allowed	Use correct rights to add metrics.

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Module	HTTP Status Code	Error Code	Error Code Description	Error Message	Measure
	403	ces.0010	System metrics cannot be deleted.	Deleting SYS metric is not allowed	Use correct rights to delete metrics.
	400	ces.0011	The request is invalid.	The request is invalid.	Check the request.
	400	ces.0013	The URL parameter is invalid or does not exist.	The URL parameter is invalid or does not exist.	Check the URL parameter.
	400	ces.0014	Some content in the message body is incorrect.	Some content in message body is not correct.	Check the request body parameters.
	401	ces.0015	Authentication fails or valid authentication information is not provided.	Authentication fails or the authentication information is not provided.	Check whether the user name or password (or AK or SK) for obtaining the token is correct.
	404	ces.0016	The requested resource does not exist.	The requested resource does not exist.	Check whether the requested resource exists.
	403	ces.0017	The authentication information is incorrect or the service invoker does not have sufficient rights.	The authentication information is incorrect or the service invoker does not have sufficient rights.	Check whether the user name or password (or AK or SK) or the user rights for obtaining the token are correct.
Cassandra	500	ces.0008	Database error	Database error.	Contact technical support.

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Module	HTTP Status Code	Error Code	Error Code Description	Error Message	Measure
Zookeeper	500	ces.0021	Internal locking error	Internal locking error	Contact technical support.
Blueflood	500	ces.0019	The metric processing engine is abnormal.	The metric processing engine is abnormal.	Contact technical support.
Alarm	400	ces.0002	The alarm ID cannot be left blank.	The alarm ID must be specified.	Specify the alarm ID.
	403	ces.0018	The number of alarm rules created exceeds the quota.	The number of alarms exceeds the quota	Apply for a higher alarm quota.
	400	ces.0028	The metric and notification type do not match when an alarm rule is created.	The metric does not support the alarm action type.	Modify the metric or notification type according to the parameter description to make them match.

9.3 Obtaining a Project ID

Scenarios

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

- **Obtain the Project ID by Calling an API**
- **Obtain the Project ID from the Console**

Obtain the Project ID by Calling an API

You can obtain a project ID by calling the API used to **query projects based on specified criteria**.

The API used to obtain a project ID is GET https://{Endpoint}/v3/projects. {Endpoint} is the IAM endpoint and can be obtained from **Regions and Endpoints**. For details about API authentication, see **3.2 Authentication**.

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

```
{
    "projects": [
        {
            "domain_id": "65ewtrgaggshhk1223245sghjlse684b",
            "is_domain": false,
            "parent_id": "65ewtrgaggshhk1223245sghjlse684b",
            "name": "project_name",
            "description": "",
            "links": {
                "next": null,
                "previous": null,
                "self": "https://www.example.com/v3/projects/a4adasfjljaaaakla12334jklga9sasfg"
            },
            "id": "a4adasfjljaaaakla12334jklga9sasfg",
            "enabled": true
        }
    ],
    "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects"
    }
}
```

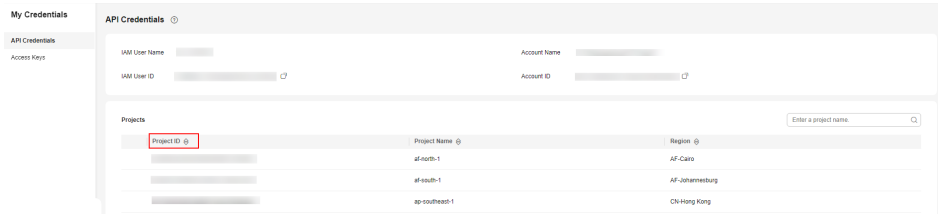
Obtain a Project ID from the Console

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

1. Log in to the management console.
2. Click the username and select **My Credentials** from the drop-down list.

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

Figure 9-1 Viewing the project ID



9.4 Obtaining an Enterprise Project ID

Scenarios

Some URLs need to be filled with the enterprise project IDs when APIs are called, so the enterprise project IDs need to be obtained. This section describes how to obtain an enterprise project ID on the management console.

