

Application Operations Management

API Reference

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1

Before You Start

Welcome to use Application Operations Management (AOM). AOM is a one-stop, multi-dimensional O&M management platform for cloud applications. It provides one-stop observability analysis. By collecting metrics, logs, and performance data from the cloud and local devices, AOM enables you to monitor real-time running status of applications, resources, and services and detect faults in a timely manner, improving O&M automation capability and efficiency.

This document describes how to use APIs to perform operations on AOM, such as creation, deletion, and query. For details about all supported operations, see [2 API Overview](#).

If you plan to call AOM APIs, ensure that you are familiar with AOM concepts. For details, see [Service Overview](#).

Endpoints

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

Concepts

- Account

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

- IAM User

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

An IAM user can view the account ID and user ID on the [My Credentials](#) page of the console. The account name, username, and password will be required for API authentication.

- Region

Regions are divided by 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 a region. Regions are classified into universal 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](#).

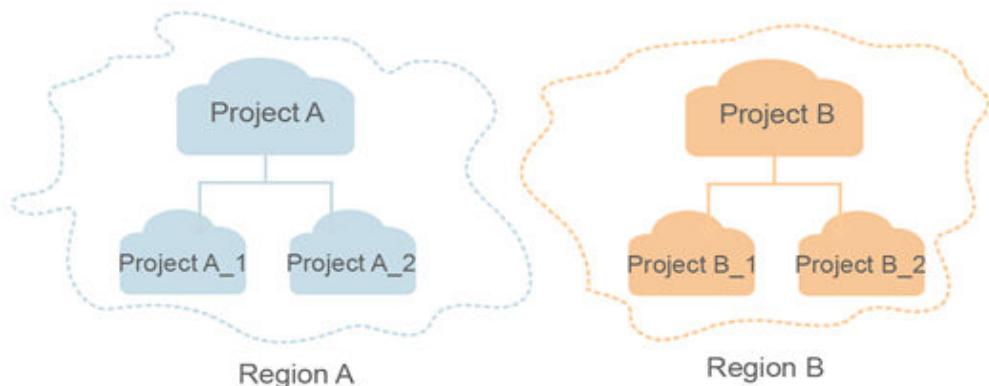
- Availability Zone (AZ)

AZs are physically isolated locations in a region, but are interconnected through an internal network for enhanced application availability.

- Project

Projects group and isolate resources (including compute, storage, and network resources) across physical regions. A default project is provided for each cloud region. Users can be granted permissions to access all resources in a specific project. For more refined access control, create subprojects under a project and purchase resources in the subprojects. Users can then be assigned permissions to access only specific resources in the subprojects.

Figure 1-1 Project isolating model



To view a project ID, go to the [My Credentials](#) page.

- Enterprise Project

Enterprise projects group and manage resources across regions. Resources in enterprise projects are logically isolated. An enterprise project can contain resources in multiple regions, and resources can be transferred between enterprise projects.

For details about how to obtain enterprise project IDs and features, see the [Enterprise Management User Guide](#).

API Calling

AOM supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS. For details about API calling, see [3 Calling APIs](#).

2 API Overview

AOM provides alarm, monitoring, Prometheus monitoring, log, Prometheus instance, and configuration management APIs, helping you quickly and cost-effectively maintain applications.

Table 2-1 API overview

Type	API
Alarm APIs	Alarm APIs, including the APIs for adding, updating, and deleting event alarm rules.
Monitoring APIs	Monitoring APIs, including the APIs for querying metrics, and querying and adding monitoring data.
Prometheus Monitoring APIs	Prometheus monitoring APIs, including the APIs for querying the expression calculation result in a specified period or at a specified time point.
Log APIs	Log APIs, including the API for querying logs.
Prometheus Instance APIs	APIs related to Prometheus instances, including adding and querying Prometheus instances, and uninstalling hosted Prometheus instances.
Configuration Management APIs	Configuration APIs, including the APIs for querying the cloud services for which AOM 2.0 has been granted permissions, and querying ICAgent installed on cluster hosts.
Dashboard APIs	Dashboard APIs, including APIs for querying and deleting dashboards.

3 Calling APIs

3.1 Making an API Request

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

Request URI

A request URI is in the following format:

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

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

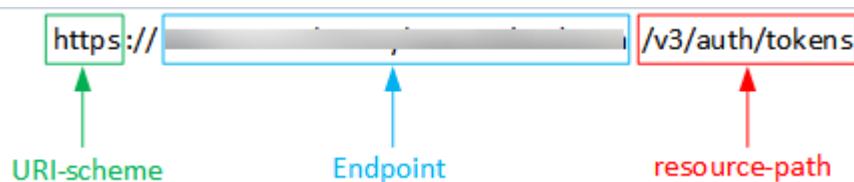
- **URI-scheme:** Protocol used to transmit requests. All APIs use HTTPS.
- **Endpoint:** Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from [Regions and Endpoints](#).

For example, the endpoint of IAM in the **CN-Hong Kong** region is **aom.ap-southeast-1.myhuaweicloud.eu**.

- **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.

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

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:

- **GET**: requests the server to return specified resources.
- **PUT**: requests the server to update specified resources.
- **POST**: requests the server to add resources or perform special operations.
- **DELETE**: requests the server to delete specified resources, for example, an object.
- **HEAD**: requests the server to return the response header only.
- **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 URL of the API for obtaining a user token, the request method is **POST**. The request is as follows:

```
POST https://Endpoint/v3/auth/tokens
```

Request Header

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

Common request header fields are as follows:

- **Content-Type**: specifies the request body type or format. This field is mandatory and its default value is **application/json**. Other values of this field will be provided for specific APIs if any.
- **Authorization**: signature authentication information. This field is optional. When AK/SK-based authentication is enabled, this field is automatically specified when SDK is used to sign the request. For more information, see [3.2 Authentication](#).
- **X-Sdk-Date**: the time when a request is sent. This field is optional. When AK/SK-based authentication is enabled, this field is automatically specified when SDK is used to sign the request. For more information, see [3.2 Authentication](#).

- **X-Auth-Token:** user token only for token-based API authentication. The user token is a response to the API used to obtain a user token. This API is the only one that does not require authentication.
- **X-Project-ID:** subproject ID. This field is optional and can be used in multi-project scenarios. The **X-Project-ID** field is mandatory in the request header for accessing resources in a subproject through AK/SK-based authentication.
- **X-Domain-ID:** account ID, which is optional. When you call APIs of global services using AK/SK-based authentication, **X-Domain-ID** needs to be configured in the request header.

NOTE

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

For more information, see [3.2 Authentication](#).

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

```
POST https://Endpoint/v3/auth/tokens
Content-Type: application/json
```

Request Body

The body of a request is often sent in a structured format as specified in **Content-Type**.

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

For the API used to obtain a user token, you can check the required request parameters and their description in the API request. The following provides an example request with a body included. Replace the italic fields in bold with the actual values. **username** indicates the username, **domainname** indicates the account name, ********* indicates the login password, and **xxxxxxxxxxxxxx** indicates the project ID. For details about how to obtain the project ID, see [7.3 Obtaining an Account ID, Project ID, and Enterprise Project ID](#).

The **scope** parameter specifies where a token takes effect. You can set **scope** to an account or a project under an account. In the following example, the token takes effect only for the resources in a specified project.

```
POST https://Endpoint/v3/auth/tokens
Content-Type: application/json
{
    "auth": {
        "identity": {
            "methods": [
                "password"
            ],
            "password": {
                "user": {
                    "name": "username",
                    "password": "*****",
                    "domain": {
                        "name": "domainname"
                    }
                }
            }
        }
    }
}
```

```
        }
    }
},
"scope": {
    "project": {
        "id": "xxxxxxxxxxxxxxxxxxxx"
    }
}
}
```

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

3.2 Authentication

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

- Access Key ID/Secret Access Key (AK/SK)-based authentication: Requests are encrypted using an AK/SK.
- Token-based authentication: Requests are authenticated using a token.

AK/SK-based Authentication

NOTE

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

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

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

In AK/SK-based authentication, you can use an AK/SK to sign requests based on the signature algorithm or use the signing SDK to sign requests. For details about how to sign requests and use the signing SDK, see [AK/SK Signing and Authentication Guide](#).

NOTICE

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

Token-based Authentication



- The validity period of a token is 24 hours. If a token is used for authentication, cache it to prevent frequent API calling.
- Ensure that the token is valid when you use it. Using a token that will soon expire may cause API calling failures.

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

The token can be obtained by calling the API for [obtaining a user token](#). Project-level tokens are required for calling APIs of this service. That is, when calling the API for [obtaining a user token](#), specify a project under **auth.scope** in the request body.

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

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

```
GET https://Endpoint/v3/auth/projects  
Content-Type: application/json  
X-Auth-Token: ABCDEFG...
```

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 [7.1 Status Codes](#).

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

Response Header

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

For the API used to obtain a user token, the **x-subject-token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.

Figure 3-2 Response header

```
connection → keep-alive
content-type → application/json
date → Tue, 12 Feb 2019 06:52:13 GMT
server → Web Server
strict-transport-security → max-age=31536000; includeSubdomains;
transfer-encoding → chunked
via → proxy A
x-content-type-options → nosniff
x-download-options → noopener
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token
→ MIIYXQVJKoZlhvcNAQcCoIYTjCCGEoCAQEExDTALBglghkgBZQMEAgEwgharBgkqhkiG9w0BBwGgg hacBIIWmHsIdG9rZW4iOnsiZXhwaXJlc19hdCI6ijlwMTktMDItMTNU McD3kjU6gKnpVNrbW2eZ5eb78SZOkqjACgkIqO1wi4JlGzrd18LGXK5bldfq4lqHCYb8P4NaY0NYejcAgzVeFIYtLWT1GSO0zxKzmlQHQj82H8qHdgjZC9fuEbL5dMhdavj+33wEl xHRC9187o+k9-j+CMZSEB7bUGd5Uj6eRASX1jiPPEGA270g1FruooL6jqglfkNPQuFSOU8+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUvhVpxk8pxiX1wTEboXRzT6MUUpvGw-oPNFYxJCKnoH3HRozv0vN--n5d6Nbixg==

x-xss-protection → 1; mode=block;
```

Response Body

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

For the API for obtaining a user token, the following message body is returned. The following describes part of the response body.

```
{
  "token": {
    "expires_at": "2019-02-13T06:52:13.855000Z",
    "methods": [
      "password"
    ],
    "catalog": [
      {
        "endpoints": [
          {
            "region_id": "xx-xxxxxx-1",
            ....

```

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

```
{
  "errorCode": "SVCSTG_AMS_4000001",
  "errorMessage": "Request param invalid"
}
```

In the response body, **errorCode** is an error code, and **errorMessage** provides information about the error.

4 APIs

4.1 Alarm

4.1.1 Obtaining the Alarm Sending Result

Function

This API is used to obtain the alarm sending result.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v2/{project_id}/alarm-notified-histories

Table 4-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-2 Query Parameters

Parameter	Mandatory	Type	Description
event_sn	No	String	Alarm serial number.

Request Parameters

Table 4-3 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	No	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Response Parameters

Status code: 200

Table 4-4 Response body parameters

Parameter	Type	Description
notified_histories	Array of NotifiedHistoriesResult objects	Historical notification list.

Table 4-5 NotifiedHistoriesResult

Parameter	Type	Description
event_sn	String	Alarm serial number.
notifications	Array of Notifications objects	Notification result.

Table 4-6 Notifications

Parameter	Type	Description
action_rule	String	Alarm action rule name.

Parameter	Type	Description
notifier_channel	String	Notification type. SMN: Simple Message Notification. Enumeration values: <ul style="list-style-type: none">• SMN
smn_channel	SmnResponse object	Notification result details.

Table 4-7 SmnResponse

Parameter	Type	Description
sent_time	Long	Sending time.
smn_notified_history	Array of SmnInfo objects	Content of a notification.
smn_request_id	String	ID for requesting SMN.
smn_response_body	String	Information returned after the SMN service is invoked.
smn_response_code	String	HTTP status code returned after the SMN service is invoked.
smn_topic	String	SMN topic.

Table 4-8 SmnInfo

Parameter	Type	Description
smn_notified_content	String	SMN message content.
smn_subscription_status	Integer	SMN subscription status.
smn_subscription_type	String	SMN subscription type.

Status code: 401**Table 4-9** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-10 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-11 Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Example Requests

Obtain the sending result of the alarm whose serial number is 1044686593798963201.

`https://{{Endpoint}}/v2/{{project_id}}/alarm-notified-histories?event_sn=1044686593798963201`

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "notified_histories": [ {  
    "event_sn": "1044686593798963201",  
    "notifications": [ {  
      "action_rule": "lhy_alarm_action_test01",  
      "status": "success"  
    } ]  
  } ]  
}
```

```

    "notifier_channel" : "SMN",
    "smn_channel" : {
      "sent_time" : 1669114269797,
      "smn_notified_history" : [ {
        "smn_notified_content" : "<style>  span { display: inline-block; float: left; font-size: 14px; } b { display: inline-block; float: left; color: #252B3A; font-size: 14px }</style><table border='0' cellpadding='0' cellspacing='0' style='font-family:Helvetica,Arial,PingFangSC-Regular,Hiragino Sans GB;border-spacing:0px 14px;font-size:14px;padding-left: 30px;line-height:25px;'> <thead> <tr style='font-size:14px;'> <td colspan='2' style='line-height:28px;color:#e6e6e6;font-size:14px;'> <b>Dear &ampnbsp</b> <b>users</b><b>&ampnbsp</b> </td> </tr> </thead> <tr> <td colspan='2' style='font-size:14px;'> <b>generated</b> <span>&ampnbspin region ***</span> <b>&ampnbspbased on action rule lhy_alarm_action_test01.</b> <span></span> <span></span> <span><span>The alarm rule is&ampnbsp</span><b>lhy_test_001</b></span> <span>. For more information, go to the AOM console.</span> <br> <br> </td> </tr> <tr style='font-size:14px;'> <td colspan='2' style='margin-bottom: -20px; margin-top: -26px;'> <span style='color:#252B3A;line-height:24px;'>Here are the details.</span> </td> </tr> <td><div>Account: kaifatest<br>Notification Type: alarm;<br>CAS Application Name: app-1;<br>Notification Type: NA;<br>Severity: Critical;<br>Name: lhy_test_001;<br>Occurred: 2022-11-22 18:51:05 GMT+08:00;<br>Source: AOM;<br>Resource Type: Application;<br>Resource Identifier: <br>&ampnbsp&ampnbsp&nbsp;casApplicationID: 2d216a2b-9a58-452e-9a82-fc0c7cbcd322;<br>&ampnbsp&ampnbsp&nbsp;casApplicationName: app-1;<br>Possible Cause: If the specified metric value crosses the threshold and the alarm severity is \\"critical\\\", an alarm is triggered.;<br>Link: https://console.xxx/aom/alarmlist;<br>Additional Info: The threshold rule lhy_test_001 status changes from \\"init\\\" to \\"alarm\\\". The value of \\"cpuCoreLimit\\\" is \\"0.250\\\" and meets the threshold criterion \\">=0\\\".<br>Suggestion: NA;<br></div></td> </table>",

        "smn_subscription_status" : 1,
        "smn_subscription_type" : "email"
      }, {
        "smn_notified_content" : "[AOM][Critical_alarm_generated] \nAlert Name: lhy_test_001;\nCAS Application Name: app-1;\nOccurrence Time: 2022-11-22 18:51:05 GMT+08:00;\nLink: https://console.xxx/aom/alarmlist;\nAlert Content: The threshold rule lhy_test_001 status changes from \"init\" to \"alarm\". The value of \"cpuCoreLimit\" is \"0.250\" and meets the threshold criterion \">=0\";.\nThis message is configured in an AOM alarm rule by kaifatest. For more information, go to the AOM console.\",",
        "smn_subscription_status" : 0,
        "smn_subscription_type" : "sms"
      }, {
        "smn_notified_content" : "[AOM][Critical_alarm_generated] \nAlert Name: lhy_test_001;\nCAS Application Name: app-1;\nOccurrence Time: 2022-11-22 18:51:05 GMT+08:00;\nLink: https://console.xxx/aom/alarmlist;\nAlert Content: The threshold rule lhy_test_001 status changes from \"init\" to \"alarm\". The value of \"cpuCoreLimit\" is \"0.250\" and meets the threshold criterion \">=0\";.\nThis message is configured in an AOM alarm rule by kaifatest. For more information, go to the AOM console.\",",
        "smn_subscription_status" : 0,
        "smn_subscription_type" : "sms"
      }],
      "smn_request_id" : "600bfa7447da48068312bba0fb2b3afa",
      "smn_response_body" : "{\"message_id\":\"b5db3a3419b84cc29d438a7dba336c20\",\"request_id\":\"600bfa7447da48068312bba0fb2b3afa\"}",
      "smn_response_code" : "200",
      "smn_topic" : "lhy_test01"
    }
  }
]
}

```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{
  "error_code" : "AOM.0403",
  "error_msg" : "auth failed.",
  "error_type" : "AUTH_FAILED",
  "trace_id" : null
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_msg" : "Internal Server Error",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.2 Deleting a Silence Rule

Function

This API is used to delete a silence rule.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v2/{project_id}/alert/mute-rules

Table 4-12 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-13 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-14 Request body parameters

Parameter	Mandatory	Type	Description
[items]	Yes	Array of DeleteMuteRuleName objects	Name of the rule to be deleted.

Table 4-15 DeleteMuteRuleName

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the silence rule to be deleted.

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

Status code: 400

Table 4-16 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 401

Table 4-17 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-18 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-19 Response body parameters

Parameter	Type	Description
error_code	String	Response code.

Parameter	Type	Description
error_msg	String	Response message.
trace_id	String	Response ID.

Example Requests

Delete silent rule "1112222".

```
https://{{Endpoint}}/v2/{{project_id}}/alert/mute-rules
```

```
[ {  
    "name" : "1112222"  
} ]
```

Example Responses

Status code: 204

No Content: The request is successful, but no content is returned.

```
No Content
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.08015002",  
    "error_msg" : "the muteName is not exist",  
    "error_type" : "PARAM_INVALID",  
    "trace_id" : ""  
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code": "AOM.08001500",  
    "error_message": "internal server error",  
    "error_type": "INTERNAL_SERVER_ERROR",  
    "trace_id": ""  
}
```

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.3 Adding a Silence Rule

Function

This API is used to add a silence rule.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v2/{project_id}/alert/mute-rules

Table 4-20 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-21 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-22 Request body parameters

Parameter	Mandatory	Type	Description
create_time	No	Long	Creation time.
desc	No	String	Rule description.
match	Yes	Array<Array< Match >>	Match condition of the rule. Up to 10 serial or parallel conditions can be created.
mute_config	Yes	MuteConfig object	Time when the rule takes effect.
name	Yes	String	Rule name. Enter a maximum of 100 characters and do not start or end with an underscore (_). Only letters, digits, and underscores are allowed.
timezone	No	String	Time zone.
update_time	No	Long	Modification time.

Parameter	Mandatory	Type	Description
user_id	No	String	User ID.

Table 4-23 Match

Parameter	Mandatory	Type	Description
key	Yes	String	Key specified in the metadata for matching.
operate	Yes	String	Match mode. EXIST: Exist. REGEX: Regular expression. EQUALS: Equal to. Enumeration values: <ul style="list-style-type: none">• EQUALS• REGEX• EXIST
value	No	Array of strings	Value corresponding to the key. If operate is set to EXIST, this parameter is left empty.

Table 4-24 MuteConfig

Parameter	Mandatory	Type	Description
ends_at	No	Long	End time of the silence rule.
scope	No	Array of integers	When type is set to WEEKLY or MONTHLY, scope cannot be empty.
starts_at	Yes	Long	Start time of the silence rule.
type	Yes	String	Type of the time for the silence rule to take effect. FIXED: Fixed time. DAILY: Certain time every day. WEEKLY: Certain time every week. MONTHLY: Certain time every month. Enumeration values: <ul style="list-style-type: none">• FIXED• DAILY• WEEKLY• MONTHLY

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

Status code: 400

Table 4-25 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 401

Table 4-26 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-27 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-28 Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Example Requests

Add a silence rule whose name is "32255" and user ID is "xxxxxxxxxxxxxxxxxxxxxxcf".

https://{{Endpoint}}/v2/{{project_id}}/alert/mute-rules

```
{  
    "create_time": 1668147671966,  
    "desc": "",  
    "match": [ [ {  
        "key": "event_severity",  
        "operate": "EQUALS",  
        "value": [ "Info" ]  
    } ],  
    "mute_config": {  
        "ends_at": 86399,  
        "scope": [ ],  
        "starts_at": 0,  
        "type": "DAILY"  
    },  
    "name": "32255",  
    "timezone": "xxx",  
    "update_time": 1668147671966,  
    "user_id": "xxxxxxxxxxxxxxxxxxxxxxcf"  
}
```

Example Responses

Status code: 204

No Content: The request is successful, but no content is returned.

No Content

Status code: 400

Bad Request: Invalid request. The client should not repeat the request without modifications.

```
{  
    "error_code": "AOM.08011001",  
    "error_msg": "the muteName is exist",  
    "error_type": "PARAM_INVALID",  
    "trace_id": ""  
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{  
    "error_code": "AOM.0403",  
}
```

```
{  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_msg" : "Internal Server Error",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.
400	Bad Request: Invalid request. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.4 Modifying a Silence Rule

Function

This API is used to modify a silence rule.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v2/{project_id}/alert/mute-rules

Table 4-29 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-30 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-31 Request body parameters

Parameter	Mandatory	Type	Description
create_time	No	Long	Creation time.
desc	No	String	Rule description.
match	Yes	Array<Array< Match >>	Match condition of the rule. Up to 10 serial or parallel conditions can be created.
mute_config	Yes	MuteConfig object	Time when the rule takes effect.

Parameter	Mandatory	Type	Description
name	Yes	String	Rule name. Enter a maximum of 100 characters and do not start or end with an underscore (_). Only letters, digits, and underscores are allowed.
timezone	No	String	Time zone.
update_time	No	Long	Modification time.
user_id	No	String	User ID.

Table 4-32 Match

Parameter	Mandatory	Type	Description
key	Yes	String	Key specified in the metadata for matching.
operate	Yes	String	Match mode. EXIST: Exist. REGEX: Regular expression. EQUALS: Equal to. Enumeration values: <ul style="list-style-type: none">• EQUALS• REGEX• EXIST
value	No	Array of strings	Value corresponding to the key. If operate is set to EXIST, this parameter is left empty.

Table 4-33 MuteConfig

Parameter	Mandatory	Type	Description
ends_at	No	Long	End time of the silence rule.
scope	No	Array of integers	When type is set to WEEKLY or MONTHLY, scope cannot be empty.
starts_at	Yes	Long	Start time of the silence rule.

Parameter	Mandatory	Type	Description
type	Yes	String	<p>Type of the time for the silence rule to take effect. FIXED: Fixed time. DAILY: Certain time every day. WEEKLY: Certain time every week. MONTHLY: Certain time every month.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • FIXED • DAILY • WEEKLY • MONTHLY

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

Status code: 400

Table 4-34 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 401

Table 4-35 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-36 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-37 Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Example Requests

Modify a silence rule whose name is "32255", time zone is "xxx", and user ID is "xxxxxxxxxxxxxxxxxxxxxxcf".

https://{endpoint}/v2/{project_id}/alert/mute-rules

```
{  
    "create_time": 1668147671966,  
    "desc": "",  
    "match": [ [ {  
        "key": "event_severity",  
        "operate": "EQUALS",  
        "value": [ "Info" ]  
    } ],  
    "mute_config": {  
        "ends_at": 86399,  
        "scope": [ ],  
        "starts_at": 0,  
        "type": "DAILY"  
    },  
    "name": "32255",  
    "timezone": "xxx",  
    "update_time": 1668147671966,  
    "user_id": "xxxxxxxxxxxxxxxxxxxxxxcf"  
}
```

Example Responses

Status code: 204

No Content: The request is successful, but no content is returned.

No Content

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.08012003",  
    "error_msg" : "request insertParma probably has error",  
    "error_type" : "PARAM_INVALID",  
    "trace_id" : ""  
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_msg" : "Internal Server Error",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.

Status Code	Description
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.5 Obtaining the Silence Rule List

Function

This API is used to obtain the silence rule list.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v2/{project_id}/alert/mute-rules

Table 4-38 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-39 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .

Parameter	Mandatory	Type	Description
Content-Type	No	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none"> • application/json

Response Parameters

Status code: 200

Table 4-40 Response body parameters

Parameter	Type	Description
[items]	Array of MuteRule objects	Silence rule.

Table 4-41 MuteRule

Parameter	Type	Description
create_time	Long	Creation time.
desc	String	Rule description.
match	Array<Array< Match >>	Match condition of the rule. Up to 10 serial or parallel conditions can be created.
mute_config	MuteConfig object	Time when the rule takes effect.
name	String	Rule name. Enter a maximum of 100 characters and do not start or end with an underscore (_). Only letters, digits, and underscores are allowed.
timezone	String	Time zone.
update_time	Long	Modification time.
user_id	String	User ID.

Table 4-42 Match

Parameter	Type	Description
key	String	Key specified in the metadata for matching.
operate	String	Match mode. EXIST: Exist. REGEX: Regular expression. EQUALS: Equal to. Enumeration values: <ul style="list-style-type: none"> • EQUALS • REGEX • EXIST
value	Array of strings	Value corresponding to the key. If operate is set to EXIST, this parameter is left empty.