Procedure

1. Log in to the management console.
2. Choose **Enterprise** > **Project Management** in the upper right corner of the page.

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If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

3. Locate the target the enterprise project and click its name.

   In the enterprise project details, **ID** is the enterprise project ID.

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A Appendix

A.1 Services Interconnected with Cloud Eye

Category	Service	Namespace	Dimension	Reference
Compute	Elastic Cloud Server	SYS.ECS	Key: instance_id Value: ECSs	Basic ECS metrics

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Category	Service	Namespace	Dimension	Reference
	Elastic Cloud Server – OS Monitoring	AGT.ECS	• Key: instance_id Value: ECSs • Key: roce Value: RoCE • Key: disk Value: Disk • Key: mount_point Value: Mount Point • Key: gpu Value: GPU • Key: npu Value: NPU • Key: davp Value: DAVP • Key: network_interface_card Value: NICs • Key: gpu_slot Value: GPU • Key: pid_for_gpu Value: GPUProcessIDs • Key: proc Value: Process	**OS monitoring metrics supported by ECSs with the Agent installed**
	Elastic Cloud Server – Process Monitoring	AGT.ECS	• Key: instance_id Value: ECSs • Key: pname Value: Process • Key: pid Value: ProcessIDs	**Process monitoring metrics supported by ECSs with the Agent installed**

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Category	Service	Namespace	Dimension	Reference
	Bare Metal Server	SERVICE.BMS	• Key: instance_id Value: ECSs • Key: disk_error_monitor Value: Disk Error Monitor • Key: proc Value: Process • Key: pname Value: Process • Key: pid Value: ProcessIDs • Key: disk Value: Disk • Key: mount_point Value: Mount Point • Key: gpu Value: GPU • Key: npu Value: NPU • Key: roce Value: RoCE • Key: network_interface_card Value: NICs • Key: gpu_slot Value: GPU • Key: pid_for_gpu Value: GPUProcessIDs	**BMS metrics (with the Agent installed)**

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Category	Service	Namespace	Dimension	Reference
	Auto Scaling	SYS.AS	Key: AutoScalingGroup Value: AS Groups	AS metrics
	Cloud Phone Host	SYS.CPH	• Key: instance_id Value: Cloud Phone Servers • Key: cph_id Value: Cloud Phones • Key: disk_name Value: Disks • Key: gpu_index Value: GPU	CPH metrics
	FunctionGraph	SYS.FunctionGraph	• Key: package-functionname Value: Functions • Key: package_functionflowname Value: FunctionFlows • Key: projectId Value: Tenant • Key: graph_name Value: Workflows	FunctionGraph metrics

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Category	Service	Namespace	Dimension	Reference
Storage	Elastic Volume Service (attached to an ECS or BMS)	SYS.EVS	Key: disk_name Value: Disks	EVS metrics
	Object Storage Service	SYS.OBS	• Key: bucket_name Value: Bucket Name • Key: tenant_id Value: User • Key: api_name Value: API Name • Key: http_code Value: HTTP Status Code • Key: domain_name Value: Domain	OBS metrics
	Scalable File Service	SYS.SFS	• Key: share_id Value: SFS Capacity-Oriented • Key: bucket_name Value: General Purpose File System	SFS metrics
	Cloud Backup and Recovery	SYS.CBR	Key: instance_id Value: Vault	CBR metrics

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Category	Service	Namespace	Dimension	Reference
	Scalable File Service Turbo	SYS.EFS	Key: efs_instance_id Value: instance	SFS Turbo metrics
	Key-Value Storage Service	SYS.KVS	Key: store_name Value: Store	KVS metrics
Networking	Virtual Private Cloud	SYS.VPC	• Key: publicip_id Value: Elastic IPs • Key: bandwidth_id Value: Bandwidths • Key: subnet_id Value: Subnet • Key: peering_id Value: Peering Connections	VPC metrics
	Global EIP	SYS.GEIP	• Key: geip_global_eip_id Value: Global EIP • Key: geip_internet_bandwidth_id Value: Internet Bandwidth	Global EIP metrics