Table 4-43 MuteConfig

Parameter	Type	Description
ends_at	Long	End time of the silence rule.
scope	Array of integers	When type is set to WEEKLY or MONTHLY, scope cannot be empty.
starts_at	Long	Start time of the silence rule.
type	String	Type of the time for the silence rule to take effect. FIXED: Fixed time. DAILY: Certain time every day. WEEKLY: Certain time every week. MONTHLY: Certain time every month. Enumeration values: <ul style="list-style-type: none"> • FIXED • DAILY • WEEKLY • MONTHLY

Status code: 401

Table 4-44 Response body parameters

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

Parameter	Type	Description
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-45 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-46 Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Example Requests

Obtain the silence rule list.

https://{{Endpoint}}/v2/{{project_id}}/alert/mute-rules

Example Responses

Status code: 200

OK: The request is successful.

```
[ {  
    "create_time": 1668147671966,  
    "desc": "",  
    "match": [ [ {  
        "key": "event_severity",  
        "operate": "EQUALS",  
        "value": [ "Info" ]  
    } ]],  
    "mute_config": {
```

```
        "ends_at" : 86399,
        "scope" : [ ],
        "starts_at" : 0,
        "type" : "DAILY"
    },
    "name" : "32255",
    "timezone" : "xxx",
    "update_time" : 1668147671966,
    "user_id" : "2a473356cca5487f8373be891bffc1cf"
} ]
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_msg" : "Internal Server Error",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.6 Querying an Alarm Action Rule Based on Alarm Rule Name

Function

This API is used to query an alarm action rule based on the alarm rule name.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v2/{project_id}/alert/action-rules/{rule_name}

Table 4-47 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .
rule_name	Yes	String	Alarm rule name.

Request Parameters

Table 4-48 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	No	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Response Parameters

Status code: 200

Table 4-49 Response body parameters

Parameter	Type	Description
rule_name	String	Alarm action rule name. Enter a maximum of 100 characters and do not start or end with a special character. Only letters, digits, and underscores (_) are allowed.
project_id	String	Project ID.
user_name	String	Member account name.
desc	String	Rule description. Enter a maximum of 1,024 characters and do not start or end with an underscore (.). <i>Only digits, letters, underscores (), asterisk (*), and spaces are allowed.</i>
type	String	Rule types. <ul style="list-style-type: none">● 1: notification.● 2: user. Enumeration values: <ul style="list-style-type: none">● 1● 2
notification_template	String	Message template.
create_time	Long	Creation time.
update_time	Long	Modification time
time_zone	String	Time zone.
smn_topics	Array of SmnTopics objects	SMN topic. The total number of topics cannot exceed 5.

Table 4-50 SmnTopics

Parameter	Type	Description
display_name	String	Topic display name, which will be the name of an email sender. Max.: 192 bytes. This parameter is left blank by default.
name	String	Name of the topic. Enter 1 to 255 characters starting with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed.

Parameter	Type	Description
push_policy	Integer	SMN message push policy. Options: 0 and 1.
status	Integer	<p>Status of the topic subscriber.</p> <ul style="list-style-type: none"> • 0: The topic has been deleted or the subscription list of this topic is empty. • 1: The subscription object is in the subscribed state. • 2: The subscription object is in the unsubscribed or canceled state. <p>Enumeration values:</p> <ul style="list-style-type: none"> • 0 • 1 • 2
topic_urn	String	Unique resource identifier of the topic.

Status code: 400

Table 4-51 Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Status code: 401

Table 4-52 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-53 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-54 Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Example Requests

Query the details of the alarm action rule named 1112222.

https://{{Endpoint}}/v2/{{project_id}}/alert/action-rules/1112222

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "create_time": 1665991889597,  
    "notification_template": "aom.built-in.template.zh",  
    "project_id": "xxxxxxxxxxxxxxxxxxxxxx",  
    "rule_name": "1112222",  
    "smn_topics": [ {  
        "display_name": "",  
        "name": "gxxxxxt",  
        "push_policy": 0,  
        "status": 0,  
        "topic_urn": "urn:smn:xxx:xxxxxxxxxxxxxxxxxxxxf:gxxxxxt"  
    } ],  
    "time_zone": "xxx",  
    "type": "1",  
    "update_time": 1665991889597,  
    "user_name": "kxxxxxxxt"  
}
```

Status code: 400

Bad Request: Invalid request. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.08001001",  
    "error_msg" : "bad request",  
    "trace_id" : ""  
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_msg" : "Internal Server Error",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: Invalid request. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.7 Adding an Alarm Action Rule

Function

This API is used to add an alarm action rule.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v2/{project_id}/alert/action-rules

Table 4-55 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-56 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-57 Request body parameters

Parameter	Mandatory	Type	Description
rule_name	Yes	String	Alarm action rule name. Enter a maximum of 100 characters and do not start or end with a special character. Only letters, digits, and underscores (_) are allowed.
project_id	Yes	String	Project ID.
user_name	Yes	String	Member account name.
desc	No	String	Rule description. Enter a maximum of 1,024 characters and do not start or end with an underscore (_). <i>Only digits, letters, underscores (_), asterisk (*), and spaces are allowed.</i>
type	Yes	String	Rule types. <ul style="list-style-type: none">• 1: notification.• 2: user. Enumeration values: <ul style="list-style-type: none">• 1• 2
notification_template	Yes	String	Message template.
create_time	No	Long	Creation time.
update_time	No	Long	Modification time
time_zone	No	String	Time zone.
smn_topics	Yes	Array of SmnTopics objects	SMN topic. The total number of topics cannot exceed 5.

Table 4-58 SmnTopics

Parameter	Mandatory	Type	Description
display_name	No	String	Topic display name, which will be the name of an email sender. Max.: 192 bytes. This parameter is left blank by default.

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the topic. Enter 1 to 255 characters starting with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed.
push_policy	Yes	Integer	SMN message push policy. Options: 0 and 1.
status	No	Integer	Status of the topic subscriber. <ul style="list-style-type: none"> • 0: The topic has been deleted or the subscription list of this topic is empty. • 1: The subscription object is in the subscribed state. • 2: The subscription object is in the unsubscribed or canceled state. Enumeration values: <ul style="list-style-type: none"> • 0 • 1 • 2
topic_urn	Yes	String	Unique resource identifier of the topic.

Response Parameters

Status code: 200

OK: Operation successful.

Status code: 400

Table 4-59 Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Status code: 401

Table 4-60 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403**Table 4-61** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500**Table 4-62** Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Example Requests

Add an alarm action rule whose name is "66666", username is "kxxxxxxxxt", user ID is "21xxxxxxxxxxxxxxxxx47c", and notification template is "aom.built-in.template.en".

```
https://[Endpoint]/v2/{project_id}/alert/action-rules
```

```
{  
    "desc" : "1111",  
    "notification_template" : "aom.built-in.template.zh",  
    "project_id" : "21xxxxxxxxxxxxxxxxx47c",  
    "rule_name" : "66666",  
    "smn_topics" : [ {  
        "display_name" : "",  
        "topic" : "aom.built-in.template.en"  
    } ]  
}
```

```
        "name" : "xiaohama",
        "push_policy" : 0,
        "status" : 0,
        "topic_urn" : "urn:smn:xxx:21xxxxxxxxxxxxxx47c:xiaohama"
    ],
    "type" : "1",
    "user_name" : "kxxxxxxxxt",
    "time_zone" : "xxx"
}
```

Example Responses

Status code: 400

Bad Request: Invalid request. The client should not repeat the request without modifications.

```
{
    "error_code" : "AOM.08018012",
    "error_msg" : "actionRule already exists",
    "trace_id" : ""
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{
    "error_code" : "AOM.0403",
    "error_msg" : "auth failed.",
    "error_type" : "AUTH_FAILED",
    "trace_id" : null
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{
    "error_code" : "AOM.0403",
    "error_msg" : "auth failed.",
    "error_type" : "AUTH_FAILED",
    "trace_id" : null
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{
    "error_code" : "APM.00000500",
    "error_msg" : "Internal Server Error",
    "trace_id" : ""
}
```

Status Codes

Status Code	Description
200	OK: Operation successful.

Status Code	Description
400	Bad Request: Invalid request. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.8 Deleting an Alarm Action Rule

Function

This API is used to delete an alarm action rule.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v2/{project_id}/alert/action-rules

Table 4-63 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-64 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-65 Request body parameters

Parameter	Mandatory	Type	Description
[items]	Yes	Array of strings	Name of the rule to be deleted.

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

Status code: 400**Table 4-66** Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Status code: 401**Table 4-67** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-68 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-69 Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Example Requests

Delete alarm action rule 1112222.

```
https://{{Endpoint}}/v2/{{project_id}}/alert/action-rules
```

```
[ "1112222" ]
```

Example Responses

Status code: 204

No Content: The request is successful, but no content is returned.

```
No Content
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.08020006",  
    "error_msg" : "The action rule does not exist",  
    "trace_id" : ""  
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "AOM.08020500",  
    "error_msg" : "internal server error",  
    "error_type" : "INTERNAL_SERVER_ERROR",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.9 Modifying an Alarm Action Rule

Function

This API is used to modify an alarm action rule.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v2/{project_id}/alert/action-rules

Table 4-70 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-71 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-72 Request body parameters

Parameter	Mandatory	Type	Description
rule_name	Yes	String	Alarm action rule name. Enter a maximum of 100 characters and do not start or end with a special character. Only letters, digits, and underscores (_) are allowed.
project_id	Yes	String	Project ID.
user_name	Yes	String	Member account name.
desc	No	String	Rule description. Enter a maximum of 1,024 characters and do not start or end with an underscore (_). <i>Only digits, letters, underscores (_), asterisk (*), and spaces are allowed.</i>
type	Yes	String	Rule types. <ul style="list-style-type: none">• 1: notification.• 2: user. Enumeration values: <ul style="list-style-type: none">• 1• 2
notification_template	Yes	String	Message template.
create_time	No	Long	Creation time.
update_time	No	Long	Modification time
time_zone	No	String	Time zone.
smn_topics	Yes	Array of SmnTopics objects	SMN topic. The total number of topics cannot exceed 5.

Table 4-73 SmnTopics

Parameter	Mandatory	Type	Description
display_name	No	String	Topic display name, which will be the name of an email sender. Max.: 192 bytes. This parameter is left blank by default.

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the topic. Enter 1 to 255 characters starting with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed.
push_policy	Yes	Integer	SMN message push policy. Options: 0 and 1.
status	No	Integer	Status of the topic subscriber. <ul style="list-style-type: none">• 0: The topic has been deleted or the subscription list of this topic is empty.• 1: The subscription object is in the subscribed state.• 2: The subscription object is in the unsubscribed or canceled state. Enumeration values: <ul style="list-style-type: none">• 0• 1• 2
topic_urn	Yes	String	Unique resource identifier of the topic.

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

Status code: 400

Table 4-74 Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Status code: 401

Table 4-75 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-76 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-77 Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Example Requests

Modify the alarm action rule whose name is "lhy_test01" and user ID is "2xxxxxxxxxxxxxxxxxxxxcf".

```
https://{endpoint}/v2/{project_id}/alert/action-rules
```

```
{
  "project_id": "2xxxxxxxxxxxxxxxxxxxxcf",
  "rule_name": "222",
  "desc": "222",
  "type": "1",
  "smn_topics": [ {
    "display_name": "",
    "name": "lhy_test01",
    "push_policy": 0,
```

```
        "topic_urn" : "urn:smn:xxx:xxxxxxxxxxxxxxxxx:lh_y_test01"
    } ],
    "user_name" : "kxxxxxxxxt",
    "notification_template" : "aom.built-in.template.zh",
    "time_zone" : "xxx",
    "create_time" : 1667316727451,
    "update_time" : 1667316727451
}
```

Example Responses

Status code: 204

No Content: The request is successful, but no content is returned.

```
No Content
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{
    "error_code" : "AOM.08019006",
    "error_msg" : "The action rule does not exist",
    "trace_id" : ""
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{
    "error_code" : "AOM.0403",
    "error_msg" : "auth failed.",
    "error_type" : "AUTH_FAILED",
    "trace_id" : null
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{
    "error_code" : "AOM.0403",
    "error_msg" : "auth failed.",
    "error_type" : "AUTH_FAILED",
    "trace_id" : null
}
```

Status code: 500

Internal Server Error

The server is able to receive the request but unable to understand the request.

```
{
    "error_code" : "APM.00000500",
    "error_msg" : "Internal Server Error",
    "trace_id" : ""
}
```

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.10 Querying the Alarm Action Rule List

Function

This API is used to query the alarm action rule list.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v2/{project_id}/alert/action-rules

Table 4-78 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-79 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	No	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Response Parameters

Status code: 200

Table 4-80 Response body parameters

Parameter	Type	Description
action_rules	Array of ActionRule objects	Alarm action rule list.

Table 4-81 ActionRule

Parameter	Type	Description
rule_name	String	Alarm action rule name. Enter a maximum of 100 characters and do not start or end with a special character. Only letters, digits, and underscores (_) are allowed.
project_id	String	Project ID.
user_name	String	Member account name.
desc	String	Rule description. Enter a maximum of 1,024 characters and do not start or end with an underscore (.). <i>Only digits, letters, underscores (), asterisk (*), and spaces are allowed.</i>

Parameter	Type	Description
type	String	<p>Rule types.</p> <ul style="list-style-type: none"> • 1: notification. • 2: user. <p>Enumeration values:</p> <ul style="list-style-type: none"> • 1 • 2
notification_template	String	Message template.
create_time	Long	Creation time.
update_time	Long	Modification time
time_zone	String	Time zone.
smn_topics	Array of SmnTopics objects	SMN topic. The total number of topics cannot exceed 5.

Table 4-82 SmnTopics

Parameter	Type	Description
display_name	String	Topic display name, which will be the name of an email sender. Max.: 192 bytes. This parameter is left blank by default.
name	String	Name of the topic. Enter 1 to 255 characters starting with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed.
push_policy	Integer	SMN message push policy. Options: 0 and 1.

Parameter	Type	Description
status	Integer	<p>Status of the topic subscriber.</p> <ul style="list-style-type: none"> • 0: The topic has been deleted or the subscription list of this topic is empty. • 1: The subscription object is in the subscribed state. • 2: The subscription object is in the unsubscribed or canceled state. <p>Enumeration values:</p> <ul style="list-style-type: none"> • 0 • 1 • 2
topic_urn	String	Unique resource identifier of the topic.

Status code: 401

Table 4-83 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-84 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-85 Response body parameters

Parameter	Type	Description
error_code	String	Response code.
error_msg	String	Response message.
trace_id	String	Response ID.

Example Requests

Query all alarm action rules.

```
https://{{Endpoint}}/v2/{{project_id}}/alert/action-rules
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "action_rules": [ {  
        "create_time": 1665991889597,  
        "desc": "",  
        "notification_template": "aom.built-in.template.zh",  
        "project_id": "xxxxxxxxxxxxxxxxxxxxxx",  
        "rule_name": "1112222",  
        "smn_topics": [ {  
            "display_name": "",  
            "name": "gcmtest",  
            "push_policy": 0,  
            "status": 0,  
            "topic_urn": "urn:smn:xxx:xxxxxxxxxxxxxxxxxxxx:gcmtest"  
        } ],  
        "time_zone": "xxx",  
        "type": "1",  
        "update_time": 1665991889597,  
        "user_name": "kxxxxxt"  
    } ]  
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{  
    "error_code": "AOM.0403",  
    "error_msg": "auth failed.",  
    "error_type": "AUTH_FAILED",  
    "trace_id": null  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code": "AOM.0403",  
    "error_msg": "auth failed."  
}
```

```
    "error_type" : "AUTH_FAILED",
    "trace_id" : null
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{
    "error_code" : "APM.00000500",
    "error_msg" : "Internal Server Error",
    "trace_id" : ""
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.11 Querying the Event Alarm Rule List

Function

This API is used to query the event alarm rule list. (This is an AOM 1.0 API and will be brought offline soon. You are advised to use the AOM 2.0 API [Querying Metric or Event Alarm Rules](#).)

Calling Method

For details, see [Calling APIs](#).

URI

GET /v2/{project_id}/event2alarm-rule

Table 4-86 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-87 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	No	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Response Parameters

Status code: 200

Table 4-88 Response body parameters

Parameter	Type	Description
[items]	Array of Event2alarmRuleBody objects	Event alarm entity.

Table 4-89 Event2alarmRuleBody

Parameter	Type	Description
user_id	String	Project ID.

Parameter	Type	Description
name	String	Rule name. Enter a maximum of 100 characters and do not start or end with a special character. Only letters, digits, underscores (_), and hyphens (-) are allowed.
description	String	Rule description. Enter a maximum of 1024 characters and do not start or end with an underscore (_) or hyphen (-). Only letters, digits, and special characters (_-<>=,) are allowed.
create_time	Long	Creation time.
update_time	Long	Update time.
resource_provider	String	Event source.
metadata	metadata object	Source data.
enable	Boolean	Whether to enable the rule.
trigger_policies	Array of trigger_policies objects	Trigger policy.
alarm_type	String	Alarm type. notification: direct alarm reporting. denoising: alarm noise reduction. Enumeration values: <ul style="list-style-type: none">● notification● denoising
action_rule	String	Alarm action rule.
inhibit_rule	String	Alarm suppression rule.
route_group_rule	String	Alarm grouping rule.
event_names	Array of strings	Event name.
migrated	Boolean	Whether to migrate to AOM 2.0.
topics	Array of SmnTopics objects	SMN information.

Table 4-90 metadata

Parameter	Type	Description
customField	Array of strings	Custom tag.

Table 4-91 trigger_policies

Parameter	Type	Description
id	Integer	ID.
name	String	Event name.
trigger_type	String	Trigger type. accumulative: Accumulated trigger. immediately: Immediate trigger. Enumeration values: • accumulative • immediately
period	Integer	Trigger cycle.
operator	String	Comparison operator.
count	Integer	Number of trigger times.
level	String	Alarm severity.

Table 4-92 SmnTopics

Parameter	Type	Description
display_name	String	Topic display name, which will be the name of an email sender. Max.: 192 bytes. This parameter is left blank by default.
name	String	Name of the topic. Enter 1 to 255 characters starting with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed.
push_policy	Integer	SMN message push policy. Options: 0 and 1.

Parameter	Type	Description
status	Integer	<p>Status of the topic subscriber.</p> <ul style="list-style-type: none"> • 0: The topic has been deleted or the subscription list of this topic is empty. • 1: The subscription object is in the subscribed state. • 2: The subscription object is in the unsubscribed or canceled state. <p>Enumeration values:</p> <ul style="list-style-type: none"> • 0 • 1 • 2
topic_urn	String	Unique resource identifier of the topic.

Status code: 401

Table 4-93 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-94 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-95 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Example Requests

Query the event alarm rule list.

https://{{endpoint}}/v2/{{project_id}}/event2alarm-rule

Example Responses

Status code: 200

OK: The request is successful.

```
[ {  
    "action_rule" : "1",  
    "alarm_type" : "notification",  
    "create_time" : 1701442632968,  
    "description" : "",  
    "enable" : true,  
    "event_names" : [ ],  
    "inhibit_rule" : "",  
    "metadata" : {  
        "customField" : [ "xxx" ]  
    },  
    "migrated" : false,  
    "name" : "1jB5h6GnbY",  
    "resource_provider" : "AOM",  
    "route_group_rule" : "",  
    "topics" : [ ],  
    "trigger_policies" : [ {  
        "count" : 99,  
        "id" : 0,  
        "level" : "",  
        "name" : "",  
        "operator" : ">=",  
        "period" : 300,  
        "trigger_type" : "accumulative"  
    } ],  
    "update_time" : 0,  
    "user_id" : "2a473356cca5487f8373be891bffc1cf"  
} ]
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{  
    "error_code" : "SVCSTG.AMS.2000051",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED"  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.0403",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED"  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_msg" : "Internal Server Error",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.12 Adding an Event Alarm Rule

Function

This API is used to add an event alarm rule.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v2/{project_id}/event2alarm-rule

Table 4-96 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-97 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-98 Request body parameters

Parameter	Mandatory	Type	Description
user_id	Yes	String	Project ID.
name	Yes	String	Rule name. Enter a maximum of 100 characters and do not start or end with a special character. Only letters, digits, underscores (_), and hyphens (-) are allowed.
description	No	String	Rule description. Enter a maximum of 1024 characters and do not start or end with an underscore (_) or hyphen (-). Only letters, digits, and special characters (_-<>=.,) are allowed.
create_time	Yes	Long	Creation time.
update_time	No	Long	Update time.

Parameter	Mandatory	Type	Description
resource_provider	No	String	Event source.
metadata	Yes	metadata object	Source data.
enable	Yes	Boolean	Whether to enable the rule.
trigger_policies	Yes	Array of trigger_policies objects	Trigger policy.
alarm_type	Yes	String	Alarm type. notification: direct alarm reporting. denoising: alarm noise reduction. Enumeration values: <ul style="list-style-type: none">• notification• denoising
action_rule	Yes	String	Alarm action rule.
inhibit_rule	No	String	Alarm suppression rule.
route_group_rule	No	String	Alarm grouping rule.
event_names	No	Array of strings	Event name.
migrated	No	Boolean	Whether to migrate to AOM 2.0.
topics	No	Array of SmnTopics objects	SMN information.

Table 4-99 metadata

Parameter	Mandatory	Type	Description
customField	No	Array of strings	Custom tag.

Table 4-100 trigger_policies

Parameter	Mandatory	Type	Description
id	No	Integer	ID.
name	No	String	Event name.

Parameter	Mandatory	Type	Description
trigger_type	No	String	Trigger type. accumulative: Accumulated trigger. immediately: Immediate trigger. Enumeration values: • accumulative • immediately
period	No	Integer	Trigger cycle.
operator	No	String	Comparison operator.
count	No	Integer	Number of trigger times.
level	No	String	Alarm severity.

Table 4-101 SmnTopics

Parameter	Mandatory	Type	Description
display_name	No	String	Topic display name, which will be the name of an email sender. Max.: 192 bytes. This parameter is left blank by default.
name	Yes	String	Name of the topic. Enter 1 to 255 characters starting with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed.
push_policy	Yes	Integer	SMN message push policy. Options: 0 and 1.
status	No	Integer	Status of the topic subscriber. • 0: The topic has been deleted or the subscription list of this topic is empty. • 1: The subscription object is in the subscribed state. • 2: The subscription object is in the unsubscribed or canceled state. Enumeration values: • 0 • 1 • 2

Parameter	Mandatory	Type	Description
topic_urn	Yes	String	Unique resource identifier of the topic.

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

Status code: 400

Table 4-102 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 401

Table 4-103 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-104 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.

Parameter	Type	Description
trace_id	String	Request ID.

Status code: 500

Table 4-105 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Example Requests

Add an event alarm rule whose user ID is "xxxx", name is "scl_test_event", and event source is "AOM".

https://{{endpoint}}/v2/{{project_id}}/event2alarm-rule

```
{  
    "user_id": "xxxx",  
    "name": "scl_test_event",  
    "description": "",  
    "create_time": 1669276173427,  
    "update_time": 0,  
    "resource_provider": "AOM",  
    "metadata": {  
        "customField": [ "xxx=xxx" ]  
    },  
    "enable": true,  
    "trigger_policies": [ {  
        "id": 0,  
        "name": "",  
        "trigger_type": "accumulative",  
        "period": 300,  
        "operator": ">=",  
        "count": 99,  
        "level": ""  
    } ],  
    "alarm_type": "notification",  
    "action_rule": "111111",  
    "inhibit_rule": "",  
    "route_group_rule": ""  
}
```

Example Responses

Status code: 204

No Content: The request is successful, but no content is returned.

No Content

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.02011400",  
    "error_msg" : "actionRule is invalid!",  
    "error_type" : "BAD_REQUEST",  
    "trace_id" : ""  
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{  
    "error_code" : "SVCSTG.AMS.2000051",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED"  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "SVCSTG.AMS.2000051",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : "8fb508e9e31b44279016f708e1c60e4c"  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_msg" : "Internal Server Error",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

Status Code	Description
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.13 Modifying an Event Alarm Rule

Function

This API is used to modify an event alarm rule.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v2/{project_id}/event2alarm-rule

Table 4-106 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-107 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-108 Request body parameters

Parameter	Mandatory	Type	Description
user_id	Yes	String	Project ID.
name	Yes	String	Rule name. Enter a maximum of 100 characters and do not start or end with a special character. Only letters, digits, underscores (_), and hyphens (-) are allowed.
description	No	String	Rule description. Enter a maximum of 1024 characters and do not start or end with an underscore (_) or hyphen (-). Only letters, digits, and special characters (_-<>=.,) are allowed.
create_time	Yes	Long	Creation time.
update_time	No	Long	Update time.
resource_provider	No	String	Event source.
metadata	Yes	metadata object	Source data.
enable	Yes	Boolean	Whether to enable the rule.
trigger_policies	Yes	Array of trigger_policies objects	Trigger policy.
alarm_type	Yes	String	Alarm type. notification: direct alarm reporting. denoising: alarm noise reduction. Enumeration values: <ul style="list-style-type: none">• notification• denoising
action_rule	Yes	String	Alarm action rule.
inhibit_rule	No	String	Alarm suppression rule.
route_group_rule	No	String	Alarm grouping rule.

Parameter	Mandatory	Type	Description
event_names	No	Array of strings	Event name.
migrated	No	Boolean	Whether to migrate to AOM 2.0.
topics	No	Array of SmnTopics objects	SMN information.

Table 4-109 metadata

Parameter	Mandatory	Type	Description
customField	No	Array of strings	Custom tag.

Table 4-110 trigger_policies

Parameter	Mandatory	Type	Description
id	No	Integer	ID.
name	No	String	Event name.
trigger_type	No	String	Trigger type. accumulative: Accumulated trigger. immediately: Immediate trigger. Enumeration values: • accumulative • immediately
period	No	Integer	Trigger cycle.
operator	No	String	Comparison operator.
count	No	Integer	Number of trigger times.
level	No	String	Alarm severity.

Table 4-111 SmnTopics

Parameter	Mandatory	Type	Description
display_name	No	String	Topic display name, which will be the name of an email sender. Max.: 192 bytes. This parameter is left blank by default.
name	Yes	String	Name of the topic. Enter 1 to 255 characters starting with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed.
push_policy	Yes	Integer	SMN message push policy. Options: 0 and 1.
status	No	Integer	Status of the topic subscriber. <ul style="list-style-type: none">● 0: The topic has been deleted or the subscription list of this topic is empty.● 1: The subscription object is in the subscribed state.● 2: The subscription object is in the unsubscribed or canceled state. Enumeration values: <ul style="list-style-type: none">● 0● 1● 2
topic_urn	Yes	String	Unique resource identifier of the topic.

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

Status code: 400

Table 4-112 Response body parameters

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

Parameter	Type	Description
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 401

Table 4-113 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-114 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-115 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Example Requests

Update an event alarm rule whose user ID is "xxxxxx", event source is "AOM", and name is "scl_test_event".