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Category	Service	Namespace	Dimension	Reference
	EIP (Regional)	SYS.VPC	• Key: publicip_id Value: Elastic IPs • Key: bandwidth_id Value: Bandwidths • Key: subnet_id Value: Subnet • Key: peering_id Value: Peering Connections	**EIP (Regional) metrics**
	Elastic Load Balance	SYS.ELB	For details, see the information in the right column.	**Dedicated ELB metrics** **Shared ELB metrics**
	NAT Gateway	SYS.NAT	• Key: nat_gateway_id Value: Public NAT Gateway • Key: elastic_nat_gateway_id Value: Elastic NAT Gateway • Key: vpc_nat_gateway_id Value: Private NAT Gateway	**NAT Gateway metrics**

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Category	Service	Namespace	Dimension	Reference
	Enterprise Router	SYS.ER	• Key: er_instance_id Value: Enterprise Router • Key: er_attachment_id Value: Attachment • Key: er_match_rule_id Value: Traffic Marking Rule	ER metrics
	Virtual Private Network	SYS.VPN	For details, see the information in the right column.	S2C Enterprise Edition VPN metrics P2C VPN metrics
		SYS.VPC	• Key: publicip_id Value: Elastic IPs • Key: bandwidth_id Value: Bandwidths • Key: subnet_id Value: Subnet • Key: peering_id Value: Peering Connections	S2C Classic VPN metrics

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Category	Service	Namespace	Dimension	Reference
	Cloud Connect	SYS.CC	• Key: cloud_connect_id Value: Cloud Connect • Key: bwp_id Value: Bandwidth Package • Key: region_bandwidth_id Value: Inter-Region Bandwidths	**Cloud Connect metrics**
	Direct Connect	SYS.DCAAS	For details, see the information in the right column. **NOTE** For full-service connections, metrics can be queried over a virtual interface. For historical connections, metrics can be queried via physical connections.	**Direct Connect basic metrics** **Network quality metrics (Agent Required)**
	VPC Endpoint	SYS.VPCEP	• Key: ep_instance_id Value: VPC endpoint • Key: eps_id Value: VPC endpoint service	**VPC Endpoint metrics**
	Enterprise Switch	SYS.ESW	Key: instance_id Value: Instance ID	**Enterprise Switch metrics**

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Category	Service	Namespace	Dimension	Reference
	Global Accelerator	SYS.GA	• Key: ga_accelerator_id Value: Global Accelerators • Key: ga_listener_id Value: Listeners • Key: ga_source_pop Value: Access Points • Key: ga_destination_region Value: Destination Regions • Key: ga_source_area Value: Destination Areas • Key: ga_listener_region Value: Destination Regions • Key: ga_pop_listener Value: Listeners • Key: ga_pop_region Value: Destination Regions	**Global Accelerator metrics**

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Category	Service	Namespace	Dimension	Reference
			• Key: ga_pop_listener_region Value: Destination Regions • Key: ga_source_destination_area Value: Destination Areas • Key: ga_outbound_region Value: Egress Regions	
Middleware	Distributed Message Service	SYS.DMS	For details, see the information in the right column.	**DMS for Kafka metrics** **DMS for RocketMQ metrics** **DMS for RocketMQ metrics**
	Shared API Gateway	SYS.APIG	Key: api_id Value: API	**Shared API Gateway metrics**

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Category	Service	Namespace	Dimension	Reference
	Dedicated API Gateway	SYS.APIC	• Key: instance_id Value: APIG Instances • Key: api_id Value: API • Key: plugin_type Value: Policy Type • Key: plugin_id Value: Policy Id • Key: app_id Value: App • Key: api_group_id Value: API Group • Key: node_ip Value: Node Ip	**Dedicated API Gateway metrics**