```
https://{{endpoint}}/v2/{{project_id}}/event2alarm-rule
```

```
{  
    "user_id" : "xxxxxx",  
    "name" : "scl_test_event",  
    "description" : "",  
    "create_time" : 1669276304343,  
    "update_time" : 1669276304343,  
    "resource_provider" : "AOM",  
    "metadata" : {  
        "customField" : [ "xxx" ]  
    },  
    "enable" : true,  
    "trigger_policies" : [ {  
        "id" : 0,  
        "name" : "",  
        "trigger_type" : "accumulative",  
        "period" : 300,  
        "operator" : ">=",  
        "count" : 99,  
        "level" : ""  
    } ],  
    "alarm_type" : "notification",  
    "action_rule" : "111111",  
    "inhibit_rule" : "",  
    "route_group_rule" : ""  
}
```

Example Responses

Status code: 204

No Content: The request is successful, but no content is returned.

```
No Content
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.02011400",  
    "error_msg" : "actionRule is invalid!",  
    "error_type" : "BAD_REQUEST",  
    "trace_id" : ""  
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{  
    "error_code" : "SVCSTG.AMS.2000051",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED"  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "SVCSTG.AMS.2000051",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED"  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_msg" : "Internal Server Error",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.14 Deleting an Event Alarm Rule

Function

This API is used to delete an event alarm rule.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v2/{project_id}/event2alarm-rule

Table 4-116 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-117 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-118 Request body parameters

Parameter	Mandatory	Type	Description
[items]	Yes	Array of strings	Name of the rule to be deleted.

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

Status code: 400

Table 4-119 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 401

Table 4-120 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 403

Table 4-121 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-122 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.

Parameter	Type	Description
trace_id	String	Request ID.

Example Requests

Delete event alarm rule "aomTestLts".

```
https://{{endpoint}}/v2/{{project_id}}/event2alarm-rule  
[ "aomTestLts" ]
```

Example Responses

Status code: 204

No Content: The request is successful, but no content is returned.

```
No Content
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.02013125",  
    "error_msg" : "send kafka message failed",  
    "error_type" : "INTERNAL_SERVER_ERROR",  
    "trace_id" : "8fb508e9e31b44279016f708e1c60e4c"  
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{  
    "error_code" : "SVCSTG.AMS.2000051",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED"  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "SVCSTG.AMS.2000051",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED"  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_msg" : "Internal Server Error",  
}
```

```
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.15 Querying Metric or Event Alarm Rules

Function

This API is used to query AOM 2.0 metric or event alarm rules.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v4/{project_id}/alarm-rules

Table 4-123 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-124 Query Parameters

Parameter	Mandatory	Type	Description
name	No	String	Alarm rule name.
limit	No	String	Number of records that can be returned.
offset	No	String	Start position for a pagination query, which must be a non-negative integer.
sort_by	No	String	Whether to sort alarms by alarm rule name or alarm creation time. <ul style="list-style-type: none">• alarm_rule_name.asc• alarm_create_time.desc
event_source	No	String	Source of an event alarm rule. <ul style="list-style-type: none">• RDS• EVS• CCE• LTS• AOM
event_severity	No	String	Alarm severity. <ul style="list-style-type: none">• Critical• Major• Minor• Info
alarm_rule_status	No	String	Alarm rule status. <ul style="list-style-type: none">• OK: normal• alarm: threshold-crossing• Effective: in use• Invalid: not in use Enumeration values: <ul style="list-style-type: none">• OK• alarm• Effective• Invalid

Parameter	Mandatory	Type	Description
alarm_rule_type	No	String	Alarm rule type. <ul style="list-style-type: none"> ● metric: metric alarm rule ● event: event alarm rule Enumeration values: <ul style="list-style-type: none"> ● metric ● event
prom_instance_id	No	String	Prometheus instance ID.
bind_notification_rule_id	No	String	Name of the bound alarm action rule.
related_cce_clusters	No	String	CCE cluster ID.

Request Parameters

Table 4-125 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	No	String	Message body type or format. Content type, which is application/json.
Enterprise-Project-Id	No	String	Enterprise project ID. For details, see Obtaining an Enterprise Project ID . <ul style="list-style-type: none"> ● To query the instances in an enterprise project, enter the enterprise project ID. ● To query the instances in all enterprise projects, enter all_granted_eps.

Response Parameters

Status code: 200

Table 4-126 Response body parameters

Parameter	Type	Description
alarm_rules	Array of AlarmParamForV4Db objects	Alarm rule list.
metadata	Object	Metadata information.
count	Integer	Number of alarm rules.

Table 4-127 AlarmParamForV4Db

Parameter	Type	Description
alarm_create_time	Long	Time when an alarm rule was created.
alarm_update_time	Long	Time when an alarm rule was modified.
alarm_rule_name	String	Alarm rule name.
alarm_rule_id	Long	Alarm rule ID.
enterprise_project_id	String	Enterprise project ID. For details, see Obtaining an Enterprise Project ID .
prom_instance_id	String	Prometheus instance ID.
alarm_rule_description	String	Alarm rule description.
alarm_rule_enable	Boolean	Enabled or not.
alarm_rule_status	String	Alarm status. <ul style="list-style-type: none">● OK: normal● alarm: threshold-crossing● Effective: in use● Invalid: not in use
alarm_rule_type	String	Rule type. <ul style="list-style-type: none">● metric: metric alarm rule● event: event alarm rule Enumeration values: <ul style="list-style-type: none">● metric● event
metric_alarm_spec	MetricAlarmSpec object	Structure of a metric alarm rule.
event_alarm_spec	EventAlarmSpec object	Structure of an event alarm rule.

Parameter	Type	Description
alarm_notification	AlarmNotification object	Alarm notification module.
user_id	String	User ID.

Table 4-128 MetricAlarmSpec

Parameter	Type	Description
monitor_type	String	Monitoring type. <ul style="list-style-type: none">• all_metric: Select metrics from all metrics.• promql: Select metrics using PromQL.• resource (unavailable soon): Select metrics by resource type. Enumeration values: <ul style="list-style-type: none">• all_metric• promql• resource
no_data_conditions	Array of NoDataCondition objects	Action taken for insufficient data.
alarm_tags	Array of AlarmTags objects	Alarm tags.
monitor_objects	Array of Map<String, String> objects	List of monitored objects.
recovery_conditions	RecoveryCondition object	Alarm clearance condition.
trigger_conditions	Array of TriggerCondition objects	Trigger conditions.
alarm_rule_template_bind_enable	Boolean	(Deprecated) Whether to bind an alarm rule template.
alarm_rule_template_id	String	(Deprecated) ID of the alarm rule template.

Table 4-129 NoDataCondition

Parameter	Type	Description
no_data_timeframe	Integer	Number of periods without data.
no_data_alert_state	String	<p>Status of the threshold rule when the data is insufficient.</p> <ul style="list-style-type: none"> • no_data: A notification indicating insufficient data is sent. • alerting: An alarm is triggered. • ok: No exception occurs. • pre_state: Retain the previous state. <p>Enumeration values:</p> <ul style="list-style-type: none"> • no_data • alerting • ok • pre_state
notify_no_data	Boolean	Whether to send a notification when data is insufficient.

Table 4-130 AlarmTags

Parameter	Type	Description
auto_tags	Array of strings	Automatic tag.
custom_tags	Array of strings	Custom tag.
custom_annotations	Array of strings	Alarm annotation.

Table 4-131 RecoveryCondition

Parameter	Type	Description
recovery_timeframe	Integer	Number of consecutive periods for which the trigger condition is not met to clear an alarm.

Table 4-132 TriggerCondition

Parameter	Type	Description
metric_query_mode	String	Metric query mode. <ul style="list-style-type: none">● AOM: native AOM● PROM: AOM Prometheus● NATIVE_PROM: native Prometheus Enumeration values: <ul style="list-style-type: none">● AOM● PROM● NATIVE_PROM
metric_namespace	String	Metric namespace.
metric_name	String	Metric name.
metric_unit	String	Metric unit.
metric_labels	Array of strings	Metric dimension.
promql	String	Prometheus statement.
promql_expr	Array of strings	Prometheus statement template.
trigger_times	Integer	Number of consecutive periods.
trigger_interval	String	Check interval. <ul style="list-style-type: none">● If trigger_type is set to HOURLY*, set this parameter to "".● If trigger_type is set to DAILY, set 00:00–23:00. Example: 03:00.● If trigger_type is set to WEEKLY, select a day in a week and then select 00:00–23:00. Example: **1 03:00" indicates 03:00 on every Monday.● If trigger_type is set to CRON, specify a standard cron expression.● If trigger_type is set to FIXED_RATE, select 15s, 30s, 1–59 min, or 1–24 h.

Parameter	Type	Description
trigger_type	String	<p>Trigger type.</p> <ul style="list-style-type: none"> • FIXED_RATE: fixed interval • HOURLY: every hour • DAILY: every day • WEEKLY: every week • CRON: Cron expression <p>Enumeration values:</p> <ul style="list-style-type: none"> • FIXED_RATE • HOURLY • DAILY • WEEKLY • CRON
promql_for	String	Native Prometheus monitoring duration.
aggregation_type	String	Statistical mode.
		<ul style="list-style-type: none"> • average • minimum • maximum • sum • sampleCount
operator	String	Operator. Options: >, <, =, >=, and <=.
thresholds	Map<String, String>	Key-value pair. The key indicates the alarm severity while the value indicates the alarm threshold.
aggregation_window	String	Statistical period.
		<ul style="list-style-type: none"> • 15s • 30s • 1m • 5m • 15m • 1h
cmdb	CmdbInfo object	CMDB information.
query_match	String	Query filter criteria.
query_param	Object	Query parameters.
aom_monitor_level	String	Monitoring layer.

Parameter	Type	Description
aggregate_type	String	<p>Aggregation mode.</p> <ul style="list-style-type: none"> • by: not grouped • avg • max • min • sum <p>Enumeration values:</p> <ul style="list-style-type: none"> • by • avg • max • min • sum
metric_statistic_method	String	<p>Metric statistics method to be used when you set Configuration Mode to Select from all metrics during alarm rule setting.</p> <ul style="list-style-type: none"> • single: single metric • mix: multi-metric combined operations <p>Enumeration values:</p> <ul style="list-style-type: none"> • single • mix
expression	String	Expression of a combined operation.
mix_promql	String	PromQL of a combined operation.

Table 4-133 CmdbInfo

Parameter	Type	Description
app_id	String	Application ID.
node_ids	Array of NodeInfo objects	Node information list.

Table 4-134 NodeInfo

Parameter	Type	Description
node_type	String	Node type.
node_id	String	Node ID.

Table 4-135 EventAlarmSpec

Parameter	Type	Description
alarm_source	String	Alarm rule source. <ul style="list-style-type: none">● systemEvent● customEvent Enumeration values: <ul style="list-style-type: none">● systemEvent● customEvent
event_source	String	Alarm source. <ul style="list-style-type: none">● RDS● EVS● CCE● LTS● AOM
monitor_objects	Array of Map<String, String> objects	List of monitored objects. Key-value pair. <ul style="list-style-type: none">● event_type: notification type● event_severity: alarm severity● event_name: event name● namespace: namespace● clusterId: cluster ID● customField: user-defined field
trigger_conditions	Array of EventTriggerCondition objects	Trigger conditions.
alarm_rule_template_bind_enable	Boolean	(Deprecated) Whether to bind an alarm rule template.
alarm_rule_template_id	String	(Deprecated) ID of the alarm rule template.

Table 4-136 EventTriggerCondition

Parameter	Type	Description
event_name	String	Event name.

Parameter	Type	Description
trigger_type	String	<p>Trigger mode.</p> <ul style="list-style-type: none"> immediately: An alarm is triggered immediately if the alarm condition is met. accumulative: An alarm is triggered if the alarm condition is met for a specified number of times. <p>Enumeration values:</p> <ul style="list-style-type: none"> immediately accumulative
aggregation_window	Long	Statistical period, in seconds. For example, 3600 indicates one hour. Leave this parameter empty if trigger_type is set to immediately .
operator	String	Operator. Options: >, <, =, >=, and <=. Leave this parameter empty if trigger_type is set to immediately .
thresholds	Map<String, Integer>	Key-value pair. The key indicates the alarm severity while the value indicates the number of accumulated trigger times. Leave this parameter empty if trigger_type is set to immediately .
frequency	String	<p>Event alarm notification frequency. Leave this parameter empty if trigger_type is set to immediately.</p> <ul style="list-style-type: none"> 0: alarm sent only once 300: every 5 minutes 600: every 10 minutes 900: every 15 minutes 1800: every 30 minutes 3600: every hour 10800: every 3 hours 21600: every 6 hours 43200: every 12 hours 86400: every day

Table 4-137 AlarmNotification

Parameter	Type	Description
notification_type	String	<p>Notification type.</p> <ul style="list-style-type: none">• direct: direct alarm reporting• alarm_policy: alarm reporting after noise reduction <p>Enumeration values:</p> <ul style="list-style-type: none">• direct• alarm_policy
route_group_enable	Boolean	<p>Whether to enable a grouping rule.</p> <ul style="list-style-type: none">• If the notification type is alarm_policy, set this parameter to true.• If the notification type is direct, set this parameter to false. <p>If both notify_triggered and notify_resolved are set to false, route_group_enable must be set to false.</p> <p>Enumeration values:</p> <ul style="list-style-type: none">• true• false
route_group_rule	String	<p>Grouping rule name.</p> <ul style="list-style-type: none">• If route_group_enable is set to true, enter a grouping rule name.• If route_group_enable is set to false, enter "".
notification_enable	Boolean	<p>Whether to enable an alarm action rule.</p> <ul style="list-style-type: none">• If the notification type is direct, set this parameter to true.• If the notification type is alarm_policy, set this parameter to false. <p>If both notify_triggered and notify_resolved are set to false, notification_enable must be set to false.</p>
bind_notification_rule_id	String	<p>Alarm action rule ID.</p> <ul style="list-style-type: none">• If notification_enable is set to true, enter an alarm action rule ID.• If notification_enable is set to false, enter "".

Parameter	Type	Description
notify_resolved	Boolean	<p>Whether to send a notification when an alarm is cleared.</p> <ul style="list-style-type: none">• true: Send a notification.• false: Do not send any notification. <p>Enumeration values:</p> <ul style="list-style-type: none">• true• false
notify_triggered	Boolean	<p>Whether to send a notification when an alarm is triggered.</p> <ul style="list-style-type: none">• true: Send a notification.• false: Do not send any notification. <p>Enumeration values:</p> <ul style="list-style-type: none">• true• false
notify_frequency	Integer	<p>Notification frequency.</p> <ul style="list-style-type: none">• If the notification type is alarm_policy, set this parameter to -1.• If the notification type is direct, set this parameter to any of the following:<ul style="list-style-type: none">• 0: alarm sent only once• 300: every 5 minutes• 600: every 10 minutes• 900: every 15 minutes• 1800: every 30 minutes• 3600: every hour• 10800: every 3 hours• 21600: every 6 hours• 43200: every 12 hours• 86400: every day

Status code: 500

Table 4-138 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Example Requests

Query metric or event alarm rules.

```
https://{{Endpoint}}/v4/{{project_id}}/alarm-rules?limit=100&offset=0
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "alarm_rules": [
    {
      "alarm_create_time": 1713929265429,
      "alarm_notifications": {
        "bind_notification_rule_id": "aom_notification_rule",
        "notification_enable": true,
        "notification_type": "direct",
        "notify_frequency": -1,
        "notify_resolved": false,
        "notify_triggered": false,
        "route_group_enable": false,
        "route_group_rule": ""
      },
      "alarm_rule_description": "",
      "alarm_rule_enable": true,
      "alarm_rule_id": 0,
      "alarm_rule_name": "aom_alarm_rule",
      "alarm_rule_status": "Effective",
      "alarm_rule_type": "event",
      "alarm_update_time": 0,
      "enterprise_project_id": "0",
      "event_alarm_spec": {
        "alarm_rule_template_bind_enable": false,
        "alarm_rule_template_id": "",
        "alarm_source": "systemEvent",
        "event_source": "CCE",
        "monitor_objects": [
          {
            "clusterId": "a4***6b-f**9-1**e-a**d-02***10***a",
            "event_type": "event"
          }
        ],
        "trigger_conditions": [
          {
            "aggregation_window": 300,
            "event_name": "",
            "frequency": "1",
            "operator": ">=",
            "thresholds": {
              "Critical": 2
            },
            "trigger_type": "immediately"
          }
        ]
      },
      "user_id": "2a***56***48***73***1b***cf"
    },
    {
      "alarm_create_time": 171145824395,
      "alarm_update_time": 0
    }
  ]
}
```

```
"alarm_notifications" : {
    "bind_notification_rule_id" : "",
    "notification_enable" : false,
    "notification_type" : "direct",
    "notify_frequency" : 0,
    "notify_resolved" : false,
    "notify_triggered" : false,
    "route_group_enable" : false,
    "route_group_rule" : ""
},
"alarm_rule_description" : "",
"alarm_rule_enable" : false,
"alarm_rule_id" : 1,
"alarm_rule_name" : "aom_alarm_rule_1",
"alarm_rule_status" : "Invalid",
"alarm_rule_type" : "metric",
"alarm_update_time" : 0,
"enterprise_project_id" : "0",
"metric_alarm_spec" : {
    "alarm_rule_template_bind_enable" : false,
    "alarm_rule_template_id" : "",
    "alarm_tags" : [ {
        "auto_tags" : [ ],
        "custom_annotations" : [ ],
        "custom_tags" : [ ]
    }],
    "monitor_objects" : [ ],
    "monitor_type" : "all_metric",
    "no_data_conditions" : [ {
        "no_data_timeframe" : 0,
        "notify_no_data" : false
    }],
    "recovery_conditions" : {
        "recovery_timeframe" : 1
    },
    "trigger_conditions" : [ {
        "aggregate_type" : "by",
        "aggregation_type" : "average",
        "aggregation_window" : "30s",
        "aom_monitor_level" : "",
        "cmdb" : {
            "app_id" : "",
            "node_ids" : [ ]
        },
        "expression" : "",
        "metric_labels" : [ ],
        "metric_name" : "container_memory_rss",
        "metric_namespace" : "",
        "metric_query_mode" : "PROM",
        "metric_statistic_method" : "single",
        "metric_unit" : "",
        "mix_promql" : "",
        "operator" : ">",
        "promql" : "label_replace(container_memory_rss{node=\"172.*.*.206\"},\"__name__\"," + 
        "\",\"container_memory_rss\"\\\"\\\") or label_replace(avg_over_time(container_memory_rss{node=" + 
        "\\"172.*.*.206\"}*[29999ms]),\"__name__\\\",\"container_memory_rss\"\\\"\\\")",
        "promql_for" : "1m",
        "query_match" : "[{"conditionList": [{"name": "\\"172.*.*.206\""}, {"name": "\\"172.*.*.133\""}], "addMode": "\\"first\"", "conditionValue": [{"name": "\\"172.*.*.206\""}], "id": "\\"first\"", "conditionCompare": "\\"=\\\"\\\"dimension\\\"\\\"node\\\"\\\""}]",
        "query_param" : {
            "apmMetricReg" : "",
            "code" : "a"
        },
        "thresholds" : {
            "Critical" : "1"
        },
        "trigger_interval" : "15s",
        "trigger_times" : 1
    }]
}
```

```
        "trigger_type" : "FIXED_RATE"
    } ]
},
"prom_instance_id" : "90e***88-1**4-4**9-9**3-1f*****cd3",
"user_id" : "2a***56***48***73***1b***cf"
},
"count" : 29,
"metadata" : {
    "alarm_rule_template_id" : [ ],
    "bind_notification_rule_id" : [ "aom_notification_rule", "1", "00*****qq", "00****3", "m***m" ],
    "event_source" : [ "CCE", "DCS", "ES", "AOM" ],
    "prom_instance_id" : [ "0", "796***7d-1**8-4**9-a**0-99*****ca0", "6cc***c8-f**f-4**4-9**2-90*****fcf",
"90e***88-1**4-4**9-9**3-1f*****cd3" ],
    "resource_kind" : [ "HC:DCS:REDIS_3.0", "CCE", "HC:ES:METRICS", "AOM" ]
}
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{
    "error_code" : "AOM.02022500",
    "error_msg" : "internal server error",
    "error_type" : "INTERNAL_SERVER_ERROR",
    "trace_id" : ""
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.16 Adding or Modifying Metric or Event Alarm Rules

Function

This API is used to add or modify AOM 2.0 metric or event alarm rules.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v4/{project_id}/alarm-rules

Table 4-139 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-140 Query Parameters

Parameter	Mandatory	Type	Description
action_id	Yes	String	Alarm rule ID. <ul style="list-style-type: none">● To add an alarm rule, enter add-alarm-action.● To modify an alarm rule, enter update-alarm-action.

Request Parameters

Table 4-141 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json.
Enterprise-Project-Id	No	String	Enterprise project ID. For details, see Obtaining an Enterprise Project ID . <ul style="list-style-type: none">● To query the instances in an enterprise project, enter the enterprise project ID.● To query the instances in all enterprise projects, enter all_granted_eps.

Table 4-142 Request body parameters

Parameter	Mandatory	Type	Description
alarm_notifications	No	AlarmNotification object	Alarm notification module.
alarm_rule_description	No	String	Alarm rule description.
alarm_rule_enable	No	Boolean	Enabled or not. Enumeration values: <ul style="list-style-type: none">• true• false
alarm_rule_name	Yes	String	Alarm rule name.
alarm_rule_type	Yes	String	Alarm rule type. <ul style="list-style-type: none">• metric: metric alarm rule• event: event alarm rule Enumeration values: <ul style="list-style-type: none">• metric• event
event_alarm_spec	No	EventAlarmSpec object	Structure of an event alarm rule.
metric_alarm_spec	No	MetricAlarmSpec object	Structure of a metric alarm rule.
prom_instance_id	No	String	Prometheus instance ID.
alias	No	String	Alias of an alarm rule. Enter a maximum of 256 characters and do not start or end with any special character. Only letters, digits, underscores (_), and hyphens (-) are allowed.

Table 4-143 AlarmNotification

Parameter	Mandatory	Type	Description
notification_type	Yes	String	<p>Notification type.</p> <ul style="list-style-type: none">• direct: direct alarm reporting• alarm_policy: alarm reporting after noise reduction <p>Enumeration values:</p> <ul style="list-style-type: none">• direct• alarm_policy
route_group_enable	Yes	Boolean	<p>Whether to enable a grouping rule.</p> <ul style="list-style-type: none">• If the notification type is alarm_policy, set this parameter to true.• If the notification type is direct, set this parameter to false. <p>If both notify_triggered and notify_resolved are set to false, route_group_enable must be set to false.</p> <p>Enumeration values:</p> <ul style="list-style-type: none">• true• false
route_group_rule	Yes	String	<p>Grouping rule name.</p> <ul style="list-style-type: none">• If route_group_enable is set to true, enter a grouping rule name.• If route_group_enable is set to false, enter "".
notification_enable	No	Boolean	<p>Whether to enable an alarm action rule.</p> <ul style="list-style-type: none">• If the notification type is direct, set this parameter to true.• If the notification type is alarm_policy, set this parameter to false. <p>If both notify_triggered and notify_resolved are set to false, notification_enable must be set to false.</p>

Parameter	Mandatory	Type	Description
bind_notification_rule_id	No	String	Alarm action rule ID. <ul style="list-style-type: none">● If notification_enable is set to true, enter an alarm action rule ID.● If notification_enable is set to false, enter "".
notify_resolved	No	Boolean	Whether to send a notification when an alarm is cleared. <ul style="list-style-type: none">● true: Send a notification.● false: Do not send any notification. Enumeration values: <ul style="list-style-type: none">● true● false
notify_triggered	No	Boolean	Whether to send a notification when an alarm is triggered. <ul style="list-style-type: none">● true: Send a notification.● false: Do not send any notification. Enumeration values: <ul style="list-style-type: none">● true● false
notify_frequency	No	Integer	Notification frequency. <ul style="list-style-type: none">● If the notification type is alarm_policy, set this parameter to -1.● If the notification type is direct, set this parameter to any of the following:<ul style="list-style-type: none">● 0: alarm sent only once● 300: every 5 minutes● 600: every 10 minutes● 900: every 15 minutes● 1800: every 30 minutes● 3600: every hour● 10800: every 3 hours● 21600: every 6 hours● 43200: every 12 hours● 86400: every day

Table 4-144 EventAlarmSpec

Parameter	Mandatory	Type	Description
alarm_source	No	String	Alarm rule source. <ul style="list-style-type: none">● systemEvent● customEvent Enumeration values: <ul style="list-style-type: none">● systemEvent● customEvent
event_source	No	String	Alarm source. <ul style="list-style-type: none">● RDS● EVS● CCE● LTS● AOM
monitor_objects	No	Array of Map<String, String> objects	List of monitored objects. Key-value pair. <ul style="list-style-type: none">● event_type: notification type● event_severity: alarm severity● event_name: event name● namespace: namespace● clusterId: cluster ID● customField: user-defined field
trigger_conditions	Yes	Array of EventTriggerCondition objects	Trigger conditions.
alarm_rule_template_bind_enable	No	Boolean	(Deprecated) Whether to bind an alarm rule template.
alarm_rule_template_id	No	String	(Deprecated) ID of the alarm rule template.

Table 4-145 EventTriggerCondition

Parameter	Mandatory	Type	Description
event_name	No	String	Event name.