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Category	Service	Namespace	Dimension	Reference
	Distributed Cache Service	SYS.DCS	• Key: dcs_instance_id Value: DCS Redis Instances • Key: dcs_cluster_redis_node Value: Redis Server • Key: dcs_cluster_proxy_node Value: Proxies • Key: dcs_cluster_proxy2_node Value: Proxies (4.0 and later) • Key: dcs_memcached_instance_id Value: DCS Memcached Instances • Key: dcs_imdg_id Value: DCS IMDG Instances • Key: dcs_imdg_cache Value: DCS IMDG Caches	DCS metrics

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Category	Service	Namespace	Dimension	Reference
	Event Grid	SYS.EG	• Key: target_id Value: Event Targets • Key: subscription_id Value: Event Subscriptions • Key: channel_id Value: Event Channels • Key: source_name Value: Event Sources • Key: streaming_id Value: Event Streams • Key: er_task_id Value: Dedicated event stream job • Key: connector_name Value: Dedicated event stream job connector	**Event Grid metrics**
Databases	Relational Database Service	SYS.RDS	For details, see the information in the right column.	**RDS for MySQL metrics** **RDS for MariaDB metrics** **RDS for PostgreSQL metrics** **RDS for SQL Server metrics**

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Category	Service	Namespace	Dimension	Reference
	Document Database Service	SYS.DDS	• Key: mongodb_node_id Value: Document Database Node • Key: mongodb_instance_id Value: Document Database Instance • Key: mongodb_cluster_id Value: Document Database Instance • Key: mongos_instance_id Value: Document Database Mongos Node • Key: mongod_primary_instance_id Value: Document Database Primary Node • Key: mongod_secondary_instance_id Value: Document Database Secondary Node	DDS metrics

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Category	Service	Namespace	Dimension	Reference
	Distributed Database Middleware	SYS.DDMS	• Key: node_id Value: DDM Nodes • Key: instance_id Value: DDM Instances	**DDM metrics**
	GeminiDB	SYS.NoSQL	For details, see the information in the right column.	**GeminiDB Cassandra metrics** **GeminiDB Mongo metrics** **GeminiDB Influx metrics** **GeminiDB Redis metrics** **Supported metrics**

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Category	Service	Namespace	Dimension	Reference
	TaurusDB	SYS.GAUSSDB	• Key: gaussdb_mysql_instance_id Value: TaurusDB Instances • Key: gaussdb_mysql_node_id Value: TaurusDB Nodes • Key: gaussdb_mysql_ha_id Value: TaurusDB Classic Architecture Instances • Key: gaussdb_mysql_ha_node_id Value: TaurusDB Classic Architecture Nodes • Key: dbproxy_instance_id Value: Database Proxy Instance • Key: dbproxy_node_id Value: Database Proxy Node	TaurusDB metrics

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Category	Service	Namespace	Dimension	Reference
	GaussDB	SYS.GAUSSDBV5	• Key: gaussdbv5_instance_id Value: GaussDB Instance • Key: gaussdbv5_node_id Value: GaussDB Node • Key: gaussdbv5_component_id Value: GaussDB Component • Key: gaussdbv5_pdb_id Value: GaussDB PDB	**GaussDB metrics**
	Data Replication Service	SYS.DRS	Key: instance_id Value: DRS Instance	**DRS metrics**
Migration	Cloud Data Migration	SYS.CDM	Key: instance_id Value: Instances	**CDM metrics**

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Category	Service	Namespace	Dimension	Reference
Big Data	Data Warehouse Service	SYS.DWS	• Key: datastore_id Value: Data Warehouse Service • Key: dws_instance_id Value: Data Warehouse Nodes • Key: dws_db_instance_id Value: Data Warehouse Instances	DWS metrics
	Cloud Search Service	SYS.ES	• Key: cluster_id Value: CSS Clusters • Key: instance_id Value: CSS Nodes	CSS metrics
	Data Lake Insight	SYS.DLI	• Key: queue_id Value: queue instance • Key: flink_job_id Value: Flink job	DLI metrics

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Category	Service	Namespace	Dimension	Reference
	Data Ingestion Service (DIS)	SYS.DAYU	• Key: stream_id Value: Data Ingestion • Key: table_id Value: Table • Key: elastic_resource_pool_id Value: Elastic Resource Pool • Key: dayu_di_job_id Value: DataArts Studio Jobs • Key: dayu_di_queue_id Value: DataArts Studio Resources • Key: user_quota Value: User Quota	**DIS Metrics**
	CloudTable Service	SYS.CloudTable	• Key: cluster_id Value: Cluster IDs • Key: instance_name Value: Compute Units	**HBase cluster metrics** **Doris cluster metrics** **ClickHouse cluster metrics**

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Category	Service	Namespace	Dimension	Reference
AI	ModelArts	SYS.ModelArts	• Key: service_id Value: Service • Key: model_id Value: Model	ModelArts metrics
	Image Recognition	SYS.IRS	Key: call_of_interface Value: APIs	Image Recognition metrics
	Optical Character Recognition	SYS.OCR	Key: call_of_interface Value: APIs	OCR metrics
	Graph Engine Service	SYS.GES	Key: instance_id Value: Graph Instances	GES metrics
	Face Recognition Service	SYS.FRS	• Key: call_of_api Value: APIs • Key: face_set Value: Facial Image Libraries	FRS metrics
Security & Compliance	Web Application Firewall	SYS.WAF	• Key: instance_id Value: Dedicated WAF Instance • Key: waf_instance_id Value: Domains	WAF metrics

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Category	Service	Namespace	Dimension	Reference
	Database Security Service	SYS.DBSS	• Key: audit_id Value: DBSS • Key: instance_id Value: Instances	DBSS metrics
	Cloud Firewall	SYS.CFW	• Key: fw_instance_id Value: CFW Instances • Key: acl_id Value: ACL rules	CFW metrics
	Anti-DDoS	SYS.DDOS	• Key: zone_ip Value: Protected IP address • Key: instance_id Value: Instance ID • Key: web_name_id Value: Website domain name • Key: package Value: Package • Key: ip Value: IP	AAD metrics
	Cloud Bastion Host	SYS.CBH	Key: server_id Value: CBH	CBH metrics

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Category	Service	Namespace	Dimension	Reference
	Host Security Service	SYS.HSS	• Key: host_id Value: Server • Key: hss_enterprise_project_id Value: Host Security	HSS metrics
	Data Encryption Workshop	SYS.KMS	• Key: key_id Value: KMS key • Key: tenant_id Value: Project	Metrics supported by DEW
		SYS.CSMS	• Key: secret_id Value: CSMS Secret	Metrics supported by DEW

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Category	Service	Namespace	Dimension	Reference
Business Applications	ROMA Connect	SYS.ROMA	• Key: instance_id Value: ROMA Instances • Key: link Value: LINK • Key: fdi Value: FDI • Key: apic Value: APIC • Key: kafka_instance_id Value: MQS • Key: kafka_broker Value: Broker Nodes • Key: kafka_rest Value: Rest Nodes • Key: kafka_topics Value: Queues • Key: kafka_partitions Value: Partitions • Key: kafka_groups Value: Consumer groups • Key: kafka_groups_topics Value: Queues	Monitoring metrics

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Category	Service	Namespace	Dimension	Reference
			• Key: kafka_groups_partitions Value: Partitions • Key: api_id Value: APIs • Key: task_id Value: FDI task • Key: abm Value: ABM • Key: node_id Value: FDI node • Key: reliablemq_instance_id Value: MQS (for RocketMQ) • Key: reliablemq_broker Value: Brokers • Key: reliablemq_topics Value: Topics • Key: reliablemq_groups Value: Consumer Groups • Key: reliablemq_groups_topics Value: Topics • Key: reliablemq_dlq_topics	