Parameter	Mandatory	Type	Description
trigger_type	No	String	<p>Trigger mode.</p> <ul style="list-style-type: none"> • immediately: An alarm is triggered immediately if the alarm condition is met. • accumulative: An alarm is triggered if the alarm condition is met for a specified number of times. <p>Enumeration values:</p> <ul style="list-style-type: none"> • immediately • accumulative
aggregation_window	No	Long	<p>Statistical period, in seconds. For example, 3600 indicates one hour. Leave this parameter empty if trigger_type is set to immediately.</p>
operator	No	String	<p>Operator. Options: >, <, =, >=, and <=. Leave this parameter empty if trigger_type is set to immediately.</p>
thresholds	No	Map<String, Integer>	<p>Key-value pair. The key indicates the alarm severity while the value indicates the number of accumulated trigger times. Leave this parameter empty if trigger_type is set to immediately.</p>

Parameter	Mandatory	Type	Description
frequency	No	String	<p>Event alarm notification frequency. Leave this parameter empty if trigger_type is set to immediately.</p> <ul style="list-style-type: none">• 0: alarm sent only once• 300: every 5 minutes• 600: every 10 minutes• 900: every 15 minutes• 1800: every 30 minutes• 3600: every hour• 10800: every 3 hours• 21600: every 6 hours• 43200: every 12 hours• 86400: every day

Table 4-146 MetricAlarmSpec

Parameter	Mandatory	Type	Description
monitor_type	Yes	String	<p>Monitoring type.</p> <ul style="list-style-type: none">• all_metric: Select metrics from all metrics.• promql: Select metrics using PromQL.• resource (unavailable soon): Select metrics by resource type. <p>Enumeration values:</p> <ul style="list-style-type: none">• all_metric• promql• resource
no_data_conditions	No	Array of NoDataCondition objects	Action taken for insufficient data.
alarm_tags	Yes	Array of AlarmTags objects	Alarm tags.
monitor_objects	No	Array of Map<String, String> objects	List of monitored objects.

Parameter	Mandatory	Type	Description
recovery_conditions	Yes	RecoveryCondition object	Alarm clearance condition.
trigger_conditions	Yes	Array of TriggerCondition objects	Trigger conditions.
alarm_rule_template_bind_enable	No	Boolean	(Deprecated) Whether to bind an alarm rule template.
alarm_rule_template_id	No	String	(Deprecated) ID of the alarm rule template.

Table 4-147 NoDataCondition

Parameter	Mandatory	Type	Description
no_data_timeframe	No	Integer	Number of periods without data.
no_data_alert_state	No	String	<p>Status of the threshold rule when the data is insufficient.</p> <ul style="list-style-type: none"> • no_data: A notification indicating insufficient data is sent. • alerting: An alarm is triggered. • ok: No exception occurs. • pre_state: Retain the previous state. <p>Enumeration values:</p> <ul style="list-style-type: none"> • no_data • alerting • ok • pre_state
notify_no_data	No	Boolean	Whether to send a notification when data is insufficient.

Table 4-148 AlarmTags

Parameter	Mandatory	Type	Description
auto_tags	No	Array of strings	Automatic tag.

Parameter	Mandatory	Type	Description
custom_tags	No	Array of strings	Custom tag.
custom_annotations	No	Array of strings	Alarm annotation.

Table 4-149 RecoveryCondition

Parameter	Mandatory	Type	Description
recovery_time_frame	No	Integer	Number of consecutive periods for which the trigger condition is not met to clear an alarm.

Table 4-150 TriggerCondition

Parameter	Mandatory	Type	Description
metric_query_mode	Yes	String	Metric query mode. <ul style="list-style-type: none"> • AOM: native AOM • PROM: AOM Prometheus • NATIVE_PROM: native Prometheus Enumeration values: <ul style="list-style-type: none"> • AOM • PROM • NATIVE_PROM
metric_namespace	Yes	String	Metric namespace.
metric_name	Yes	String	Metric name.
metric_unit	Yes	String	Metric unit.
metric_labels	Yes	Array of strings	Metric dimension.
promql	Yes	String	Prometheus statement.
promql_expr	No	Array of strings	Prometheus statement template.
trigger_times	No	Integer	Number of consecutive periods.

Parameter	Mandatory	Type	Description
trigger_interval	No	String	<p>Check interval.</p> <ul style="list-style-type: none"> • If trigger_type is set to HOURLY*, set this parameter to "". • If trigger_type is set to DAILY, set 00:00–23:00. Example: 03:00. • If trigger_type is set to WEEKLY, select a day in a week and then select 00:00–23:00. Example: **1 03:00" indicates 03:00 on every Monday. • If trigger_type is set to CRON, specify a standard cron expression. • If trigger_type is set to FIXED_RATE, select 15s, 30s, 1–59 min, or 1–24 h.
trigger_type	No	String	<p>Trigger type.</p> <ul style="list-style-type: none"> • FIXED_RATE: fixed interval • HOURLY: every hour • DAILY: every day • WEEKLY: every week • CRON: Cron expression <p>Enumeration values:</p> <ul style="list-style-type: none"> • FIXED_RATE • HOURLY • DAILY • WEEKLY • CRON
promql_for	No	String	Native Prometheus monitoring duration.
aggregation_type	No	String	<p>Statistical mode.</p> <ul style="list-style-type: none"> • average • minimum • maximum • sum • sampleCount
operator	No	String	Operator. Options: >, <, =, >=, and <=.

Parameter	Mandatory	Type	Description
thresholds	No	Map<String, String>	Key-value pair. The key indicates the alarm severity while the value indicates the alarm threshold.
aggregation_window	No	String	Statistical period. <ul style="list-style-type: none"> • 15s • 30s • 1m • 5m • 15m • 1h
cmdb	No	CmdbInfo object	CMDB information.
query_match	No	String	Query filter criteria.
query_param	Yes	Object	Query parameters.
aom_monitor_level	No	String	Monitoring layer.
aggregate_type	No	String	Aggregation mode. <ul style="list-style-type: none"> • by: not grouped • avg • max • min • sum <p>Enumeration values:</p> <ul style="list-style-type: none"> • by • avg • max • min • sum

Parameter	Mandatory	Type	Description
metric_statistic_method	No	String	<p>Metric statistics method to be used when you set Configuration Mode to Select from all metrics during alarm rule setting.</p> <ul style="list-style-type: none"> • single: single metric • mix: multi-metric combined operations <p>Enumeration values:</p> <ul style="list-style-type: none"> • single • mix
expression	No	String	Expression of a combined operation.
mix_promql	No	String	PromQL of a combined operation.

Table 4-151 CmdbInfo

Parameter	Mandatory	Type	Description
app_id	No	String	Application ID.
node_ids	No	Array of NodeInfo objects	Node information list.

Table 4-152 NodeInfo

Parameter	Mandatory	Type	Description
node_type	No	String	Node type.
node_id	No	String	Node ID.

Response Parameters

Status code: 200

Table 4-153 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_message	String	Error message.
alarm_rules	Array of AddOrUpdateAlarmRuleV4ItemResult objects	Alarm rule list.

Table 4-154 AddOrUpdateAlarmRuleV4ItemResult

Parameter	Type	Description
alarm_rule_name	String	Alarm rule name.
result	String	Whether an alarm rule is successfully added or modified.

Status code: 400

Table 4-155 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-156 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Example Requests

- Add a metric alarm rule.

```
https://{{Endpoint}}/v4/{{project_id}}/alarm-rules?action_id=add-alarm-action
```

```
{  
    "alarm_notifications" : {  
        "bind_notification_rule_id" : "",  
        "notification_enable" : false,  
        "notification_type" : "alarm_policy",  
        "notify_frequency" : -1,  
        "notify_resolved" : true,  
        "notify_triggered" : true,  
        "route_group_enable" : true,  
        "route_group_rule" : "aom_route_group_rule"  
    },  
    "alarm_rule_description" : "aom_alarm_rule",  
    "alarm_rule_enable" : true,  
    "alarm_rule_name" : "aom_alarm_rule",  
    "alarm_rule_type" : "metric",  
    "metric_alarm_spec" : {  
        "alarm_rule_template_bind_enable" : false,  
        "alarm_rule_template_id" : "",  
        "alarm_tags" : [ {  
            "auto_tags" : [ ],  
            "custom_annotations" : [ "333=rrr" ],  
            "custom_tags" : [ "333=rrr" ]  
        } ],  
        "monitor_objects" : [ ],  
        "monitor_type" : "all_metric",  
        "no_data_conditions" : [ {  
            "no_data_alert_state" : "no_data",  
            "no_data_timeframe" : 3,  
            "notify_no_data" : true  
        } ],  
        "recovery_conditions" : {  
            "recovery_timeframe" : 2  
        },  
        "trigger_conditions" : [ {  
            "aggregate_type" : "by",  
            "aggregation_type" : "average",  
            "aggregation_window" : "5m",  
            "aom_monitor_level" : "",  
            "cmdb" : {  
                "app_id" : "",  
                "node_ids" : [ ]  
            },  
            "expression" : "",  
            "metric_labels" : [ ],  
            "metric_name" : "aom_metrics_total",  
            "metric_namespace" : "",  
            "metric_query_mode" : "PROM",  
            "metric_statistic_method" : "single",  
            "metric_unit" : "",  
            "mix_promql" : "",  
            "operator" : ">",  
            "promql" : "label_replace(avg_over_time(aom_metrics_total{instance=\"1117919565\"} [59999ms]),\"__name__\", \"aom_metrics_total\", \"\", \"\")",  
            "query_match" : [ {  
                "addMode" : "first",  
                "conditionCompare" : "=",  
                "conditionList" : [ {  
                    "name" : "1117919565"  
                } ],  
                "conditionValue" : [ {  
                    "name" : "1117919565"  
                } ],  
                "dimension" : "instance",  
                "id" : "first",  
                "label" : "aom_metrics_total",  
                "labelMatch" : "true",  
                "labelValue" : "1117919565",  
                "operator" : ">",  
                "value" : "1117919565"  
            } ]  
        } ]  
    }  
}
```

```
        "regExpress" : null
    } ],
    "query_param" : { },
    "thresholds" : [
        "Info" : "100"
    ],
    "trigger_interval" : "15m",
    "trigger_times" : 4,
    "trigger_type" : "FIXED_RATE"
]
},
"prom_instance_id" : "0"
}
```

- **Modify a metric alarm rule.**

```
https://{{Endpoint}}/v4/{{project\_id}}/alarm-rules?action\_id=update-alarm-action
```

```
{
    "alarm_notifications" : {
        "bind_notification_rule_id" : "",
        "notification_enable" : false,
        "notification_type" : "alarm_policy",
        "notify_frequency" : -1,
        "notify_resolved" : true,
        "notify_triggered" : true,
        "route_group_enable" : true,
        "route_group_rule" : "aom_route_group_rule"
    },
    "alarm_rule_description" : "aom_alarm_rule",
    "alarm_rule_enable" : true,
    "alarm_rule_name" : "aom_alarm_rule",
    "alarm_rule_type" : "metric",
    "metric_alarm_spec" : {
        "alarm_rule_template_bind_enable" : false,
        "alarm_rule_template_id" : "",
        "alarm_tags" : [ {
            "auto_tags" : [ ],
            "custom_annotations" : [ "333=rrr" ],
            "custom_tags" : [ "333=rrr" ]
        } ],
        "monitor_objects" : [ ],
        "monitor_type" : "all_metric",
        "no_data_conditions" : [ {
            "no_data_alert_state" : "no_data",
            "no_data_timeframe" : 3,
            "notify_no_data" : true
        } ],
        "recovery_conditions" : {
            "recovery_timeframe" : 2
        },
        "trigger_conditions" : [ {
            "aggregate_type" : "by",
            "aggregation_type" : "average",
            "aggregation_window" : "5m",
            "aom_monitor_level" : "",
            "cmdb" : {
                "app_id" : "",
                "node_ids" : [ ]
            },
            "expression" : "",
            "metric_labels" : [ ],
            "metric_name" : "aom_metrics_total",
            "metric_namespace" : "",
            "metric_query_mode" : "PROM",
            "metric_statistic_method" : "single",
            "metric_unit" : "",
            "mix_promql" : "",
            "operator" : ">",
            "promql" : "label_replace(avg_over_time(aom_metrics_total{instance=\"1117919565\"} [59999ms]),\"__name__\",\"aom_metrics_total\\\"\\\"\\\")"
        } ]
    }
}
```

```
"query_match": [ {  
    "addMode" : "first",  
    "conditionCompare" : "=",  
    "conditionList" : [ {  
        "name" : "1117919565"  
    } ],  
    "conditionValue" : [ {  
        "name" : "1117919565"  
    } ],  
    "dimension" : "instance",  
    "id" : "first",  
    "regExpress" : null  
} ],  
"query_param" : { },  
"thresholds" : {  
    "Info" : "100"  
},  
"trigger_interval" : "15m",  
"trigger_times" : 4,  
"trigger_type" : "FIXED_RATE"  
} ]  
},  
"prom_instance_id" : "0"  
}
```

- Add an event alarm rule.

https://{{Endpoint}}/v4/{{project_id}}/alarm-rules?action_id=add-alarm-action

```
{  
    "alarm_notifications" : {  
        "bind_notification_rule_id" : "aom_event_notification_rule",  
        "notification_enable" : true,  
        "notification_type" : "direct",  
        "notify_frequency" : "-1",  
        "notify_resolved" : false,  
        "notify_triggered" : false,  
        "route_group_enable" : false,  

```

- Modify an event alarm rule.

```
https://{{Endpoint}}/v4/{{project_id}}/alarm-rules?action_id=update-alarm-action

{
    "alarm_notifications": {
        "bind_notification_rule_id": "aom_event_notification_rule",
        "notification_enable": true,
        "notification_type": "direct",
        "notify_frequency": "-1",
        "notify_resolved": false,
        "notify_triggered": false,
        "route_group_enable": false,
        "route_group_rule": ""
    },
    "alarm_rule_description": "aom_alarm_event_rule",
    "alarm_rule_enable": true,
    "alarm_rule_name": "aom_event_alarm_rule",
    "alarm_rule_type": "event",
    "event_alarm_spec": {
        "alarm_source": "systemEvent",
        "event_source": "CCE",
        "monitor_objects": [
            {
                "event_name": "ScaleUpTimedOut; VolumeResizeFailed",
                "event_type": "event"
            }
        ],
        "trigger_conditions": [
            {
                "aggregation_window": 300,
                "event_name": "ScaleUpTimedOut",
                "frequency": "-1",
                "operator": ">",
                "thresholds": {
                    "Critical": 1
                },
                "trigger_type": "accumulative"
            },
            {
                "event_name": "VolumeResizeFailed",
                "thresholds": {
                    "Critical": 2
                },
                "trigger_type": "immediately"
            }
        ]
    }
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
    "alarm_rules": [
        {
            "alarm_rule_name": "aom_alarm_rule",
            "result": "success"
        }
    ],
    "error_code": "200",
    "error_message": "success"
}
```

Status code: 400

Bad Request: Invalid request. The client should not repeat this request without modification.

```
{
    "error_code": "AOM.02021006",
    "error_msg": "This rule actionId is invalid",
    "error_type": "PARAM_INVALID",
    "trace_id": "58ef0f7c107a2b577f78b9cc7f48b46f"
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code": "AOM.02021500",  
    "error_msg": "internal server error",  
    "error_type": "INTERNAL_SERVER_ERROR",  
    "trace_id": ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: Invalid request. The client should not repeat this request without modification.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.17 Deleting Metric or Event Alarm Rules

Function

This API is used to delete AOM 2.0 metric or event alarm rules.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v4/{project_id}/alarm-rules

Table 4-157 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-158 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json.

Table 4-159 Request body parameters

Parameter	Mandatory	Type	Description
alarm_rules	Yes	Array of strings	Alarm rule name list.

Response Parameters

Status code: 200

Table 4-160 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_message	String	Error message.
resources	Array of ItemResult objects	Resource list.

Table 4-161 ItemResult

Parameter	Type	Description
alarm_rule_name	String	Alarm rule name.

Status code: 400

Table 4-162 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Status code: 500

Table 4-163 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Example Requests

- Delete a metric or event alarm rule.

```
https://{{Endpoint}}/v4/{{project_id}}/alarm-rules
```

```
{  
    "alarm_rules" : [ "aom_alarm_rule" ]  
}
```

- Delete multiple metric or event alarm rules.

```
https://{{Endpoint}}/v4/{{project_id}}/alarm-rules
```

```
{  
    "alarm_rules" : [ "aom_alarm_rule", "aom_alarm_rule2" ]  
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "error_code" : "200",  
    "error_message" : "success",  
    "resources" : [ {  
        "alarm_rule_name" : "aom_alarm_rule"  
    } ]  
}
```

Status code: 400

Bad Request: Invalid request. The client should not repeat this request without modification.

```
{  
    "error_code" : "AOM.02024016",  
    "error_msg" : "delete alarm rule name is empty",  
    "trace_id" : ""  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_msg" : "Internal Server Error",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: Invalid request. The client should not repeat this request without modification.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.1.18 Deleting an Alarm Template

Function

This API is used to delete an alarm template.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v4/{project_id}/alarm-rules-template

Table 4-164 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-165 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json.
Enterprise-Project-Id	No	String	Enterprise project ID. For details, see Obtaining an Enterprise Project ID . <ul style="list-style-type: none"> ● To delete instances in an enterprise project, enter the enterprise project ID. ● If this parameter is not specified, the instances in enterprise project 0 are deleted by default.

Table 4-166 Request body parameters

Parameter	Mandatory	Type	Description
alarm_rule_templates	Yes	Array of strings	Alarm template ID list.

Response Parameters

Status code: 200

Table 4-167 Response body parameters

Parameter	Type	Description
resources	Array of DeleteAlarmRuleTemplateItemResult objects	Alarm template status list.

Table 4-168 DeleteAlarmRuleTemplateItemResult

Parameter	Type	Description
alarm_rule_template_name	String	Alarm template ID.

Status code: 400

Table 4-169 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Example Requests

Delete an alarm template.

```
https://{{Endpoint}}/v4/{{project_id}}/alarm-rules-template
{
    "alarm_rule_templates": [ "12427****340773893" ]
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
    "error_code": "200",
    "error_message": "success",
    "resources": [
        {
            "alarm_rule_template_name": "12427****340773893"
        }
    ]
}
```

Status code: 400

Bad Request: Invalid request. The client should not repeat this request without modification.

```
{  
    "error_code": "AOM.02018002",  
    "error_msg": "no template to be deleted is found!",  
    "trace_id": ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: Invalid request. The client should not repeat this request without modification.

Error Codes

See [Error Codes](#).

4.1.19 Querying the Alarm Template List

Function

This API is used to query the alarm template list.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v4/{project_id}/alarm-rules-template

Table 4-170 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-171 Query Parameters

Parameter	Mandatory	Type	Description
id	No	String	Alarm template ID.
type	No	String	Alarm template type. <ul style="list-style-type: none"> If the value of type is promql, the default CCE template is returned. If type is set to another value or left blank, all templates are returned.

Request Parameters

Table 4-172 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	No	String	Message body type or format. Content type, which is application/json.
Enterprise-Project-Id	No	String	Enterprise project ID. For details, see Obtaining an Enterprise Project ID . <ul style="list-style-type: none"> To query the instances in an enterprise project, enter the enterprise project ID. To query the instances in all enterprise projects, enter all_granted_eps.

Response Parameters

Status code: 200

Table 4-173 Response body parameters

Parameter	Type	Description
alarm_rule_templates	Array of AlarmRuleTemplateBody objects	Alarm template list.

Parameter	Type	Description
count	Integer	Total number of alarm templates.

Table 4-174 AlarmRuleTemplateBody

Parameter	Type	Description
alarm_rule_template_name	String	Alarm template name.
alarm_rule_template_name_en	String	Name of an alarm template.
alarm_rule_template_description	String	Alarm template description.
alarm_rule_template_id	String	Alarm template ID.
alarm_rule_template_project_id	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .
alarm_rule_template_type	String	Alarm template type. <ul style="list-style-type: none"> ● statics: static alarm template. ● dynamic: dynamic alarm template.
alarm_rule_template_source	String	Source of an alarm template.
alarm_rule_template_binding	Map<String, String>	Alarm rule bound to the alarm template.
alarm_template_spec_list	Array of AlarmRuleTemplateSpecWithCloudService objects	List of rules in an alarm template.
enterprise_project_id	String	Enterprise project ID. For details, see Obtaining an Enterprise Project ID .
create_time	Long	Creation time.
modify_time	Long	Update time.
templating	Templating object	List of variables in an alarm template.
template_version	String	Version of an alarm template.

Table 4-175 AlarmRuleTemplateSpecWithCloudService

Parameter	Type	Description
related_cloud_service	String	Associated cloud service.
related_cce_clusters	Array of strings	Associated CCE cluster.
related_prometheus_instances	Array of strings	Associated Prometheus instance.
alarm_notification	AlarmNotification object	Notification information.
alarm_template_spec_items	Array of AlarmTemplateSpecItem objects	Alarm template list.

Table 4-176 AlarmNotification

Parameter	Type	Description
notification_type	String	<p>Notification type.</p> <ul style="list-style-type: none"> • direct: direct alarm reporting • alarm_policy: alarm reporting after noise reduction <p>Enumeration values:</p> <ul style="list-style-type: none"> • direct • alarm_policy
route_group_enable	Boolean	<p>Whether to enable a grouping rule.</p> <ul style="list-style-type: none"> • If the notification type is alarm_policy, set this parameter to true. • If the notification type is direct, set this parameter to false. <p>If both notify_triggered and notify_resolved are set to false, route_group_enable must be set to false.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • true • false

Parameter	Type	Description
route_group_rule	String	<p>Grouping rule name.</p> <ul style="list-style-type: none"> If route_group_enable is set to true, enter a grouping rule name. If route_group_enable is set to false, enter "".
notification_enable	Boolean	<p>Whether to enable an alarm action rule.</p> <ul style="list-style-type: none"> If the notification type is direct, set this parameter to true. If the notification type is alarm_policy, set this parameter to false. <p>If both notify_triggered and notify_resolved are set to false, notification_enable must be set to false.</p>
bind_notification_rule_id	String	<p>Alarm action rule ID.</p> <ul style="list-style-type: none"> If notification_enable is set to true, enter an alarm action rule ID. If notification_enable is set to false, enter "".
notify_resolved	Boolean	<p>Whether to send a notification when an alarm is cleared.</p> <ul style="list-style-type: none"> true: Send a notification. false: Do not send any notification. <p>Enumeration values:</p> <ul style="list-style-type: none"> true false
notify_triggered	Boolean	<p>Whether to send a notification when an alarm is triggered.</p> <ul style="list-style-type: none"> true: Send a notification. false: Do not send any notification. <p>Enumeration values:</p> <ul style="list-style-type: none"> true false

Parameter	Type	Description
notify_frequency	Integer	<p>Notification frequency.</p> <ul style="list-style-type: none">• If the notification type is alarm_policy, set this parameter to -1.• If the notification type is direct, set this parameter to any of the following:• 0: alarm sent only once• 300: every 5 minutes• 600: every 10 minutes• 900: every 15 minutes• 1800: every 30 minutes• 3600: every hour• 10800: every 3 hours• 21600: every 6 hours• 43200: every 12 hours• 86400: every day

Table 4-177 AlarmTemplateSpecItem

Parameter	Type	Description
alarm_template_name	String	Name of an alarm rule in an alarm template.
alarm_template_name_en	String	Name of an alarm rule in an alarm template.
desc	String	Description of an alarm rule in an alarm template.
desc_en	String	Description of an alarm rule in an alarm template.
alarm_template_spec_type	String	Type of an alarm rule. <ul style="list-style-type: none">• metric: metric alarm rule.• event: event alarm rule.
metric_alarm_template_spec	MetricAlarmTemplateSpec object	Metric alarm template.
event_alarm_template_spec	EventAlarmTemplateSpec object	Event alarm template.

Table 4-178 MetricAlarmTemplateSpec

Parameter	Type	Description
alarm_subtype	String	Alarm rule type.
alarm_source	String	Alarm source, for example, CCE .
monitor_type	String	Monitoring type.
trigger_conditions	Array of TemplateTrigger-Condition objects	Trigger condition.
no_data_conditions	Array of NoDataCondition objects	Action taken when data is insufficient.
alarm_tags	Array of AlarmTags objects	Alarm tag.
recovery_conditions	RecoveryCondition object	Alarm clearance condition.

Table 4-179 TemplateTriggerCondition

Parameter	Type	Description
metric_query_mode	String	Metric query mode. <ul style="list-style-type: none">• AOM: native AOM• PROM: AOM Prometheus• NATIVE_PROM: native Prometheus Enumeration values: <ul style="list-style-type: none">• AOM• PROM• NATIVE_PROM
metric_namespace	String	Metric namespace.
metric_name	String	Metric name.
metric_unit	String	Metric unit.
metric_labels	Array of strings	Metric dimension.
promql	String	Prometheus statement.
promql_expr	Array of strings	Prometheus statement template.
trigger_times	String	Number of consecutive periods.

Parameter	Type	Description
trigger_interval	String	<p>Check interval.</p> <ul style="list-style-type: none">• If trigger_type is set to HOURLY*, set this parameter to "".• If trigger_type is set to DAILY, set 00:00–23:00. Example: 03:00.• If trigger_type is set to WEEKLY, select a day in a week and then select 00:00–23:00. Example: **1 03:00" indicates 03:00 on every Monday.• If trigger_type is set to CRON, specify a standard cron expression.• If trigger_type is set to FIXED_RATE, select 15s, 30s, 1–59 min, or 1–24 h.
trigger_type	String	<p>Trigger type.</p> <ul style="list-style-type: none">• FIXED_RATE: fixed interval• HOURLY: every hour• DAILY: every day• WEEKLY: every week• CRON: Cron expression <p>Enumeration values:</p> <ul style="list-style-type: none">• FIXED_RATE• HOURLY• DAILY• WEEKLY• CRON
promql_for	String	Native Prometheus monitoring duration.
aggregation_type	String	Statistical mode.
operator	String	Operator. Options: >, <, =, >=, and <=.
thresholds	Map<String, String>	Key-value pair. The key indicates the alarm severity while the value indicates the alarm threshold.

Parameter	Type	Description
aggregation_window	String	<p>Statistical period.</p> <ul style="list-style-type: none"> ● 15s ● 30s ● 1m ● 5m ● 15m ● 1h
cmdb	CmdbInfo object	CMDB information.
query_match	String	Query filter criteria.
aom_monitor_level	String	Monitoring layer.
aggregate_type	String	<p>Aggregation mode.</p> <ul style="list-style-type: none"> ● by: not grouped ● avg ● max ● min ● sum <p>Enumeration values:</p> <ul style="list-style-type: none"> ● by ● avg ● max ● min ● sum
metric_statistic_method	String	<p>Metric statistics method to be used when you set Configuration Mode to Select from all metrics during alarm rule setting.</p> <ul style="list-style-type: none"> ● single: single metric ● mix: multi-metric combined operations <p>Enumeration values:</p> <ul style="list-style-type: none"> ● single ● mix
expression	String	Expression of a combined operation.
mix_promql	String	PromQL of a combined operation.

Table 4-180 CmdbInfo

Parameter	Type	Description
app_id	String	Application ID.
node_ids	Array of NodeInfo objects	Node information list.

Table 4-181 NodeInfo

Parameter	Type	Description
node_type	String	Node type.
node_id	String	Node ID.

Table 4-182 NoDataCondition

Parameter	Type	Description
no_data_timeframe	Integer	Number of periods without data.
no_data_alert_state	String	<p>Status of the threshold rule when the data is insufficient.</p> <ul style="list-style-type: none"> • no_data: A notification indicating insufficient data is sent. • alerting: An alarm is triggered. • ok: No exception occurs. • pre_state: Retain the previous state. <p>Enumeration values:</p> <ul style="list-style-type: none"> • no_data • alerting • ok • pre_state
notify_no_data	Boolean	Whether to send a notification when data is insufficient.

Table 4-183 AlarmTags

Parameter	Type	Description
auto_tags	Array of strings	Automatic tag.
custom_tags	Array of strings	Custom tag.

Parameter	Type	Description
custom_annotations	Array of strings	Alarm annotation.

Table 4-184 RecoveryCondition

Parameter	Type	Description
recovery_timeframe	Integer	Number of consecutive periods for which the trigger condition is not met to clear an alarm.

Table 4-185 EventAlarmTemplateSpec

Parameter	Type	Description
alarm_subtype	String	Alarm rule type.
alarm_source	String	Alarm source, for example, CCE .
event_source	String	Event source.
monitor_object_templates	Array of strings	Monitored object template. Currently, only clusterId is supported.
monitor_objects	Array of Map<String, String> objects	List of monitored objects. Key-value pair. <ul style="list-style-type: none"> • event_type: notification type • event_severity: alarm severity • event_name: event name • namespace: namespace • clusterId: cluster ID • customField: user-defined field
trigger_conditions	Array of EventTriggerCondition objects	Trigger condition.

Table 4-186 EventTriggerCondition

Parameter	Type	Description
event_name	String	Event name.

Parameter	Type	Description
trigger_type	String	<p>Trigger mode.</p> <ul style="list-style-type: none">• immediately: An alarm is triggered immediately if the alarm condition is met.• accumulative: An alarm is triggered if the alarm condition is met for a specified number of times. <p>Enumeration values:</p> <ul style="list-style-type: none">• immediately• accumulative
aggregation_window	Long	Statistical period, in seconds. For example, 3600 indicates one hour. Leave this parameter empty if trigger_type is set to immediately .
operator	String	Operator. Options: > , < , = , >= , and <= . Leave this parameter empty if trigger_type is set to immediately .
thresholds	Map<String, Integer>	Key-value pair. The key indicates the alarm severity while the value indicates the number of accumulated trigger times. Leave this parameter empty if trigger_type is set to immediately .
frequency	String	<p>Event alarm notification frequency. Leave this parameter empty if trigger_type is set to immediately.</p> <ul style="list-style-type: none">• 0: alarm sent only once• 300: every 5 minutes• 600: every 10 minutes• 900: every 15 minutes• 1800: every 30 minutes• 3600: every hour• 10800: every 3 hours• 21600: every 6 hours• 43200: every 12 hours• 86400: every day

Table 4-187 Templating

Parameter	Type	Description
list	Array of TemplateInfo objects	Variable list.

Table 4-188 TemplateInfo

Parameter	Type	Description
name	String	Variable name.
type	String	Variable type.
query	String	Variable value.
description	String	Variable description.

Example Requests

- Query the alarm template list.
https://{{Endpoint}}/v4/{{project_id}}/alarm-rules-template
- Query the alarm template whose ID is 12142546931.
https://{{Endpoint}}/v4/{{project_id}}/alarm-rules-template?id=1214***2546***931

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "alarm_rule_templates": [ {  
        "alarm_rule_template_binding": { },  
        "alarm_rule_template_id": "130****1802****3121",  
        "alarm_rule_template_name": "aomTemplate",  
        "alarm_rule_template_project_id": "2a47***cca5***8373***1bff***",  
        "alarm_rule_template_type": "statics",  
        "alarm_template_spec_list": [ {  
            "alarm_template_spec_items": [ ],  
            "related_cce_clusters": [ ],  
            "related_cloud_service": "VPC",  
            "related_prometheus_instances": [ ]  
        } ],  
        "create_time": 1732266984780,  
        "enterprise_project_id": "0",  
        "modify_time": 1732266984780  
    } ],  
    "count": 119  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.1.20 Querying the Message Template List

Function

This API is used to query the message template list.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v2/{project_id}/events/notification/templates

Table 4-189 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-190 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json.

Parameter	Mandatory	Type	Description
Enterprise-Project-Id	No	String	<p>Enterprise project ID. For details, see Obtaining an Enterprise Project ID.</p> <ul style="list-style-type: none">• To query the message template of an enterprise project, enter the enterprise project ID.• To query the message templates of all enterprise projects, enter all_granted_eps.• If this parameter is not specified, the message template of the default enterprise project is returned.

Response Parameters

Status code: 200

Table 4-191 Response body parameters

Parameter	Type	Description
[items]	Array of NotificationTemplate objects	Message template list.

Table 4-192 NotificationTemplate

Parameter	Type	Description
create_time	Long	Time when a message template was created.
desc	String	Message template description.
enterprise_project_id	String	ID of the enterprise project to which the message template belongs.
locale	String	Message template language.
modify_time	Long	Time when a message template was modified.
name	String	Message template name.

Parameter	Type	Description
project_id	String	ID of the project to which the message template belongs.
source	String	Message template source.

Parameter	Type	Description			
		Name	Mandatory	Parameter Type	Description
templates	String	Message template content. The content is escaped from JSON arrays consisting of the following parameters:			
		content	Yes	String	Message template content.
		subType	Yes	String	Notification mode. Options: email, SMS, and webhook.
		topic	No	String	Email subject.
		sendType	No	String	Message template format, which must be specified if subType is set to webhook . Options: HTML

Parameter	Type	Description			
		Name	Mandatory	Parameter Type	Description
					and JSON.
		version	Yes	String	The default value is v2.
type	Array of strings	Message notification mode.			

Example Requests

Query the message template list.

https://{{Endpoint}}/v2/{{project_id}}/events/notification/templates

Example Responses

Status code: 200

OK: The request is successful.

```
[{"create_time": 1685445932076,
 "desc": "",
 "enterprise_project_id": "0",
 "locale": "zh-cn",
 "modify_time": 1707011425355,
 "name": "530en",
 "project_id": "2a4****6cca****f837****91bf****f",
 "templates": "[{\\"subType\\": \"email\", \"version\\": \"v2\", \"topic\\": \"$region_name[${event_severity}]_${event_type} ${clear_type}\", \"content\\": \"\\nAlarm Name:${event_name_alias};\\nAlarm ID:${id};\\nOccurred:${starts_at};\\nEvent Severity:${event_severity};\\nAlarm Info:${alarm_info};\\nResource Identifier:${resources_new};\\nSuggestion:${alarm_fix_suggestion_zh};\"}, {\\"subType\\": \"sms\", \"version\\": \"v2\", \"content\\": \"\\nAlarm Name:${event_name_alias};\\nAlarm ID:${id};\\nOccurred:${starts_at};\\nEvent Severity:${event_severity};\\nAlarm Info:${alarm_info};\\nResource Identifier:${resources_new};\\nSuggestion:${alarm_fix_suggestion_zh};\"}, {\\"subType\\": \"wechat\", \"version\\": \"v2\", \"content\\": \"**Alarm Name:** ${event_name_alias} \\n**Alarm ID:** ${id} \\n**Occurred:** ${starts_at} \\n**Event Severity:** ${event_severity} \\n**Alarm Info:** ${alarm_info} \\n**Resource Identifier:** ${resources_new} \\n**Suggestion:** ${alarm_fix_suggestion_zh}\", {\\"subType\\": \"dingding\", \"version\\": \"v2\", \"content\\": \"**Alarm Name:** ${event_name_alias} \\n\\n**Alarm ID:** ${id} \\n\\n**Occurred:** ${starts_at} \\n\\n**Event Severity:** ${event_severity} \\n\\n**Alarm Info:** ${alarm_info} \\n\\n**Resource Identifier:** ${resources_new} \\n\\n**Suggestion:** ${alarm_fix_suggestion_zh}\", {\\"subType\\": \"HTML\", \"version\\": \"v2\", \"content\\": \"\\nName:$event.metadata.event_name_alias;\\nOccurred:${starts_at};\\nSource:$event.metadata.resource_provider;\\nResource Type:$event.metadata.resource_type;\\nResource Identifier:${resources_new};\\nPossible Cause:${alarm_probableCause_zh};\\nAdditional Info:${message};\\nSuggestion:${alarm_fix_suggestion_zh};\"}, {\\"subType\\": \"HTML\", \"version\\": \"v2\", \"content\\": \"\\nTopic:$topic;\\nContent:$Notification_Type;\\nSeverity:${event_severity};\"}, {\\"subType\\": \"voice\", \"version\\": \"v2\", \"topic\\": "", \"content\\": \"$Notification_Type:${event_type};\\nSeverity:${event_severity};\"}]"}]
```

```
\nName:$event.metadata.event_name_alias; \nOccurred:${starts_at}; \
\nSource:$event.metadata.resource_provider; \nResource Type:$event.metadata.resource_type; \
\nResource Identifier:${resources_new}; \nPossible Cause:${alarm_probableCause_zh}; \nAdditional Info:$
{message}; \nSuggestion:${alarm_fix_suggestion_zh}\",{"subType":"espace","version":"v2","topic
":","content":"Notification Type:${event_type}; \nSeverity:${event_severity}; \
\nName:$event.metadata.event_name_alias; \nOccurred:${starts_at}; \
\nSource:$event.metadata.resource_provider; \nResource Type:$event.metadata.resource_type; \
\nResource Identifier:${resources_new}; \nPossible Cause:${alarm_probableCause_zh}; \nAdditional Info:$
{message}; \nSuggestion:${alarm_fix_suggestion_zh}\",{"subType":"feishu","version":"v2","topic
":","content": "***Alarm Name:** ${event_name_alias} \n**Alarm ID:** ${id} \n**Occurred:** ${starts_at} \n**Event Severity:** ${event_severity} \n**Alarm Info:** ${alarm_info} \n**Resource Identifier:** ${resources_new} \n**Suggestion:** ${alarm_fix_suggestion_zh}\",{"subType":"welink","version":"v2","topic":","content"}\nAlarm Name:${event_name_alias};\nAlarm ID:${id};\nOccurred:${starts_at};\nEvent Severity:${event_severity};\nAlarm Info:${alarm_info};\nResource Identifier:${resources_new};\nSuggestion:${alarm_fix_suggestion_zh}\"]}], \
"type" : [ ] \
} ]
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.1.21 Deleting a Message Template

Function

This API is used to delete a message template.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v2/{project_id}/events/notification/templates

Table 4-193 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-194 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM.
Content-Type	Yes	String	Content type, which is application/json.
Enterprise-Project-Id	No	String	Enterprise project ID. <ul style="list-style-type: none">● To delete the message template of an enterprise project, enter the enterprise project ID.● If this parameter is not specified, the message template of the default enterprise project is deleted.

Table 4-195 Request body parameters

Parameter	Mandatory	Type	Description
names	Yes	Array of strings	List of message templates to be deleted.

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

None

Example Requests

Delete the message template named **aaa**.

```
https://{{Endpoint}}/v2/{{project_id}}/events/notification/templates
{
    "names" : [ "aaa" ]
}
```

Example Responses

None

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.

Error Codes

See [Error Codes](#).

4.1.22 Adding a Message Template

Function

This API is used to add a message template.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v2/{project_id}/events/notification/templates

Table 4-196 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-197 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json.

Parameter	Mandatory	Type	Description
Enterprise-Project-Id	No	String	<p>Enterprise project ID. For details, see Obtaining an Enterprise Project ID.</p> <ul style="list-style-type: none">• To add the message template of an enterprise project, enter the enterprise project ID.• If this parameter is not specified, the message template of the default enterprise project is added.

Table 4-198 Request body parameters

Parameter	Mandatory	Type	Description
desc	No	String	Message template description.
locale	Yes	String	Message template language.
name	Yes	String	Message template name.

Parameter	Mandatory	Type	Description			
			Name	Mandatory	Parameter Type	Description
templates	Yes	String	Message template content. The content is escaped from JSON arrays consisting of the following parameters:			
			content	Yes	String	Message template content.
			subType	Yes	String	Notification mode. Options: email, SMS, and webhook.
			topic	No	String	Email subject.
			sendType	No	String	Message template format, which

Parameter	Mandatory	Type	Description			
			Name	Mandatory	Parameter Type	Description
						ch must be specified if subType is set to webhook . Options: HTML and JSON.
			version	Yes	String	The default value is v2 .
source	No	String	Message template type. <ul style="list-style-type: none"> Default: metric/event template. LTS: log template. 			

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

None

Example Requests

Add the message template named **test2**.

```
/v2/{project_id}/events/notification/templates

{
  "desc" : "",
  "locale" : "en-us",
  "name" : "txytst2",
  "templates" : "[{\\"subType\\":\\"email\\",\\"version\\":\\"v2\\",\\"topic\\":\\"${region_name}[${event_severity}_$ {event_type}_${clear_type}] have a new alert at ${starts_at}.\\",\\"content\\":\\"\\nAlarm Name:$ {event_name_alias};\\nAlarm ID:${id};\\nOccurred:${starts_at};\\nEvent Severity:${event_severity};\\nAlarm Info:${alarm_info};\\nResource Identifier:${resources_new};\\nSuggestion:${alarm_fix_suggestion_zh}\\"}, {\\"subType\\":\\"sms\\",\\"version\\":\\"v2\\",\\"content\\":\\"\\nAlarm Name:$ {event_name_alias};\\nAlarm ID:${id};\\nOccurred:${starts_at};\\nEvent Severity:${event_severity};\\nAlarm Info:${alarm_info};\\nResource Identifier:${resources_new};\\nSuggestion:${alarm_fix_suggestion_zh}\\"}, {\\"subType\\":\\"wechat\\",\\"version\\":\\"v2\\",\\"content\\":> **Alarm Name:** ${event_name_alias} \\n**Alarm ID:** ${id} \\n**Occurred:** ${starts_at} \\n**Event Severity:** ${event_severity} \\n**Alarm Info:** ${alarm_info} \\n**Resource Identifier:** ${resources_new} \\n**Suggestion:** ${alarm_fix_suggestion_zh}\\"}, {\\"subType\\":\\"dingding\\",\\"version\\":\\"v2\\",\\"content\\":> **Alarm Name:** ${event_name_alias} \\n\\n**Alarm ID:** ${id} \\n\\n**Occurred:** ${starts_at} \\n\\n**Event Severity:** ${event_severity} \\n\\n**Alarm Info:** ${alarm_info} \\n\\n**Resource Identifier:** ${resources_new} \\n\\n**Suggestion:** ${alarm_fix_suggestion_zh}\\"}, {\\"subType\\":\\"HTML\\",\\"version\\":\\"v2\\",\\"content\\":> **Notification Type:**${event_type};\\nSeverity:${event_severity};\\nName:$event.metadata.event_name_alias;\\nOccurred:${starts_at};\\nSource:$event.metadata.resource_provider;\\nResource Type:$event.metadata.resource_type;\\nResource Identifier:${resources_new};\\nPossible Cause:${alarm_probableCause_zh};\\nAdditional Info:${message};\\nSuggestion:${alarm_fix_suggestion_zh}\\"}, {\\"subType\\":\\"HTML\\",\\"version\\":\\"v2\\",\\"topic\\":\\"${topic}\\",\\"content\\":> **Notification Type:**${event_type};\\nSeverity:${event_severity};\\nName:$event.metadata.event_name_alias;\\nOccurred:${starts_at};\\nSource:$event.metadata.resource_provider;\\nResource Type:$event.metadata.resource_type;\\nResource Identifier:${resources_new};\\nPossible Cause:${alarm_probableCause_zh};\\nAdditional Info:${message};\\nSuggestion:${alarm_fix_suggestion_zh}\\"}, {\\"subType\\":\\"feishu\\",\\"version\\":\\"v2\\",\\"topic\\":\\"${topic}\\",\\"content\\":> **Alarm Name:** ${event_name_alias} \\n\\n**Alarm ID:** ${id} \\n\\n**Occurred:** ${starts_at} \\n\\n**Event Severity:** ${event_severity} \\n\\n**Alarm Info:** ${alarm_info} \\n\\n**Resource Identifier:** ${resources_new} \\n\\n**Suggestion:** ${alarm_fix_suggestion_zh}\\"}, {\\"subType\\":\\"welink\\",\\"version\\":\\"v2\\",\\"topic\\":\\"${topic}\\",\\"content\\":> \\nAlarm Name:$ {event_name_alias};\\nAlarm ID:${id};\\nOccurred:${starts_at};\\nEvent Severity:${event_severity};\\nAlarm Info:${alarm_info};\\nResource Identifier:${resources_new};\\nSuggestion:${alarm_fix_suggestion_zh}\\"}]"
}
```

Example Responses

None

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.

Error Codes

See [Error Codes](#).

4.1.23 Modifying a Message Template

Function

This API is used to modify a message template.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v2/{project_id}/events/notification/templates

Table 4-199 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-200 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json.
Enterprise-Project-Id	No	String	Enterprise project ID. For details, see Obtaining an Enterprise Project ID . <ul style="list-style-type: none">• To modify the message template of an enterprise project, enter the enterprise project ID.• If this parameter is not specified, the message template of the default enterprise project is modified.

Table 4-201 Request body parameters

Parameter	Mandatory	Type	Description
desc	No	String	Message template description.
locale	Yes	String	Message template language.
name	Yes	String	Message template name, which cannot be modified.

Parameter	Mandatory	Type	Description			
			Name	Mandatory	Parameter Type	Description
templates	Yes	String	Message template content. The content is escaped from JSON arrays consisting of the following parameters:			
			content	Yes	String	Message template content.
			subType	Yes	String	Notification mode. Options: email, SMS, and webhook.
			topic	No	String	Email subject.
			sendType	No	String	Message template format, which

Parameter	Mandatory	Type	Description			
			Name	Mandatory	Parameter Type	Description
						ch must be specified if subType is set to webhook . Options: HTML and JSON.
			version	Yes	String	The default value is v2.

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

None

Example Requests

Modify the message template named **test2**.

/v2/{project_id}/events/notification/templates

```
  "desc": "",  
  "name": "test2",  
  "locale": "en-us",  
  "templates": "[{"subType": "email", "version": "v2"}, {"topic": "${region_name}#${event_severity}_${event_type}_${clear_type} have a new alert at ${starts_at}.", "content": "\nAlarm Name: ${event_name_alias};\nAlarm ID:${id};\nOccurred:${starts_at};\nEvent Severity:${event_severity};\nAlarm Info:${alarm_info};\nResource Identifier:${resources_new};\nSuggestion:${alarm_fix_suggestion_zh};", "subType": "sms", "version": "v2", "content": "\nAlarm Name: ${event_name_alias};\nAlarm ID:${id};\nOccurred:${starts_at};\nEvent Severity:${event_severity};\nAlarm Info:${alarm_info};\nResource Identifier:${resources_new};\nSuggestion:${alarm_fix_suggestion_zh};", "subType": "wechat", "version": "v2", "content": "> **Alarm Name:** ${event_name_alias} \n> **Alarm ID:** ${id} \n> **Occurred:** ${starts_at} \n> **Event Severity:** ${event_severity} \n> **Alarm Info:** ${alarm_info} \n> **Resource Identifier:** ${resources_new} \n> **Suggestion:** ${alarm_fix_suggestion_zh};", "subType": "dingding", "version": "v2", "content": "> **Alarm Name:** ${event_name_alias} \n> **Alarm ID:** ${id} \n> **Occurred:** ${starts_at} \n> **Event Severity:** ${event_severity} \n> **Alarm Info:** ${alarm_info} \n> **Resource Identifier:** ${resources_new} \n> **Suggestion:** ${alarm_fix_suggestion_zh};", "subType": "sendType": "HTML", "content": "\nNotification Type:${event_type};\nSeverity:${event_severity};\nName:$event.metadata.event_name_alias;\nOccurred:${starts_at};\nSource:$event.metadata.resource_provider;\nResource Type:$event.metadata.resource_type;\nResource Identifier:${resources_new};\nPossible Cause:${alarm_probableCause_zh};\nAdditional Info:${message};\nSuggestion:${alarm_fix_suggestion_zh};", "subType": "webhook", "version": "v2", "content": "\nNotification Type:${event_type};\nSeverity:${event_severity};\nName:$event.metadata.event_name_alias; \nOccurred:${starts_at};\nSource:$event.metadata.resource_provider; \nResource Type:$event.metadata.resource_type; \nResource Identifier:${resources_new}; \nPossible Cause:${alarm_probableCause_zh}; \nAdditional Info:${message}; \nSuggestion:${alarm_fix_suggestion_zh};", "subType": "voice", "version": "v2", "content": "\nNotification Type:${event_type};\nSeverity:${event_severity};\nName:$event.metadata.event_name_alias; \nOccurred:${starts_at};\nSource:$event.metadata.resource_provider; \nResource Type:$event.metadata.resource_type; \nResource Identifier:${resources_new}; \nPossible Cause:${alarm_probableCause_zh}; \nAdditional Info:${message}; \nSuggestion:${alarm_fix_suggestion_zh};", "subType": "espace", "version": "v2", "content": "\nNotification Type:${event_type};\nSeverity:${event_severity};\nName:$event.metadata.event_name_alias; \nOccurred:${starts_at};\nSource:$event.metadata.resource_provider; \nResource Type:$event.metadata.resource_type; \nResource Identifier:${resources_new}; \nPossible Cause:${alarm_probableCause_zh}; \nAdditional Info:${message}; \nSuggestion:${alarm_fix_suggestion_zh};", "subType": "feishu", "version": "v2", "content": "\nNotification Type:${event_type};\nSeverity:${event_severity};\nName:$event.metadata.event_name_alias; \nOccurred:${starts_at};\nSource:$event.metadata.resource_provider; \nResource Type:$event.metadata.resource_type; \nResource Identifier:${resources_new}; \nPossible Cause:${alarm_probableCause_zh}; \nAdditional Info:${message}; \nSuggestion:${alarm_fix_suggestion_zh};", "subType": "welink", "version": "v2", "content": "\nNotification Type:${event_type};\nSeverity:${event_severity};\nName:$event.metadata.event_name_alias; \nOccurred:${starts_at};\nSource:$event.metadata.resource_provider; \nResource Type:$event.metadata.resource_type; \nResource Identifier:${resources_new}; \nSuggestion:${alarm_fix_suggestion_zh};"}]"}
```

Example Responses

None

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.

Error Codes

See [Error Codes](#).

4.1.24 Querying a Message Template Based on the Template Name

Function

This API is used to query a message template based on the template name.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v2/{project_id}/events/notification/template/{name}

Table 4-202 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .
name	Yes	String	Message template name.

Request Parameters

Table 4-203 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json.

Parameter	Mandatory	Type	Description
Enterprise-Project-Id	No	String	<p>Enterprise project ID. For details, see Obtaining an Enterprise Project ID.</p> <ul style="list-style-type: none">• To query the message template of an enterprise project, enter the enterprise project ID.• To query the message templates of all enterprise projects, enter all_granted_eps.• If this parameter is not specified, the message template of the default enterprise project is returned.

Response Parameters

Status code: 200

Table 4-204 Response body parameters

Parameter	Type	Description
create_time	Long	Time when a message template was created.
desc	String	Message template description.
enterprise_project_id	String	ID of the enterprise project to which the message template belongs.
locale	String	Message template language.
modify_time	Long	Time when a message template was modified.
name	String	Message template name.
project_id	String	ID of the project to which the message template belongs.
source	String	Message template source.

Parameter	Type	Description																							
		Name	Mandatory	Parameter Type	Description																				
templates	String	Message template content. The content is escaped from JSON arrays consisting of the following parameters: <table border="1" data-bbox="913 449 1421 1920"> <thead> <tr> <th>Name</th><th>Mandatory</th><th>Parameter Type</th><th>Description</th></tr> </thead> <tbody> <tr> <td>content</td><td>Yes</td><td>String</td><td>Message template content.</td></tr> <tr> <td>subType</td><td>Yes</td><td>String</td><td>Notification mode. Options: email, SMS, and webhook.</td></tr> <tr> <td>topic</td><td>No</td><td>String</td><td>Email subject.</td></tr> <tr> <td>sendType</td><td>No</td><td>String</td><td>Message template format, which must be specified if subType is set to webhook. Options: HTML</td></tr> </tbody> </table>				Name	Mandatory	Parameter Type	Description	content	Yes	String	Message template content.	subType	Yes	String	Notification mode. Options: email, SMS, and webhook.	topic	No	String	Email subject.	sendType	No	String	Message template format, which must be specified if subType is set to webhook . Options: HTML
Name	Mandatory	Parameter Type	Description																						
content	Yes	String	Message template content.																						
subType	Yes	String	Notification mode. Options: email, SMS, and webhook.																						
topic	No	String	Email subject.																						
sendType	No	String	Message template format, which must be specified if subType is set to webhook . Options: HTML																						

Parameter	Type	Description			
		Name	Mandatory	Parameter Type	Description
					and JSON.
		version	Yes	String	The default value is v2.
type	Array of strings	Message notification mode.			

Example Requests

Query the message template named **test22**.