Category	Service	Namespace	Dimension	Reference
			Value: Dead Letter Queues	
	Workspace	SYS.Workspace	Key: instance_id Value: Workspace	**Workspace metrics**
Content Delivery & Edge Computing	Content Delivery Network	SYS.CDN	Key: domain_name Value: domain name	**CDN metrics**
Media Services	Live	SYS.Live	• Key: domain Value: Domain • Key: medialive_mpc Value: Media Live Transcoding Service • Key: medialive_package Value: Media Live Packaging Service • Key: medialive_cdn Value: Media Live CDN Service • Key: pipeline Value: Pipeline • Key: audio Value: Audio	**Live metrics**

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Category	Service	Namespace	Dimension	Reference
	Video on Demand	SYS.VOD	Key: domain_name Value: domain name	VOD metrics
Management & Governance	Simple Message Notification	SYS.SMN	Key: topic_id Value: Topics	SMN metrics

A.2 Events Supported by Event Monitoring

NOTE

The name of a resource that supports event reporting can contain a maximum of 128 characters, including letters, digits, underscores (_), hyphens (-), and periods (.). If it contains other characters, the event may fail to be reported to Cloud Eye.

Category	Service	Event Source	Namespace	Reference Document
Compute	Elastic Cloud Server	ECS	SYS.ECS	Monitored ECS Events
	Bare Metal Server	BMS	SYS.BMS	Monitored BMS Events
	Cloud Phone Host	CPH	SYS.CPH	CPH Events
	Image Management Service	IMS	SYS.IMS	IMS Events
Storage	Cloud Backup and Recovery	CBR	SYS.CBR	CBR Events
	Elastic Volume Service	EVS	SYS.EVS	EVS Events

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Category	Service	Event Source	Namespace	Reference Document
	Object Storage Service	OBS	SYS.OBS	**OBS Events**
Networking	Elastic IP	EIP	SYS.EIP	**EIP Events**
	Elastic Load Balance	ELB	SYS.ELB	**ELB Events**
	Global Accelerator	GA	SYS.GA	**GA Events**
	Virtual Private Cloud	VPC	SYS.VPC	**VPC Events**
	Enterprise Switch	ESW	SYS.ESW	**Enterprise Switch Events**
	Virtual Private Network	VPN	SYS.VPN	**VPN Events**
Databases	Relational Database Service	RDS	SYS.RDS	**RDS Events**
	Document Database Service	DDS	SYS.DDS	**DDS Events**
	GeminiDB	NoSQL	SYS.NoSQL	**GeminiDB Redis Events** **GeminiDB Influx Events** **GeminiDB Cassandra Events** **GeminiDB DynamoDB-Compatible Events**
	TaurusDB	TaurusDB	SYS.GAUSSDB	**TaurusDB Events**
	GaussDB	GaussDB	SYS.GAUSSDBV5	**GaussDB Events**
	Distributed Database Middleware	DDM	SYS.DDM	**DDM Events**

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Category	Service	Event Source	Namespace	Reference Document
	Data Admin Service	DAS	SYS.DAS	DAS Events
Security & Compliance	Anti-DDoS Service	Anti-DDoS	SYS.DDOS	AAD Events CNAD Advanced Events
	Key Management Service	KMS	SYS.KMS	KMS Events
	Cloud Secret Management Service	CSMS	SYS.CSMS	CSMS Events
	SecMaster	SecMaster	SYS.SecMaster	SecMaster Events
	Host Security Service	HSS	SYS.HSS	HSS Events
	Cloud Certificate & Manager	CCM	SYS.CCM	CCM Events
Middleware	Distributed Cache Service	DCS	SYS.DCS	DCS Events
	Multi-Site High Availability Service	MAS	SYS.MAS	MAS Events
Management & Governance	Config	Config	SYS.RMS	Config Events
	Cloud Eye	CES	SYS.CES	Cloud Eye Events
	Simple Message Notification	SMN	SYS.SMN	SMN Events

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Category	Service	Event Source	Namespace	Reference Document
Business Applications	Workspace	Workspace	SYS.Workspace	Workspace Events
	Application Streaming	AppStream	SYS.AppStream	Application Streaming Events
Media Services	MetaStudio	MetaStudio	SYS.MetaStudio	MetaStudio Events

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