/v2/{project_id}/events/notification/templates/test22

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "create_time": 1685445932076,  
    "desc": "",  
    "enterprise_project_id": "0",  
    "locale": "zh-cn",  
    "modify_time": 1707011425355,  
    "name": "530en",  
    "project_id": "2a4****6cca****f837****91bf****f",  
    "templates": "[{\\"subType\\": \"email\", \\"version\\": \"v2\", \\"topic\\": \"$region_name[$event_severity]_${event_type} ${clear_type}] have a new alert at ${starts_at}.\", \\"content\\": \"\\nAlarm Name:$ {event_name_alias};\\nAlarm ID:$[id];\\nOccurred:$[starts_at];\\nEvent Severity:$[event_severity];\\nAlarm Info:$[alarm_info];\\nResource Identifier:$[resources_new];\\nSuggestion:$[alarm_fix_suggestion_zh];\"}, {\\"subType\\": \"sms\", \\"version\\": \"v2\", \\"content\\": \"\\nAlarm Name:$[event_name_alias];\\nAlarm ID:$[id];\\nOccurred:$[starts_at];\\nEvent Severity:$[event_severity];\\nAlarm Info:$[alarm_info];\\nResource Identifier:$[resources_new];\\nSuggestion:$[alarm_fix_suggestion_zh];\"}, {\\"subType\\": \"wechat\", \\"version\\": \"v2\", \\"content\\": \"**Alarm Name:** $[event_name_alias] \\n> **Alarm ID:** $[id] \\n> **Occurred:** $[starts_at] \\n> **Event Severity:** $[event_severity] \\n> **Alarm Info:** $[alarm_info] \\n> **Resource Identifier:** $[resources_new] \\n> **Suggestion:** $[alarm_fix_suggestion_zh]\"}, {\\"subType\\": \"dingding\", \\"version\\": \"v2\", \\"content\\": \"**Alarm Name:** $[event_name_alias] \\n\\n> **Alarm ID:** $[id] \\n\\n> **Occurred:** $[starts_at] \\n\\n> **Event Severity:** $[event_severity] \\n\\n> **Alarm Info:** $[alarm_info] \\n\\n> **Resource Identifier:** $[resources_new] \\n\\n> **Suggestion:** $[alarm_fix_suggestion_zh]\"}, {\\"subType\\": \"HTML\", \\"version\\": \"v2\", \\"content\\": \"Notification Type:$[event_type];\\nSeverity:$[event_severity];\\nName:$event.metadata.event_name_alias;\\nOccurred:$[starts_at]\\nSource:$event.metadata.resource_provider;\\nResource Type:$event.metadata.resource_type;\\nResource Identifier:$[resources_new];\\nPossible Cause:$[alarm_probableCause_zh];\\nAdditional Info:$[message];\\nSuggestion:$[alarm_fix_suggestion_zh];\"}, {\\"subType\\": \"HTML\", \\"version\\": \"v2\", \\"topic\\": \"\", \\"content\\": \"Notification Type:$[event_type];\\nSeverity:$[event_severity];\"} ]  
}
```

```
\nName:$event.metadata.event_name_alias; \nOccurred:${starts_at}; \
\nSource:$event.metadata.resource_provider; \nResource Type:$event.metadata.resource_type; \
\nResource Identifier:${resources_new}; \nPossible Cause:${alarm_probableCause_zh}; \nAdditional Info:$
{message}; \nSuggestion:${alarm_fix_suggestion_zh}\",{"subType":"espace","version":"v2"},"topic
":","content":"Notification Type:${event_type}; \nSeverity:${event_severity}; \
\nName:$event.metadata.event_name_alias; \nOccurred:${starts_at}; \
\nSource:$event.metadata.resource_provider; \nResource Type:$event.metadata.resource_type; \
\nResource Identifier:${resources_new}; \nPossible Cause:${alarm_probableCause_zh}; \nAdditional Info:$
{message}; \nSuggestion:${alarm_fix_suggestion_zh}\",{"subType":"feishu","version":"v2"},"topic
":","content":***Alarm Name:** ${event_name_alias} \n**Alarm ID:** ${id} \n**Occurred:** ${starts_at} \
\n**Event Severity:** ${event_severity} \n**Alarm Info:** ${alarm_info} \n**Resource Identifier:** ${resources_new} \
\n**Suggestion:** ${alarm_fix_suggestion_zh}\",{"subType":"welink","version":"v2"},"topic":","content":
\nAlarm Name:${event_name_alias};\nAlarm ID:${id};\nOccurred:${starts_at};\nEvent Severity:${event_severity};\nAlarm Info:${alarm_info};\nResource Identifier:${resources_new};\nSuggestion:${alarm_fix_suggestion_zh}]}",
"type" : []
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.1.25 Querying Events and Alarms

Function

This API is used to query events and alarms of a user.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v2/{project_id}/events

Table 4-205 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-206 Query Parameters

Parameter	Mandatory	Type	Description
type	No	String	Type of information to be queried. <ul style="list-style-type: none">• active_alert: Active alarms are to be queried.• history_alert: Historical alarms are to be queried. If this parameter is not transferred or other values are transferred, information that meets the specified search criteria will be returned. Enumeration values: <ul style="list-style-type: none">• history_alert• active_alert
limit	No	Integer	Maximum number of records returned for each query. Default: 1,000.
marker	No	String	Pagination marker. The initial value is 0 , and the subsequent value is the value of next_marker in the response body.

Request Parameters

Table 4-207 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Parameter	Mandatory	Type	Description
Enterprise-Project-Id	No	String	<p>Enterprise project ID.</p> <ul style="list-style-type: none">• To query instances in an enterprise project, enter the enterprise project ID.• To query instances in all enterprise projects, enter all_granted_eps.

Table 4-208 Request body parameters

Parameter	Mandatory	Type	Description
time_range	Yes	String	<p>Time range specified to query data of the last N minutes when the client time is inconsistent with the server time. It can also be used to accurately query the data of a specified period.</p> <p>Example:</p> <ul style="list-style-type: none">• -1.-1.60: indicates that the data of the latest 60 minutes is queried. This query is based on the server time regardless of the current client time.• 1650852000000.165085230000.5: indicates the five minutes from 10:00:00 to 10:05:00 on April 25, 2022 GMT+08:00. <p>Format:</p> <p>startTimeInMillis.endTimeInMillis.durationInMinutes</p> <p>Parameter description:</p> <ul style="list-style-type: none">• startTimeInMillis: start time (UTC) of the query, in milliseconds. If this parameter is set to -1, the server calculates the start time as follows: endTimeInMillis – durationInMinutes × 60 × 1000. For example, -1.1650852300000.5 is equivalent to 1650852000000.165085230000.5.• endTimeInMillis: end time (UTC) of the query, in milliseconds. If this parameter is set to -1, the server calculates the end time as follows: startTimeInMillis + durationInMinutes × 60 × 1000. If the calculated end time is later than the

Parameter	Mandatory	Type	Description
			<p>current system time, the current system time is used. For example, 1650852000000.-1.5 is equivalent to 1650852000000.165085230000.5.</p> <ul style="list-style-type: none">durationInMinutes: query time span, in minutes. The value must be greater than 0 and greater than or equal to the result of $(endTimeInMillis - startTimeInMillis)/(60 \times 1000) - 1$. If both the start time and end time are set to -1, the system sets the end time to the current UTC time (in milliseconds) and calculates the start time as follows: $endTimeInMillis - durationInMinutes \times 60 \times 1000$. For example, -1.-1.60 indicates the latest 60 minutes. <p>Constraint: In a single request, the following condition must be met: $durationInMinutes \times 60 / period \leq 1,440$</p>
step	No	Long	Statistical step (unit: ms). For example, if the statistical step is one minute, set this parameter to 60,000.
search	No	String	Field specified for fuzzy query, which can be left blank. If this field is not left blank, fuzzy query can be performed accordingly. In that case, the metadata field is mandatory.
sort	No	sort object	Sorting order, which can be left blank.
metadata_relation	No	Array of RelationModel objects	Combination of search criteria, which can be left blank.

Table 4-209 sort

Parameter	Mandatory	Type	Description
order_by	Yes	Array of strings	List of sorted fields. Fields in this list are sorted based on the specified order. This parameter is mandatory if sort is not empty.
order	No	String	Sorting order. asc: ascending order. desc: descending order. Enumeration values: <ul style="list-style-type: none">• asc• desc

Table 4-210 RelationModel

Parameter	Mandatory	Type	Description
key	Yes	String	Key specified for query, which corresponds to the key in the metadata. This parameter is mandatory if metadata_relation is not empty.
value	No	Array of strings	Value of the specified key in the search criterion.
relation	No	String	Relationship between search criteria. <ul style="list-style-type: none">• AND: All criteria must be met.• OR: One of the criteria needs to be met.• NOT: None of the criteria can be met. Enumeration values: <ul style="list-style-type: none">• AND• OR• NOT

Response Parameters

Status code: 200

Table 4-211 Response body parameters

Parameter	Type	Description
events	Array of ListEventModel objects	Event or alarm details.
page_info	PageInfo object	Pagination information.

Table 4-212 ListEventModel

Parameter	Type	Description
starts_at	Long	Time when an event or alarm is generated (UTC timestamp precise down to the millisecond).
ends_at	Long	Time when an event or alarm is cleared (UTC timestamp precise down to the millisecond). 0: The event or alarm is not deleted.
timeout	Long	After how long will an alarm be automatically cleared. Unit: ms. For example, if an alarm is cleared after 1 minute, set this parameter to 60000 . The default value is 5 days (that is, 5 days × 24 hours × 60 minutes × 60,000 ms).

Parameter	Type	Description
metadata	Map<String, String>	Details of an event or alarm. The value is a key-value pair. The following fields are mandatory: <ul style="list-style-type: none">• event_name: event or alarm name, which is a string.• event_severity: event severity, which is an enumerated value with string elements. Options: Critical, Major, Minor, and Info.• event_type: event type, which is an enumerated value with string elements. Options: event and alarm.• resource_provider: name of a cloud service corresponding to an event, which is a string.• resource_type: type of the resource corresponding to an event, which is a string.• resource_id: resource ID corresponding to an event, which is a string.
annotations	Map<String, Object>	Additional field for an event or alarm, which can be left blank.
attach_rule	Map<String, Object>	Reserved field for an event or alarm, which can be left blank.
id	String	Event or alarm ID, which is automatically generated by the system.
event_sn	String	Alarm serial number.
arrives_at	Long	Time when an event arrives at the system (UTC timestamp precise down to the millisecond).
enterprise_project_id	String	ID of the enterprise project to which the event or alarm belongs.
policy	Map<String, Object>	Open alarm policy.

Table 4-213 PageInfo

Parameter	Type	Description
current_count	Integer	Total number of events and alarms on the current page.
previous_marker	String	Previous marker.
next_marker	String	Next marker.

Status code: 400

Table 4-214 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.
error_type	String	API call failure type.
trace_id	String	Request ID.

Status code: 401

Table 4-215 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.
error_type	String	API call failure type.
trace_id	String	Request ID.

Status code: 403

Table 4-216 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.
error_type	String	API call failure type.

Parameter	Type	Description
trace_id	String	Request ID.

Status code: 500

Table 4-217 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.
error_type	String	API call failure type.
trace_id	String	Request ID.

Status code: 503

Table 4-218 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.
error_type	String	API call failure type.
trace_id	String	Request ID.

Example Requests

Query the events and alarms of a specified user.

`https://{endpoint}/v2/{project_id}/events`

```
{  
    "time_range": "-1.-1.30",  
    "metadata_relation": [ {  
        "key": "event_type",  
        "relation": "AND",  
        "value": [ "alarm" ]  
    }, {  
        "key": "event_severity",  
        "relation": "AND",  
        "value": [ "Critical", "Major", "Minor", "Info" ]  
    } ],  
    "search": "",  
    "sort": {  
        "order_by": [ "starts_at" ],  
        "order": "desc"  
    }  
}
```

```
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "events" : [ {
    "annotations" : {
      "alarm_fix_suggestion_zh_cn" : "Suggestions",
      "alarm_probableCause_zh_cn" : "Possible Causes",
      "message" : "Alarm Details"
    },
    "arrives_at" : 16377362908000,
    "ends_at" : 0,
    "enterprise_project_id" : "0",
    "event_sn" : "1283514476372426755",
    "id" : "6775161208461480000",
    "metadata" : {
      "event_name" : "test",
      "event_severity" : "Major",
      "event_type" : "alarm",
      "resource_id" : "ecs123",
      "resource_provider" : "ecs",
      "resource_type" : "vm"
    },
    "policy" : { },
    "starts_at" : 16377362908000,
    "timeout" : 60000
  }],
  "page_info" : {
    "current_count" : 1,
    "next_marker" : "",
    "previous_marker" : "0"
  }
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{
  "error_code" : "AOM.08032002",
  "error_message" : "The request body is illegal",
  "error_type" : "SC_BAD_REQUEST"
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{
  "error_code" : "AOM.0403",
  "error_message" : "auth failed.",
  "error_type" : "AUTH_FAILED",
  "trace_id" : null
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.0403",  
    "error_message" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_message" : "Internal Server Error",  
    "trace_id" : null  
}
```

Status code: 503

Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.0503",  
    "error_message" : "SC_NOT_IMPLEMENTED",  
    "error_type" : "SC_NOT_IMPLEMENTED"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.1.26 Counting Events and Alarms

Function

This API is used to count events and alarms that meet specified conditions.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v2/{project_id}/events/statistic

Table 4-219 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-220 Query Parameters

Parameter	Mandatory	Type	Description
type	No	String	<p>Type of information to be queried.</p> <ul style="list-style-type: none">• active_alert: Active alarms are to be queried.• history_alert: Historical alarms are to be queried. <p>If this parameter is not transferred or other values are transferred, information that meets the specified search criteria will be returned.</p> <p>Enumeration values:</p> <ul style="list-style-type: none">• history_alert• active_alert

Request Parameters

Table 4-221 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-222 Request body parameters

Parameter	Mandatory	Type	Description
time_range	Yes	String	<p>Time range specified to query data of the last N minutes when the client time is inconsistent with the server time. It can also be used to accurately query the data of a specified period.</p> <p>Example:</p> <ul style="list-style-type: none">• -1.-1.60: indicates that the data of the latest 60 minutes is queried. This query is based on the server time regardless of the current client time.• 1650852000000.165085230000.5: indicates the five minutes from 10:00:00 to 10:05:00 on April 25, 2022 GMT+08:00. <p>Format:</p> <p>startTimeInMillis.endTimeInMillis.durationInMinutes</p> <p>Parameter description:</p> <ul style="list-style-type: none">• startTimeInMillis: start time (UTC) of the query, in milliseconds. If this parameter is set to -1, the server calculates the start time as follows: endTimeInMillis – durationInMinutes × 60 × 1000. For example, -1.1650852300000.5 is equivalent to 1650852000000.165085230000.5.• endTimeInMillis: end time (UTC) of the query, in milliseconds. If this parameter is set to -1, the server calculates the end time as follows: startTimeInMillis + durationInMinutes × 60 × 1000. If the calculated end time is later than the

Parameter	Mandatory	Type	Description
			<p>current system time, the current system time is used. For example, 1650852000000.-1.5 is equivalent to 1650852000000.165085230000.5.</p> <ul style="list-style-type: none">durationInMinutes: query time span, in minutes. The value must be greater than 0 and greater than or equal to the result of $(endTimeInMillis - startTimeInMillis)/(60 \times 1000) - 1$. If both the start time and end time are set to -1, the system sets the end time to the current UTC time (in milliseconds) and calculates the start time as follows: $endTimeInMillis - durationInMinutes \times 60 \times 1000$. For example, -1.-1.60 indicates the latest 60 minutes. <p>Constraint: In a single request, the following condition must be met: $durationInMinutes \times 60 / period \leq 1,440$</p>
step	No	Long	Statistical step. Unit: ms. For example, if an alarm is cleared after 1 minute, set this parameter to 60000 . Min.: 1 minute.
search	No	String	Field specified for fuzzy query, which can be left blank. If this field is not left blank, the system will return metadata's mandatory fields that are fuzzily matched.
sort	No	sort object	Sorting order, which can be left blank.
metadata_relation	No	Array of RelationModel objects	Combination of search criteria, which can be left blank.

Table 4-223 sort

Parameter	Mandatory	Type	Description
order_by	No	Array of strings	List of sorted fields. Fields in this list are sorted based on the specified order.
order	No	String	Sorting order. asc: ascending order. desc: descending order. Enumeration values: <ul style="list-style-type: none">• asc• desc

Table 4-224 RelationModel

Parameter	Mandatory	Type	Description
key	Yes	String	Key specified for query, which corresponds to the key in the metadata. This parameter is mandatory if metadata_relation is not empty.
value	No	Array of strings	Value of the specified key in the search criterion.
relation	No	String	Relationship between search criteria. <ul style="list-style-type: none">• AND: All criteria must be met.• OR: One of the criteria needs to be met.• NOT: None of the criteria can be met. Enumeration values: <ul style="list-style-type: none">• AND• OR• NOT

Response Parameters

Status code: 200

Table 4-225 Response body parameters

Parameter	Type	Description
step	Long	Statistical step (unit: ms). For example, if the statistical step is one minute, set this parameter to 60,000.
timestamps	Array of longs	Time series object corresponding to the statistical result.
series	Array of EventSeries objects	Statistical results of a time series object's different severities of events or alarms.
summary	Map<String, Integer>	Alarm statistics summary.

Table 4-226 EventSeries

Parameter	Type	Description
event_severity	String	Enumerated values of event or alarm severities. Enumeration values: <ul style="list-style-type: none">• Critical• Major• Minor• Info
values	Array of integers	Event or alarm statistical result.

Status code: 400

Table 4-227 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.
error_type	String	API call failure type.
trace_id	String	Request ID.

Status code: 401

Table 4-228 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.
error_type	String	API call failure type.
trace_id	String	Request ID.

Status code: 403

Table 4-229 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.
error_type	String	API call failure type.
trace_id	String	Request ID.

Status code: 500

Table 4-230 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.
error_type	String	API call failure type.
trace_id	String	Request ID.

Status code: 503

Table 4-231 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.
error_type	String	API call failure type.

Parameter	Type	Description
trace_id	String	Request ID.

Example Requests

Query the events and alarms on the step basis in a specified time range.

```
https://{endpoint}/v2/{project_id}/events/statistic
{
  "time_range": "-1..-1.5",
  "step": 60000
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "series": [ {
    "event_severity": "Critical",
    "values": [ 2, 3, 3, 1, 0 ]
  }, {
    "event_severity": "Major",
    "values": [ 4, 3, 5, 4, 0 ]
  }, {
    "event_severity": "Minor",
    "values": [ 3, 1, 1, 1, 0 ]
  }, {
    "event_severity": "Info",
    "values": [ 0, 0, 0, 0, 0 ]
  }],
  "step": 60000,
  "summary": {
    "critical_count": 9,
    "info_count": 0,
    "major_count": 16,
    "minor_count": 6
  },
  "timestamps": [ 1711788600000, 1711788660000, 1711788720000, 1711788780000, 1711788840000 ]
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{
  "error_code": "AOM.08033002",
  "error_message": "The request body is illegal",
  "trace_id": ""
}
```

Status code: 401

Unauthorized: The authentication information is incorrect or invalid.

```
{
  "error_code": "AOM.0403",
  "error_message": "auth failed.",
```

```
{  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.0403",  
    "error_message" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_message" : "Internal Server Error",  
    "trace_id" : ""  
}
```

Status code: 503

Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.0503",  
    "error_message" : "SC_NOT_IMPLEMENTED",  
    "error_type" : "SC_NOT_IMPLEMENTED"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.1.27 Reporting Events and Alarms

Function

This API is used to report events and alarms to AOM. It is also used to clear alarms.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v2/{project_id}/push/events

Table 4-232 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-233 Query Parameters

Parameter	Mandatory	Type	Description
action	No	String	<p>Requested action.</p> <ul style="list-style-type: none">If this parameter is not transferred or other values are transferred, an alarm or event is to be reported. By default, this parameter is left blank, indicating that an alarm or event is to be reported.clear: An alarm is to be cleared. <p>Enumeration values:</p> <ul style="list-style-type: none">clear

Request Parameters

Table 4-234 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json
enterprise-project-id	No	String	ID of the enterprise project to which the alarm belongs. For details, see Obtaining an Enterprise Project ID . If this parameter is not transferred, the default enterprise project will be used (ID: 0).

Table 4-235 Request body parameters

Parameter	Mandatory	Type	Description
events	Yes	Array of EventModel objects	Event or alarm details.

Table 4-236 EventModel

Parameter	Mandatory	Type	Description
starts_at	No	Long	<p>Time when an event or alarm is generated (UTC timestamp precise down to the millisecond).</p> <p>Example: 2024-10-16 16:03:01 needs to be converted to UTC timestamp 1702759381000 using a tool.</p> <p>This parameter needs to be specified if the value of action is left blank (which indicates that an event or alarm is to be reported).</p>
ends_at	No	Long	<p>Time when an event or alarm is cleared (UTC timestamp precise down to the millisecond). 0 (default): The alarm is not cleared.</p> <p>Example: 2024-10-16 16:03:01 needs to be converted to UTC timestamp 1702759381000 using a tool.</p> <p>This parameter needs to be specified if the value of action is set to clear.</p>
timeout	No	Long	<p>After how long will an alarm be automatically cleared. Unit: ms. For example, if an alarm is cleared after 1 minute, set this parameter to 60000. By default, alarms older than five days will be cleared. The corresponding value is $7,200 \times 60,000$ (5 days \times 24 hours \times 60 minutes \times 60,000 ms).</p> <p>Max.: 15 days. This parameter needs to be specified if the value of action is left blank (which indicates that an alarm is to be reported).</p>

Parameter	Mandatory	Type	Description
metadata	Yes	Map<String, String>	<p>Details about an event or alarm to be reported. The value is a key-value pair. Mandatory fields:</p> <ul style="list-style-type: none">• event_name: event or alarm name, which is a string.• event_severity: event or alarm severity, which is a string. Options:<ul style="list-style-type: none">- Critical- Major- Minor- Info• event_type: event or alarm type, which is a string. Options:<ul style="list-style-type: none">- event- alarm• resource_provider: name of a cloud service corresponding to an event, which is a string.• resource_type: type of the resource corresponding to an event, which is a string.• resource_id: resource ID corresponding to an event, which is a string. <p>Length: 1 to 2,048 characters.</p>
annotations	No	Map<String, Object>	Additional field for an event or alarm, which can be left blank.
attach_rule	No	Map<String, Object>	Reserved field for an event or alarm, which can be left blank.
id	No	String	<p>Event or alarm ID, which is automatically generated when an event or alarm is generated.</p> <p>This parameter needs to be specified if the value of action is set to clear.</p>

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

Status code: 400

Table 4-237 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error description.
error_type	String	API call failure type.
trace_id	String	Request ID.

Example Requests

Report an alarm named "test".

```
https://{{EndPoint}}/v2/{{project_id}}/push/events

{
  "events": [ {
    "starts_at": 1605232501000,
    "timeout": 60000,
    "metadata": {
      "event_name": "test",
      "event_severity": "Major",
      "event_type": "alarm",
      "resource_provider": "ecs",
      "resource_type": "vm",
      "resource_id": "ecs123"
    },
    "annotations": {
      "alarm_probableCause_zh_cn": "Possible Causes",
      "alarm_fix_suggestion_zh_cn": "Suggestions",
      "message": "Alarm Details"
    },
    "attach_rule": { }
  } ]
}
```

Example Responses

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{
  "error_code": "AOM.0400",
  "error_msg": "parse eventParam failed",
  "error_type": "SC_BAD_REQUEST"
}
```

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2 Monitoring

4.2.1 Querying Time Series Objects

Function

This API is used to query the time series objects that can be monitored in the system. You can specify a namespace, name, dimension, and resource ID (format: resType_resId). You can also specify the start position and the maximum number of returned records for a pagination query.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v2/{project_id}/series

Table 4-238 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-239 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	String	Maximum number of returned records. Value range: 1–1000. Default value: 1000.
offset	No	String	Start position of a pagination query. The value is a non-negative integer.

Request Parameters

Table 4-240 Request body parameters

Parameter	Mandatory	Type	Description
series	Yes	Array of QuerySeries OptionParam objects	Array for querying time series objects.

Table 4-241 QuerySeriesOptionParam

Parameter	Mandatory	Type	Description
namespace	Yes	String	<p>Namespace of time series objects. Options: PAAS.CONTAINER, PAAS.NODE, PAAS.SLA, PAAS.AGGR, and CUSTOMMETRICS.</p> <ul style="list-style-type: none">• PAAS.CONTAINER: namespace of application time series objects.• PAAS.NODE: namespace of node time series objects.• PAAS.SLA: namespace of SLA time series objects.• PAAS.AGGR: namespace of cluster time series objects.• CUSTOMMETRICS: namespace of custom time series objects. <p>Custom namespaces are also supported.</p> <p>To query namespaces, call the API Querying Tag Values.</p>
metric_name	No	String	<p>Time series name. Length: 1 to 255 characters. Options: basic time series names (such as cpuUsage and cpuCoreUsed) provided by AOM, and custom time series names. To query time series names, call the API Querying Tag Values.</p>
dimensions	No	Array of DimensionSeries objects	<p>List of time series dimensions. To query the time series dimension list, call the API Querying Time Series Objects.</p>

Table 4-242 DimensionSeries

Parameter	Mandatory	Type	Description
name	No	String	Dimension name.
value	No	String	Dimension value.

Response Parameters

Status code: 200

Table 4-243 Response body parameters

Parameter	Type	Description
series	Array of SeriesQueryItem-Result objects	List of time series objects.
meta_data	MetaDataSeries object	Metadata, including pagination information.

Table 4-244 SeriesQueryItemResult

Parameter	Type	Description
namespace	String	Namespace.
dimensions	Array of DimensionSeries objects	List of time series dimensions.
metric_name	String	Time series name.
unit	String	Time series unit.
dimension_value_hash	String	Time series hash value.

Table 4-245 DimensionSeries

Parameter	Type	Description
name	String	Dimension name.
value	String	Dimension value.

Table 4-246 MetaDataSeries

Parameter	Type	Description
count	Integer	Number of returned records.
offset	Integer	Start of the next page, which is used for pagination. null: No more data.
total	Integer	Total number of records.

Parameter	Type	Description
nextToken	Integer	Offset.

Status code: 400

Table 4-247 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Request ID.

Example Requests

Query time series objects by namespace and metric_name.

```
https://{{Endpoint}}/v2/{{project_id}}/series
{
  "series" : [ {
    "namespace" : "PAAS.CONTAINER",
    "metric_name" : "aom_process_cpu_usage"
  }]
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "meta_data" : {
    "count" : 1,
    "offset" : null,
    "total" : 1,
    "nextToken" : 0
  },
  "series" : [ {
    "namespace" : "PAAS.CONTAINER",
    "metric_name" : "cpuUsage",
    "unit" : "Percent",
    "dimensions" : [ {
      "name" : "appName",
      "value" : "appValue"
    }],
    "dimension_value_hash" : null
  }]
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code": "AOM.04007101",  
    "error_msg": "Invalid namespace",  
    "error_type": "BAD_REQUEST",  
    "trace_id": ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2.2 Querying Time Series Data

Function

This API is used to query time series data within a specified period. You can specify a dimension or period to query. (This API will not evolve. You are advised to use [Querying Expression Calculation Results in a Specified Period Using the POST Method](#).)

Calling Method

For details, see [Calling APIs](#).

URI

POST /v2/{project_id}/samples

Table 4-248 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-249 Query Parameters

Parameter	Mandatory	Type	Description
fill_value	No	String	<p>Value filled for breakpoints in time series data. Default value: -1.</p> <ul style="list-style-type: none">• -1: Breakpoints are filled with -1.• 0: Breakpoints are filled with 0.• null: Breakpoints are filled with null.• average: Breakpoints are filled with the average value of adjacent valid data. If there is no valid data, breakpoints are filled with null.

Request Parameters

Table 4-250 Request body parameters

Parameter	Mandatory	Type	Description
samples	Yes	Array of QuerySample objects	List of time series objects. A JSON array can contain up to 20 objects.
statistics	Yes	Array of strings	Statistic. Values: maximum, minimum, sum, average, and sampleCount.

Parameter	Mandatory	Type	Description
period	Yes	Integer	<p>Monitoring data granularity.</p> <p>Options:</p> <ul style="list-style-type: none">• 60: The granularity is 1 minute.• 300: The granularity is 5 minutes.• 900: The granularity is 15 minutes.• 3600: The granularity is 1 hour.

Parameter	Mandatory	Type	Description
time_range	Yes	String	<p>Time range specified to query data of the last N minutes when the client time is inconsistent with the server time. It can also be used to accurately query the data of a specified period.</p> <p>Example:</p> <ul style="list-style-type: none">• -1.-1.60: indicates that the data of the latest 60 minutes is queried. This query is based on the server time regardless of the current client time.• 1650852000000.165085230000.5: indicates the five minutes from 10:00:00 to 10:05:00 on April 25, 2022 GMT+08:00. <p>Format:</p> <p>startTimelnMillis.endTimelnMillis.durationInMinutes</p> <p>Parameter description:</p> <ul style="list-style-type: none">• startTimelnMillis: start time (UTC) of the query, in milliseconds. If this parameter is set to -1, the server calculates the start time as follows: $\text{endTimeInMillis} - \text{durationInMinutes} \times 60 \times 1000$. For example, -1.1650852300000.5 is equivalent to 1650852000000.165085230000.5.• endTimeInMillis: end time (UTC) of the query, in milliseconds. If this parameter is set to -1, the server calculates the end time as follows: $\text{startTimelnMillis} + \text{durationInMinutes} \times 60 \times 1000$. If the calculated end time is later than the current system time, the current system time is used.

Parameter	Mandatory	Type	Description
			<p>For example, 1650852000000.-1.5 is equivalent to 1650852000000.165085230000.5.</p> <ul style="list-style-type: none">durationInMinutes: query time span, in minutes. The value must be greater than 0 and greater than or equal to the result of $(endTimeInMillis - startTimeInMillis) / (60 \times 1000) - 1$. If both the start time and end time are set to -1, the system sets the end time to the current UTC time (in milliseconds) and calculates the start time as follows: $endTimeInMillis - durationInMinutes \times 60 \times 1000$. For example, -1.-1.60 indicates the latest 60 minutes. <p>Constraint:</p> <p>In a single request, the following condition must be met: $durationInMinutes \times 60 / period \leq 1,440$</p>

Table 4-251 QuerySample

Parameter	Mandatory	Type	Description
namespace	Yes	String	<p>Namespace of time series objects. Options: PAAS.CONTAINER, PAAS.NODE, PAAS.SLA, PAAS.AGGR, and CUSTOMMETRICS. - PAAS.CONTAINER: namespace of application time series objects.</p> <ul style="list-style-type: none"> • PAAS.NODE: namespace of node time series objects. • PAAS.SLA: namespace of SLA time series objects. • PAAS.AGGR: namespace of cluster time series objects. • CUSTOMMETRICS: namespace of custom time series objects. <p>To query namespaces, call the API Querying Tag Values.</p>
dimensions	Yes	Array of DimensionSeries objects	<p>List of time series dimensions. To query the time series dimension list, call the API Querying Time Series Objects.</p>
metric_name	Yes	String	<p>Time series name. Length: 1 to 255 characters. Options: basic time series names (such as cpuUsage and cpuCoreUsed) provided by AOM, and custom time series names.</p> <p>To query time series names, call the API Querying Tag Values.</p>

Table 4-252 DimensionSeries

Parameter	Mandatory	Type	Description
name	No	String	Dimension name.
value	No	String	Dimension value.

Response Parameters

Status code: 200

Table 4-253 Response body parameters

Parameter	Type	Description
samples	Array of SampleDataValue objects	List of time series objects.

Table 4-254 SampleDataValue

Parameter	Type	Description
sample	QuerySample object	List of time series objects.
data_points	Array of MetricDataPoints objects	Time series data.

Table 4-255 QuerySample

Parameter	Type	Description
namespace	String	<p>Namespace of time series objects. Options: PAAS.CONTAINER, PAAS.NODE, PAAS.SLA, PAAS.AGGR, and CUSTOMMETRICS. -</p> <ul style="list-style-type: none"> PAAS.CONTAINER: namespace of application time series objects. PAAS.NODE: namespace of node time series objects. PAAS.SLA: namespace of SLA time series objects. PAAS.AGGR: namespace of cluster time series objects. CUSTOMMETRICS: namespace of custom time series objects. <p>To query namespaces, call the API Querying Tag Values.</p>
dimensions	Array of DimensionSeries objects	List of time series dimensions. To query the time series dimension list, call the API Querying Time Series Objects .

Parameter	Type	Description
metric_name	String	Time series name. Length: 1 to 255 characters. Options: basic time series names (such as cpuUsage and cpuCoreUsed) provided by AOM, and custom time series names. To query time series names, call the API Querying Tag Values .

Table 4-256 DimensionSeries

Parameter	Type	Description
name	String	Dimension name.
value	String	Dimension value.

Table 4-257 MetricDataPoints

Parameter	Type	Description
statistics	Array of StatisticValue objects	Statistic.
timestamp	Long	Timestamp.
unit	String	Time series unit.

Table 4-258 StatisticValue

Parameter	Type	Description
statistic	String	Statistic.
value	Double	Statistical result.

Status code: 400

Table 4-259 Response body parameters

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

Parameter	Type	Description
error_type	String	Error type.
trace_id	String	Request ID.

Example Requests

Query time series data in the last five minutes by namespace, metric_name, and dimensions.

```
https://{{Endpoint}}/v2/{{project_id}}/samples

{
  "samples": [
    {
      "namespace": "PAAS.CONTAINER",
      "metric_name": "aom_process_cpu_usage",
      "dimensions": [
        {
          "name": "appName",
          "value": "aomApp"
        }
      ]
    },
    "period": 60,
    "time_range": "-1.-1.5", // Last 5 minutes
    "statistics": [
      "sum"
    ]
  ]
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "samples" : [ {
    "sample" : {
      "namespace" : "PAAS.CONTAINER",
      "metric_name" : "aom_process_cpu_usage",
      "dimensions" : [ {
        "name" : "appName",
        "value" : "aomApp"
      } ]
    },
    "data_points" : [ {
      "timestamp" : 1694673300000,
      "unit" : "Percent",
      "statistics" : [ {
        "statistic" : "sum",
        "value" : "23"
      } ]
    } ]
  } ]
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code": "AOM.04008105",  
    "error_msg": "Query metric data samples is invalid",  
    "error_type": "BAD_REQUEST",  
    "trace_id": ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2.3 Querying Metrics

Function

This API is used to query the metrics that can be monitored in the system. You can query specific metrics by specifying a namespace, metric name, dimension, and resource ID (format: resType_resId). You can also specify the start position and the maximum number of returned records for a pagination query.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/ams/metrics

Table 4-260 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-261 Query Parameters

Parameter	Mandatory	Type	Description
type	No	String	Metric query mode.
limit	No	String	Maximum number of returned records. Value range: 1–1000. Default value: 1000.
start	No	String	Start position of a pagination query. The value is a non-negative integer.

Request Parameters

Table 4-262 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-263 Request body parameters

Parameter	Mandatory	Type	Description
inventoryId	No	String	Resource ID, which must be in the format of resType_resId. Enumerated values of resType: host, application, instance, container, process, network, storage, and volume. When type (a URI parameter) is inventory, this parameter instead of metricItems is used for associated metric queries.
metricItems	No	Array of QueryMetricItemOptionParam objects	If the value of type in the URI is not inventory, metrics are queried based on the information carried by metricItems.

Table 4-264 QueryMetricItemOptionParam

Parameter	Mandatory	Type	Description
dimensions	No	Array of Dimension objects	List of time series dimensions. To query the time series dimension list, call the API Querying Time Series Objects .
metricName	No	String	Metric name. Length: 1 to 255 characters. Options: basic metrics (such as cpuUsage and cpuCoreUsed) provided by AOM, and custom metrics. To query metric names, call the API Querying Tag Values .

Parameter	Mandatory	Type	Description
namespace	Yes	String	<p>Metric namespace. Options:</p> <ul style="list-style-type: none">• PAAS.CONTAINER: namespace of component, instance, process, and container metrics.• PAAS.NODE: namespace of host, network, disk, and file system metrics.• PAAS.SLA: namespace of SLA metrics.• PAAS.AGGR: namespace of cluster metrics.• CUSTOMMETRICS: default namespace of custom metrics. <p>Custom namespaces are also supported.</p> <p>To query namespaces, call the API Querying Tag Values.</p> <p>Enumeration values:</p> <ul style="list-style-type: none">• PAAS.CONTAINER• PAAS.NODE• PAAS.SLA• PAAS.AGGR• CUSTOMMETRICS

Table 4-265 Dimension

Parameter	Mandatory	Type	Description
name	Yes	String	Dimension name.
value	Yes	String	Dimension value.

Response Parameters

Status code: 200

Table 4-266 Response body parameters

Parameter	Type	Description
metaData	MetaDataSetSeries object	Metadata, including pagination information.
metrics	Array of MetricItemResultAPI objects	Metric list.

Table 4-267 MetaDataSetSeries

Parameter	Type	Description
count	Integer	Number of returned records.
offset	Integer	Start of the next page, which is used for pagination. null: No more data.
total	Integer	Total number of records.
nextToken	Integer	Offset.

Table 4-268 MetricItemResultAPI

Parameter	Type	Description
dimensions	Array of Dimension objects	List of time series dimensions. To query the time series dimension list, call the API Querying Time Series Objects .
dimensionvaluehash	String	Metric hash value.
metricName	String	Metric name.
namespace	String	Namespace.
unit	String	Metric unit.

Table 4-269 Dimension

Parameter	Type	Description
name	String	Dimension name.
value	String	Dimension value.

Example Requests

- Query metrics by inventory ID.

```
https://{{Endpoint}}/v1/{{project_id}}/ams/metrics
```

```
{  
    "metricItems" : [ {  
        "namespace" : "PAAS.CONTAINER",  
        "dimensions" : [ {  
            "name" : "appName",  
            "value" : "aomApp"  
        }, {  
            "name" : "clusterName",  
            "value" : "aomCluster"  
        } ]  
    } ]  
}
```

- Query metrics by namespace, appName, and clusterName.

```
https://{{Endpoint}}/v1/{{project_id}}/ams/metrics?type=inventory
```

```
{  
    "inventoryId" : "application_xxxxxxx-xxxx-xxxx-xxxx-xxxxx3fee10"  
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "errorCode" : "SVCSTG_AMS_2000000",  
    "errorMessage" : "success",  
    "metaData" : {  
        "count" : 1,  
        "offset" : 1,  
        "nextToken" : null,  
        "total" : 1  
    },  
    "metrics" : [ {  
        "namespace" : "PAAS.CONTAINER",  
        "metricName" : "aom_process_cpu_usage",  
        "unit" : "Percent",  
        "dimensions" : [ {  
            "name" : "appName",  
            "value" : "aomApp"  
        } ]  
    } ]  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.

Status Code	Description
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2.4 Querying Monitoring Data

Function

This API is used to query monitoring data of metrics within a specified period. You can specify a dimension or period to query. (This API will not evolve. You are advised to use [Querying Expression Calculation Results in a Specified Period Using the POST Method](#).)

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/ams/metricdata

Table 4-270 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-271 Query Parameters

Parameter	Mandatory	Type	Description
fillValue	No	String	<p>Value filled for breakpoints in monitoring data. Default value: -1.</p> <ul style="list-style-type: none"> • -1: Breakpoints are filled with -1. • 0: Breakpoints are filled with 0. • null: Breakpoints are filled with null. • average: Breakpoints are filled with the average value of adjacent valid data. If there is no valid data, breakpoints are filled with null. <p>Enumeration values:</p> <ul style="list-style-type: none"> • -1 • 0 • null • average

Request Parameters

Table 4-272 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	<p>Message body type or format. Content type, which is application/json.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • application/json

Table 4-273 Request body parameters

Parameter	Mandatory	Type	Description
metrics	Yes	Array of MetricQuery MetricParam objects	Metric list. A JSON array can contain up to 20 objects.
period	Yes	Integer	Monitoring data granularity. Options: <ul style="list-style-type: none">• 60: The granularity is 1 minute.• 300: The granularity is 5 minutes.• 900: The granularity is 15 minutes.• 3600: The granularity is 1 hour.
statistics	Yes	Array of strings	Statistic. Values: maximum, minimum, sum, average, and sampleCount.

Parameter	Mandatory	Type	Description
timerange	Yes	String	<p>Time range specified to query data of the last N minutes when the client time is inconsistent with the server time. It can also be used to accurately query the data of a specified period.</p> <p>Example:</p> <ul style="list-style-type: none">• -1.-1.60: indicates that the data of the latest 60 minutes is queried. This query is based on the server time regardless of the current client time.• 1650852000000.165085230000.5: indicates the five minutes from 10:00:00 to 10:05:00 on April 25, 2022 GMT+08:00. <p>Format:</p> <p>startTimelnMillis.endTimelnMillis.durationInMinutes</p> <p>Parameter description:</p> <ul style="list-style-type: none">• startTimelnMillis: start time (UTC) of the query, in milliseconds. If this parameter is set to -1, the server calculates the start time as follows: $\text{endTimeInMillis} - \text{durationInMinutes} \times 60 \times 1000$. For example, -1.1650852300000.5 is equivalent to 1650852000000.165085230000.5.• endTimeInMillis: end time (UTC) of the query, in milliseconds. If this parameter is set to -1, the server calculates the end time as follows: $\text{startTimelnMillis} + \text{durationInMinutes} \times 60 \times 1000$. If the calculated end time is later than the current system time, the current system time is used.

Parameter	Mandatory	Type	Description
			<p>For example, 1650852000000.-1.5 is equivalent to 1650852000000.165085230000.5.</p> <ul style="list-style-type: none">durationInMinutes: query time span, in minutes. The value must be greater than 0 and greater than or equal to the result of $(endTimeInMillis - startTimeInMillis) / (60 \times 1000) - 1$. If both the start time and end time are set to -1, the system sets the end time to the current UTC time (in milliseconds) and calculates the start time as follows: $endTimeInMillis - durationInMinutes \times 60 \times 1000$. For example, -1.-1.60 indicates the latest 60 minutes. <p>Constraint:</p> <p>In a single request, the following condition must be met: $durationInMinutes \times 60 / period \leq 1,440$</p>

Table 4-274 MetricQueryMetricParam

Parameter	Mandatory	Type	Description
dimensions	Yes	Array of Dimension objects	List of time series dimensions. To query the time series dimension list, call the API Querying Time Series Objects . Neither the array nor the name/value of any dimension in the array can be left blank.

Parameter	Mandatory	Type	Description
metricName	Yes	String	Metric name. Length: 1 to 255 characters. Options: basic metrics (such as cpuUsage and cpuCoreUsed) provided by AOM, and custom metrics. To query metrics, call the API Querying Tag Values .
namespace	Yes	String	Metric namespace. Options: <ul style="list-style-type: none">• PAAS.CONTAINER: namespace of component, instance, process, and container metrics.• PAAS.NODE: namespace of host, network, disk, and file system metrics.• PAAS.SLA: namespace of SLA metrics.• PAAS.AGGR: namespace of cluster metrics.• CUSTOMMETRICS: default namespace of custom metrics. Custom namespaces are also supported. To query namespaces, call the API Querying Tag Values .

Table 4-275 Dimension

Parameter	Mandatory	Type	Description
name	Yes	String	Dimension name.
value	Yes	String	Dimension value.

Response Parameters

Status code: 200

Table 4-276 Response body parameters

Parameter	Type	Description
errorCode	String	Response code.

Parameter	Type	Description
errorMessage	String	Response message.
metrics	Array of MetricDataValue objects	Metric list.

Table 4-277 MetricDataValue

Parameter	Type	Description
dataPoints	Array of MetricDataPoints objects	Key metric.
metric	MetricQueryMetri cParam object	Query parameters.

Table 4-278 MetricDataPoints

Parameter	Type	Description
statistics	Array of StatisticValue objects	Statistic.
timestamp	Long	Timestamp.
unit	String	Time series unit.

Table 4-279 StatisticValue

Parameter	Type	Description
statistic	String	Statistic.
value	Double	Statistical result.

Table 4-280 MetricQueryMetricParam

Parameter	Type	Description
dimensions	Array of Dimension objects	List of time series dimensions. To query the time series dimension list, call the API Querying Time Series Objects . Neither the array nor the name/value of any dimension in the array can be left blank.
metricName	String	Metric name. Length: 1 to 255 characters. Options: basic metrics (such as cpuUsage and cpuCoreUsed) provided by AOM, and custom metrics. To query metrics, call the API Querying Tag Values .
namespace	String	Metric namespace. Options: <ul style="list-style-type: none">• PAAS.CONTAINER: namespace of component, instance, process, and container metrics.• PAAS.NODE: namespace of host, network, disk, and file system metrics.• PAAS.SLA: namespace of SLA metrics.• PAAS.AGGR: namespace of cluster metrics.• CUSTOMMETRICS: default namespace of custom metrics. Custom namespaces are also supported. To query namespaces, call the API Querying Tag Values .

Table 4-281 Dimension

Parameter	Type	Description
name	String	Dimension name.
value	String	Dimension value.

Example Requests

Query the monitoring data of **cpuUsage** in the **PAAS.CONTAINER** namespace in the last five minutes.

```
https://{{Endpoint}}/v1/{{project_id}}/ams/metricdata
```

```
{  
  "metrics" : [ {  
    "dimensions" : [ {  
      "name" : "appName",  
      "value" : "aomApp"  
    } ],  
    "metricName" : "cpuUsage",  
    "namespace" : "PAAS.CONTAINER"  
  } ],  
  "period" : 60,  
  "statistics" : [ "maximum", "minimum", "sum" ],  
  "timerange" : "-1.-1.5"  
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "errorCode" : "SVCSTG_AMS_2000000",  
  "errorMessage" : "success",  
  "metrics" : [ {  
    "metric" : {  
      "namespace" : "PAAS.CONTAINER",  
      "metricName" : "cpuUsage",  
      "dimensions" : [ {  
        "name" : "appName",  
        "value" : "aomApp"  
      } ]  
    },  
    "dataPoints" : [ {  
      "timestamp" : "1467892800000",  
      "unit" : "Percent",  
      "statistics" : [ {  
        "statistic" : "maximum",  
        "value" : "23"  
      } ]  
    } ]  
  } ]  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Status Code	Description
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2.5 Adding Monitoring Data

Function

This API is used to add one or more monitoring data records to a server.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/ams/report/metricdata

Table 4-282 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-283 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-284 Request body parameters

Parameter	Mandatory	Type	Description
[items]	Yes	Array of MetricDataItem objects	Monitoring data items to be added.

Table 4-285 MetricDataItem

Parameter	Mandatory	Type	Description
collect_time	Yes	Long	Data collection time (Unix timestamp, in ms), which ranges from the last 24 hours to the next 30 minutes. Example: 2024-10-16 16:03:01 needs to be converted to Unix timestamp 1702759381000 using a tool. If the data reporting time is earlier than 08:00 of the current day, only the data generated after 08:00 of the current day is displayed on the metric monitoring page.
metric	Yes	MetricItemInfo object	Metric details.
values	Yes	Array of ValueData objects	Metric value.

Table 4-286 MetricItemInfo

Parameter	Mandatory	Type	Description
dimensions	Yes	Array of Dimension2 objects	List of metric dimensions. To query the metric dimension list, call the API Querying Time Series Objects . A maximum of 50 dimensions are supported. Each dimension is in JSON format.

Parameter	Mandatory	Type	Description
namespace	Yes	String	<p>Metric namespace. To query metric namespaces, call the API Querying Tag Values. To use a custom namespace, ensure that:</p> <p>It cannot contain colons (:). It must be in the format of "service.item". The value must contain 3 to 32 characters starting with a letter. Only letters, digits, and underscores (_) are allowed. In addition, "service" cannot be "PAAS".</p>

Table 4-287 Dimension2

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the custom metric dimension. Length: 1 to 32 characters.
value	Yes	String	Value of the custom metric dimension. Length: 1 to 64 characters.

Table 4-288 ValueData

Parameter	Mandatory	Type	Description
metric_name	Yes	String	Metric name. Length: 1 to 255 characters.
type	No	String	<p>Metric data type.</p> <ul style="list-style-type: none">• int: integer.• float: floating-point number. <p>Enumeration values:</p> <ul style="list-style-type: none">• int• float
unit	No	String	Data unit. Length: up to 32 characters.
value	Yes	Double	Metric value. Value range: valid numeral type.

Response Parameters

Status code: 200

Table 4-289 Response body parameters

Parameter	Type	Description
errorCode	String	Response code.
errorMessage	String	Response message.

Example Requests

Add a piece of monitoring data to the server. (In the following example, set "collect_time" to the latest timestamp.)

```
https://{{Endpoint}}/v1/{{project_id}}/ams/report/metricdata
```

```
[ {  
    "metric" : {  
        "namespace" : "NOAAES.ESC",  
        "dimensions" : [ {  
            "name" : "instance_id",  
            "value" : "instance-101"  
        } ]  
    },  
    "values" : [ {  
        "unit" : "percent",  
        "metric_name" : "cpu_util",  
        "type" : "int",  
        "value" : 35  
    } ],  
    "collect_time" : 1467787152000  
} ]
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "errorCode" : "SVCSTG_AMS_2000000",  
    "errorMessage" : "success"  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.

Status Code	Description
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2.6 Adding or Modifying One or More Service Discovery Rules

Function

This API is used to add or modify one or more service discovery rules. A maximum of 100 rules can be added to a project.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v1/{project_id}/inv/servicediscoveryrules

Table 4-290 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-291 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-292 Request body parameters

Parameter	Mandatory	Type	Description
appRules	No	Array of AppRules objects	Service parameters.

Table 4-293 AppRules

Parameter	Mandatory	Type	Description
createTime	No	String	Creation time. When creating a service discovery rule, leave this parameter blank. When modifying a service discovery rule, enter the returned createTime.
enable	Yes	Boolean	Whether a rule is enabled. Values: true and false.
eventName	Yes	String	aom_inventory_rules_event Rule event name. For service discovery, the fixed value is aom_inventory_rules_event.
hostid	No	Array of strings	Host ID. Currently, this parameter is not used and can be left blank.

Parameter	Mandatory	Type	Description
id	Yes	String	Rule ID. When creating a service discovery rule, leave this parameter blank. When modifying a service discovery rule, enter a rule ID.
name	Yes	String	Rule name, which contains a maximum of 64 characters. It must start with a lowercase letter but cannot end with a hyphen (-). Only digits, lowercase letters, and hyphens are allowed.
projectid	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .
spec	Yes	AppRulesSpec object	Rule details.
desc	No	String	Custom description

Table 4-294 AppRulesSpec

Parameter	Mandatory	Type	Description
appType	Yes	String	Service type, which is used only for rule classification and UI display. You can enter any field. For example, enter Java or Python by technology stack, or enter collector or database by function.
attrList	No	Array of strings	Attribute list. Currently, this parameter is not used and can be left blank. Values: cmdLine and env.
detectLog	Yes	String	Whether to enable log collection. Values: true and false.

Parameter	Mandatory	Type	Description
discoveryRule	Yes	Array of DiscoveryRule objects	Discovery rule. If the array contains multiple conditions, only the processes that meet all the conditions will be matched. If the value of checkType is cmdLine, set the value of checkMode to contain. checkContent is in the format of ["xxx"], indicating that the process must contain the xxx parameter. If the value of checkType is env, set the value of checkMode to contain. checkContent is in the format of ["k1","v1"], indicating that the process must contain the environment variable whose name is k1 and value is v1. If the value of checkType is scope, set the value of checkMode to equals. checkContent is in the format of ["hostId1","hostId2"], indicating that the rule takes effect only on specified nodes. If no nodes are specified, the rule applies to all nodes of the project.
isDefaultRule	Yes	String	Whether the rule is the default one. Values: true and false.
isDetect	Yes	String	Whether the scenario is a pre-check scenario. No rules will be saved in the pre-check scenario. This scenario is designed only to check whether a rule can detect node processes before it is delivered. Values: true and false.
logFileFix	Yes	Array of strings	Log file suffix. Values: log, trace, and out.

Parameter	Mandatory	Type	Description
logPathRule	No	Array of LogPathRule objects	Log path configuration rule. If cmdLineHash is a fixed string, logs in the specified log path or log file are collected. Otherwise, only the files whose names end with .log or .trace are collected. If the value of nameType is cmdLineHash, args is in the format of ["00001"] and value is in the format of ["/xxx/xx.log"], indicating that the log path is /xxx/xx.log when the startup command is 00001.
nameRule	Yes	NameRule object	Naming rules for discovered services and applications.
priority	Yes	Integer	Rule priority. Value range: 1 to 9999. Default value: 9999.
dataSource	No	String	Data source.
editable	No	String	Whether to support editing. Options: true and false.
aom_metric_relabel_configs	No	Object	Metric configuration.

Table 4-295 DiscoveryRule

Parameter	Mandatory	Type	Description
checkContent	Yes	Array of strings	Matched value.
checkMode	Yes	String	Match condition. Values: contain and equals.
checkType	Yes	String	Match type. Values: cmdLine, env, and scope.

Table 4-296 LogPathRule

Parameter	Mandatory	Type	Description
args	Yes	Array of strings	Command.

Parameter	Mandatory	Type	Description
nameType	Yes	String	Value type, which can be cmdLineHash.
value	Yes	Array of strings	Log path.

Table 4-297 NameRule

Parameter	Mandatory	Type	Description
appNameRule	Yes	Array of AppNameRule objects	Service name rule. If there are multiple objects in the array, the character strings extracted from these objects constitute the service name. If the value of nameType is cmdLine, args is in the format of ["start", "end"], indicating that the characters between start and end in the command are extracted. If the value of nameType is cmdLine, args is in the format of ["aa"], indicating that the environment variable named aa is extracted. If the value of nameType is str, args is in the format of ["fix"], indicating that the service name is suffixed with fix. If the value of nameType is cmdLineHash, args is in the format of ["0001"] and value is in the format of ["ser"], indicating that the service name is ser when the startup command is 0001.

Parameter	Mandatory	Type	Description
applicationNameRule	Yes	Array of ApplicationNameRule objects	Application name rule.If the value of nameType is cmdLine, args is in the format of ["start", "end"], indicating that the characters between start and end in the command are extracted.If the value of nameType is cmdLine, args is in the format of ["aa"], indicating that the environment variable named aa is extracted.If the value of nameType is str, args is in the format of ["fix"], indicating that the service name is suffixed with fix.If the value of nameType is cmdLineHash, args is in the format of ["0001"] and value is in the format of ["ser"], indicating that the application name is ser when the startup command is 0001.

Table 4-298 AppNameRule

Parameter	Mandatory	Type	Description
nameType	Yes	String	Value type. Values: cmdLineHash, cmdLine, env, and str.
args	Yes	Array of strings	Input value.
value	No	Array of strings	Service name, which is mandatory only when the value of nameType is cmdLineHash.

Table 4-299 ApplicationNameRule

Parameter	Mandatory	Type	Description
nameType	Yes	String	Value type. Values: cmdLineHash, cmdLine, env, and str.

Parameter	Mandatory	Type	Description
args	Yes	Array of strings	Input value.
value	No	Array of strings	Service name, which is mandatory only when the value of nameType is cmdLineHash.

Response Parameters

Status code: 200

Table 4-300 Response body parameters

Parameter	Type	Description
errorCode	String	Response code.
errorMessage	String	Response message.
responseStatus	Integer	Response status code (no longer used).
id	Array of strings	Service discovery rule ID list. This parameter is used during cross-AZ configuration synchronization.
results	Array of Map<String, String> objects	Details about service discovery rules.

Example Requests

Add an application discovery rule whose name is **aom_inventory_rules_event** and project ID is **684fc87a79d7xxxx22e62a7da95b**.

https://{{endpoint}}/v1/{{project_id}}/inv/servicediscoveryrules

```
{  
    "appRules" : [ {  
        "createTime" : "1694705766730",  
        "enable" : true,  
        "name" : "ica**nt",  
        "eventName" : "aom_inventory_rules_event",  
        "hostid" : [ ],  
        "id" : "b53a5152-****-****-302367e04c0b",  
        "projectid" : "684fc87a79d7xxxx22e62a7da95b",  
        "spec" : {  
            "detectLog" : "true",  
            "editable" : null,  
            "logPathRule" : [ ],  
            "priority" : 9999,  
            "attrList" : [ "cmdLine" ],  
            "nameRule" : {  
                "rule" : "cmdLineHash",  
                "value" : "aom_inventory_rules_event"  
            }  
        }  
    } ]  
}
```

```
"appNameRule" : [ {
    "args" : [ "/opt/***** -DNFW=ica**nt" ],
    "nameType" : "cmdLineHash",
    "value" : [ "aicagentserver" ]
} ],
"applicationNameRule" : [ {
    "args" : [ "/opt/***** -DNFW=ica**nt" ],
    "nameType" : "cmdLineHash",
    "value" : [ "aica**nt" ]
} ]
},
"appType" : "",
"aom_metric_relabel_configs" : null,
"logFileFix" : [ "log", "trace", "out" ],
"isDetect" : "false",
"isDefaultRule" : null,
"dataSource" : null,
"discoveryRule" : [ {
    "checkType" : "cmdLine",
    "checkContent" : [ "-DNFW=ica**nt" ],
    "checkMode" : "contain"
} ],
},
"desc" : "Custom description"
} ]
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
    "errorCode" : "SVCSTG.INV.2000000",
    "errorMessage" : null,
    "id" : [ ],
    "results" : [ {
        "name" : "aom_inventory_rules_event",
        "id" : "b53a5152-****-****-****-302367e04c0b"
    } ]
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{
    "errorCode" : "SVCSTG.INV.4000115",
    "errorMessage" : "apprule name has existed",
    "id" : [ ],
    "results" : [ ]
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.

Status Code	Description
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2.7 Deleting a Service Discovery Rule

Function

This API is used to delete a service discovery rule.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/{project_id}/inv/servicediscoveryrules

Table 4-301 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-302 Query Parameters

Parameter	Mandatory	Type	Description
appRuleIds	Yes	Array of strings	Discovery rule ID. Multiple IDs need to be separated by commas (,). The parameter cannot be empty.

Request Parameters

Table 4-303 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">● application/json

Response Parameters

Status code: 200

Table 4-304 Response body parameters

Parameter	Type	Description
errorCode	String	Response code.
errorMessage	String	Response message.
responseStatus	Integer	Response status code (no longer used).
id	Array of strings	Service discovery rule ID list. This parameter is used during cross-AZ configuration synchronization.

Example Requests

Delete a service discovery rule with a specified ID.

```
https://{{Endpoint}}/v1/{{project_id}}/inv/servicediscoveryrules?appRuleIds=b788349e-62b2-xxxx-xxxx-02c611d59801
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "errorCode" : "SVCSTG.INV.2000000",  
  "errorMessage" : null,  
  "id" : [ ]  
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
  "errorCode" : "SVCSTG.INV.40000118",  
  "errorMessage" : "Request param is invalid",  
  "trace_id" : ""  
}
```

Status code: 404

Not Found: The requested resource could not be found. The client should not repeat this request without modification.

```
{  
  "errorCode" : "SVCSTG.INV.4040000",  
  "errorMessage" : "Inventory does not exists",  
  "id" : [ ]  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
  "error_code" : "APM.00000500",  
  "error_msg" : "Internal Server Error",  
  "trace_id" : ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
404	Not Found: The requested resource could not be found. The client should not repeat this request without modification.

Status Code	Description
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Unauthorized: The authentication information is incorrect or invalid.

Error Codes

See [Error Codes](#).

4.2.8 Querying Existing Service Discovery Rules

Function

This API is used to query existing service discovery rules in the system.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/inv/servicediscoveryrules

Table 4-305 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-306 Query Parameters

Parameter	Mandatory	Type	Description
id	No	String	Service discovery rule ID, which corresponds to a service discovery rule. If this parameter is left blank, all service discovery rules in the project are returned.

Request Parameters

Table 4-307 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	No	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Response Parameters

Status code: 200

Table 4-308 Response body parameters

Parameter	Type	Description
appRules	Array of AppRules objects	Rule information.
errorCode	String	Response code. AOM_INVENTORY_2000000: Success response.
errorMessage	String	Response message.
id	Array of strings	Service discovery rule ID list. This parameter is used during cross-AZ configuration synchronization.

Table 4-309 AppRules

Parameter	Type	Description
createTime	String	Creation time. When creating a service discovery rule, leave this parameter blank. When modifying a service discovery rule, enter the returned createTime.
enable	Boolean	Whether a rule is enabled. Values: true and false.

Parameter	Type	Description
eventName	String	aom_inventory_rules_event Rule event name. For service discovery, the fixed value is aom_inventory_rules_event.
hostid	Array of strings	Host ID. Currently, this parameter is not used and can be left blank.
id	String	Rule ID. When creating a service discovery rule, leave this parameter blank. When modifying a service discovery rule, enter a rule ID.
name	String	Rule name, which contains a maximum of 64 characters. It must start with a lowercase letter but cannot end with a hyphen (-). Only digits, lowercase letters, and hyphens are allowed.
projectid	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .
spec	AppRulesSpec object	Rule details.
desc	String	Custom description

Table 4-310 AppRulesSpec

Parameter	Type	Description
appType	String	Service type, which is used only for rule classification and UI display. You can enter any field. For example, enter Java or Python by technology stack, or enter collector or database by function.
attrList	Array of strings	Attribute list. Currently, this parameter is not used and can be left blank. Values: cmdLine and env.
detectLog	String	Whether to enable log collection. Values: true and false.

Parameter	Type	Description
discoveryRule	Array of DiscoveryRule objects	Discovery rule. If the array contains multiple conditions, only the processes that meet all the conditions will be matched. If the value of checkType is cmdLine, set the value of checkMode to contain. checkContent is in the format of ["xxx"], indicating that the process must contain the xxx parameter. If the value of checkType is env, set the value of checkMode to contain. checkContent is in the format of ["k1","v1"], indicating that the process must contain the environment variable whose name is k1 and value is v1. If the value of checkType is scope, set the value of checkMode to equals. checkContent is in the format of ["hostId1","hostId2"], indicating that the rule takes effect only on specified nodes. If no nodes are specified, the rule applies to all nodes of the project.
isDefaultRule	String	Whether the rule is the default one. Values: true and false.
isDetect	String	Whether the scenario is a pre-check scenario. No rules will be saved in the pre-check scenario. This scenario is designed only to check whether a rule can detect node processes before it is delivered. Values: true and false.
logFileFix	Array of strings	Log file suffix. Values: log, trace, and out.
logPathRule	Array of LogPathRule objects	Log path configuration rule. If cmdLineHash is a fixed string, logs in the specified log path or log file are collected. Otherwise, only the files whose names end with .log or .trace are collected. If the value of nameType is cmdLineHash, args is in the format of ["00001"] and value is in the format of ["/xxx/xx.log"], indicating that the log path is /xxx/xx.log when the startup command is 00001.
nameRule	NameRule object	Naming rules for discovered services and applications.

Parameter	Type	Description
priority	Integer	Rule priority. Value range: 1 to 9999. Default value: 9999.
dataSource	String	Data source.
editable	String	Whether to support editing. Options: true and false.
aom_metric_relabel_configs	Object	Metric configuration.

Table 4-311 DiscoveryRule

Parameter	Type	Description
checkContent	Array of strings	Matched value.
checkMode	String	Match condition. Values: contain and equals.
checkType	String	Match type. Values: cmdLine, env, and scope.

Table 4-312 LogPathRule

Parameter	Type	Description
args	Array of strings	Command.
nameType	String	Value type, which can be cmdLineHash.
value	Array of strings	Log path.

Table 4-313 NameRule

Parameter	Type	Description
appNameRule	Array of AppNameRule objects	Service name rule. If there are multiple objects in the array, the character strings extracted from these objects constitute the service name. If the value of nameType is cmdLine, args is in the format of ["start", "end"], indicating that the characters between start and end in the command are extracted. If the value of nameType is cmdLine, args is in the format of ["aa"], indicating that the environment variable named aa is extracted. If the value of nameType is str, args is in the format of ["fix"], indicating that the service name is suffixed with fix. If the value of nameType is cmdLineHash, args is in the format of ["0001"] and value is in the format of ["ser"], indicating that the service name is ser when the startup command is 0001.
applicationNameRule	Array of ApplicationNameRule objects	Application name rule. If the value of nameType is cmdLine, args is in the format of ["start", "end"], indicating that the characters between start and end in the command are extracted. If the value of nameType is cmdLine, args is in the format of ["aa"], indicating that the environment variable named aa is extracted. If the value of nameType is str, args is in the format of ["fix"], indicating that the service name is suffixed with fix. If the value of nameType is cmdLineHash, args is in the format of ["0001"] and value is in the format of ["ser"], indicating that the application name is ser when the startup command is 0001.

Table 4-314 AppNameRule

Parameter	Type	Description
nameType	String	Value type. Values: cmdLineHash, cmdLine, env, and str.
args	Array of strings	Input value.

Parameter	Type	Description
value	Array of strings	Service name, which is mandatory only when the value of nameType is cmdLineHash.

Table 4-315 ApplicationNameRule

Parameter	Type	Description
nameType	String	Value type. Values: cmdLineHash, cmdLine, env, and str.
args	Array of strings	Input value.
value	Array of strings	Service name, which is mandatory only when the value of nameType is cmdLineHash.

Example Requests

Query the application discovery rule whose ID is **-6066-****-8cc7-**.

```
https://{endpoint}/v1/{project_id}/inv/servicediscoveryrules?id=*****-6066-***-8cc7-*****
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "appRules" : [ {
    "createTime" : "1694705814424",
    "enable" : true,
    "name" : "ic�aaant",
    "eventName" : "aom_inventory_rules_event",
    "hostid" : [ ],
    "id" : "*****-6066-***-8cc7-*****",
    "projectid" : "684fc87a79d7xxxx22e62a7da95b",
    "spec" : {
      "detectLog" : "true",
      "editable" : null,
      "logPathRule" : [ ],
      "priority" : 9999,
      "attrList" : [ "cmdLine" ],
      "nameRule" : [
        "appNameRule" : [ {
          "args" : [ "/opt/***** -DNFW=ica**nt" ],
          "nameType" : "cmdLineHash",
          "value" : [ "aicagentserver" ]
        } ],
        "applicationNameRule" : [ {
          "args" : [ "/opt/***** -DNFW=ica**nt" ],
          "nameType" : "cmdLineHash",
          "value" : [ "aica**nt" ]
        } ]
      ],
      "ruleType" : "cmdLine"
    }
  }
},
```

```
"appType" : "",  
"aom_metric_relabel_configs" : null,  
"logFileFix" : [ "log", "trace", "out" ],  
"isDetect" : "false",  
"isDefaultRule" : null,  
"dataSource" : null,  
"discoveryRule" : [ {  
    "checkType" : "cmdLine",  
    "checkContent" : [ "-DNFW=ica**nt" ],  
    "checkMode" : "contain"  
} ]  
},  
"desc" : "Custom description"  
},  
"errorMessage" : null,  
"errorCode" : "SVCSTG.INV.2000000",  
"id" : [ ]  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
404	Not Found: The requested resource could not be found. The client should not repeat this request without modification.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2.9 Adding a Threshold Rule

Function

This API is used to add a threshold rule.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v2/{project_id}/alarm-rules

Table 4-316 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-317 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-318 Request body parameters

Parameter	Mandatory	Type	Description
action_enabled	No	Boolean	Whether to enable notification.
alarm_actions	No	Array of strings	List of alarm notifications.
alarm_advice	No	String	Alarm clearance suggestion.
alarm_description	No	String	Threshold rule description.

Parameter	Mandatory	Type	Description
alarm_level	Yes	Integer	<p>Alarm severity.</p> <ul style="list-style-type: none"> • 1: critical. • 2: major. • 3: minor. • 4: info. <p>Enumeration values:</p> <ul style="list-style-type: none"> • 1 • 2 • 3 • 4
alarm_rule_name	Yes	String	<p>Threshold rule name.</p> <p>Enter a maximum of 100 characters and do not start or end with a special character. Only letters, digits, underscores (_), and hyphens (-) are allowed.</p>
comparison_operator	Yes	String	<p>Threshold-crossing condition.</p> <ul style="list-style-type: none"> • <: lower than the threshold. • NOTE : greater than the threshold. • <=: less than or equal to the threshold. • NOTE =: greater than or equal to the threshold. <p>Enumeration values:</p> <ul style="list-style-type: none"> • < • > • <= • >=
dimensions	Yes	Array of Dimension objects	<p>List of time series dimensions.</p> <p>To query the time series dimension list, call the API Querying Time Series Objects.</p>
evaluation_periods	Yes	Integer	Interval.
is_turn_on	No	Boolean	Whether to enable the threshold rule.

Parameter	Mandatory	Type	Description
insufficient_data_actions	No	Array of strings	List of insufficient data notifications.
metric_name	Yes	String	Time series name. Length: 1 to 255 characters.
namespace	Yes	String	Time series objects' namespace.
ok_actions	No	Array of strings	List of normal status notifications.
period	Yes	Integer	Statistical period. Options: <ul style="list-style-type: none"> • 60000: one minute. • 300000: five minutes. • 900000: 15 minutes. • 3600000: one hour. Enumeration values: <ul style="list-style-type: none"> • 60000 • 300000 • 900000 • 3600000
statistic	Yes	String	Statistic. Enumeration values: <ul style="list-style-type: none"> • maximum • minimum • average • sum • sampleCount
threshold	Yes	String	Threshold value.
unit	Yes	String	Time series unit.

Table 4-319 Dimension

Parameter	Mandatory	Type	Description
name	Yes	String	Dimension name.
value	Yes	String	Dimension value.

Response Parameters

Status code: 200

Table 4-320 Response body parameters

Parameter	Type	Description
alarm_rule_id	Long	Threshold rule ID.

Status code: 400

Table 4-321 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Trace ID, which is used to search for logs and locate faults. If 2xx is returned, trace_id is empty. If 4xx , trace_id is not empty.

Status code: 500

Table 4-322 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Trace ID, which is used to search for logs and locate faults. If 2xx is returned, trace_id is empty. If 4xx , trace_id is not empty.

Example Requests

Add a threshold rule whose name is **testaoom**, alarm severity is **3**, namespace is **PAAS.CONTAINER**, and statistical mode is **average**.

```
https://{{Endpoint}}/v2/{{project_id}}/alarm-rules
{
    "is_turn_on" : true,
    "action_enabled" : false,
    "alarm_actions" : [ ],
    "alarm_advice" : "",
```

```
"alarm_description" : "",  
"alarm_level" : 3,  
"alarm_rule_name" : "aom_rule",  
"comparison_operator" : ">=",  
"dimensions" : [ {  
    "name" : "appName",  
    "value" : "rhm-broker"  
} ],  
"evaluation_periods" : 1,  
"insufficient_data_actions" : [ ],  
"metric_name" : "cpuCoreLimit",  
"namespace" : "PAAS.CONTAINER",  
"ok_actions" : [ ],  
"period" : 60000,  
"statistic" : "average",  
"threshold" : 0,  
"unit" : "Core"  
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "alarm_rule_id" : 1134050083814244400  
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.02001102",  
    "error_msg" : "this Threshold rule name has been existed",  
    "error_type" : "BAD_REQUEST",  
    "trace_id" : ""  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "AOM.02001500",  
    "error_msg" : "internal server error",  
    "error_type" : "INTERNAL_SERVER_ERROR",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.

Status Code	Description
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2.10 Querying the Threshold Rule List

Function

This API is used to query the threshold rule list. (This is an AOM 1.0 API and will be brought offline soon.)

Calling Method

For details, see [Calling APIs](#).

URI

GET /v2/{project_id}/alarm-rules

Table 4-323 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-324 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	String	Pagination information.

Parameter	Mandatory	Type	Description
limit	No	Integer	Maximum number of returned records. Value range: 1–1000. Default value: 1000.

Request Parameters

Table 4-325 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	No	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Response Parameters

Status code: 200

Table 4-326 Response body parameters

Parameter	Type	Description
meta_data	MetaData object	Metadata, including pagination information.
thresholds	Array of QueryAlarmResult objects	Parameters specified for querying a threshold rule.

Table 4-327 MetaData

Parameter	Type	Description
count	Integer	Number of returned records.
start	String	Start of the next page, which is used for pagination. null: No more data.
total	Integer	Total number of records.

Table 4-328 QueryAlarmResult

Parameter	Type	Description
action_enabled	Boolean	Whether to enable notification.
alarm_actions	Array of strings	List of alarm notifications.
alarm_advice	String	Alarm clearance suggestion.
alarm_description	String	Threshold rule description.
alarm_level	String	Alarm severity.
alarm_rule_id	String	Threshold rule ID.
alarm_rule_name	String	Threshold rule name.
comparison_operator	String	Comparison operator.
dimensions	Array of Dimension objects	List of time series dimensions. To query the time series dimension list, call the API Querying Time Series Objects .
evaluation_periods	Integer	Interval.
id_turn_on	Boolean	Whether to enable the threshold rule.
insufficient_data_actions	Array of strings	List of insufficient data notifications.
metric_name	String	Time series name.
namespace	String	Time series objects' namespace.
ok_actions	Array of strings	List of normal status notifications.
period	Integer	Statistical period.
policy_name	String	Threshold rule name.
resources	Array of strings	Resource information (discarded).
state_reason	String	Cause description.
state_updated_timestamp	String	Time when the status was updated.
state_value	String	Service status.
statistic	String	Statistic.
threshold	String	Threshold value.
type	String	Threshold rule type.
unit	String	Threshold unit.

Table 4-329 Dimension

Parameter	Type	Description
name	String	Dimension name.
value	String	Dimension value.

Status code: 400

Table 4-330 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Trace ID, which is used to search for logs and locate faults. If 2xx is returned, trace_id is empty. If 4xx , trace_id is not empty.

Example Requests

Obtain the alarm rule list of a user whose ID is **Project_Id**.

https://{{EndPoint_Id}}/v2/{{Project_Id}}/alarm-rules

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "meta_data" : [ {  
    "count" : 10,  
    "total" : 100  
  } ],  
  "thresholds" : [ {  
    "action_enabled" : false,  
    "alarm_actions" : null,  
    "alarm_advice" : null,  
    "alarm_description" : null,  
    "alarm_level" : 3,  
    "alarm_rule_id" : 2137,  
    "alarm_rule_name" : "aom_rule",  
    "comparison_operator" : ">=",  
    "dimensions" : [ {  
      "name" : "appName"  
    }, {  
      "name" : "appVersion"  
    } ]  
  } ]
```

```
        "value" : "rhm-broker"
    } ],
    "evaluation_periods" : 1,
    "id_turn_on" : true,
    "insufficient_data_actions" : null,
    "metric_name" : "cpuCoreLimit",
    "namespace" : "PAAS.CONTAINER",
    "ok_actions" : null,
    "period" : 60000,
    "policy_name" : "23",
    "resources" : [ ],
    "state_reason" : null,
    "state_updated_timestamp" : null,
    "state_value" : "alarm",
    "statistic" : "average",
    "threshold" : 0,
    "type" : "single",
    "unit" : "Core"
}
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{
  "error_code" : "AOM.02003SVCSTG_AMS_4000123",
  "error_msg" : "The rule does not exist",
  "error_type" : "BAD_REQUEST",
  "trace_id" : ""
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2.11 Modifying a Threshold Rule

Function

This API is used to modify a threshold rule.

Calling Method

For details, see [Calling APIs](#).

URI

PUT /v2/{project_id}/alarm-rules

Table 4-331 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-332 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-333 Request body parameters

Parameter	Mandatory	Type	Description
action_enabled	No	Boolean	Whether to enable notification.
alarm_actions	No	Array of strings	List of alarm notifications.

Parameter	Mandatory	Type	Description
alarm_advice	No	String	Alarm clearance suggestion, which contains a maximum of 255 characters.
alarm_description	No	String	Threshold rule description, which contains a maximum of 1024 characters.
alarm_level	Yes	Integer	<p>Alarm severity.</p> <p>Values: 1 (critical), 2 (major), 3 (minor), and 4 (warning).</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • 1 • 2 • 3 • 4
alarm_rule_name	Yes	String	<p>Threshold rule name.</p> <p>Enter a maximum of 100 characters and do not start or end with a special character. Only letters, digits, underscores (_), and hyphens (-) are allowed.</p>
comparison_operator	Yes	String	<p>Comparison operator. Options: <: less than the threshold; >: greater than the threshold; <=: less than or equal to the threshold; >=: greater than or equal to the threshold.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> • < • > • <= • >=
dimensions	Yes	Array of Dimension objects	<p>List of time series dimensions. To query the time series dimension list, call the API Querying Time Series Objects.</p>
evaluation_periods	Yes	Integer	Interval at which data is calculated.
is_turn_on	No	Boolean	Whether to enable the threshold rule.

Parameter	Mandatory	Type	Description
insufficient_data_actions	No	Array of strings	List of insufficient data notifications.
metric_name	Yes	String	Time series name. Length: 1 to 255 characters.
namespace	Yes	String	Namespace of time series objects.
ok_actions	No	Array of strings	List of normal status notifications.
period	Yes	Integer	Statistical period. Options: 60000: one minute; 300000: five minutes; 900000: 15 minutes; 3600000: one hour. Enumeration values: <ul style="list-style-type: none">• 60000• 300000• 900000• 3600000
statistic	Yes	String	Statistic. Enumeration values: <ul style="list-style-type: none">• maximum• minimum• average• sum• sampleCount
threshold	Yes	String	Threshold.
unit	Yes	String	Time series unit.

Table 4-334 Dimension

Parameter	Mandatory	Type	Description
name	Yes	String	Dimension name.
value	Yes	String	Dimension value.

Response Parameters

Status code: 200

Table 4-335 Response body parameters

Parameter	Type	Description
alarm_rule_id	Long	Threshold rule ID.

Status code: 400

Table 4-336 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Trace ID, which is used to search for logs and locate faults. If 2xx is returned, trace_id is empty. If 4xx , trace_id is not empty.

Example Requests

Modify a threshold rule whose name is **testaom**, alarm severity is **3**, metric name is **cpuCoreLimit**, and namespace is **PAAS.CONTAINER**.

https://{{Endpoint}}/v2/{{project_id}}/alarm-rules

```
{  
    "action_enabled": false,  
    "alarm_actions": [],  
    "alarm_advice": "",  
    "alarm_description": "",  
    "alarm_level": 3,  
    "alarm_rule_name": "aom_rule",  
    "comparison_operator": ">=",  
    "dimensions": [  
        {"name": "appName",  
         "value": "rhm-broker"}  
    ],  
    "evaluation_periods": 1,  
    "insufficient_data_actions": [],  
    "metric_name": "cpuCoreLimit",  
    "namespace": "PAAS.CONTAINER",  
    "ok_actions": [],  
    "period": 60000,  
    "statistic": "average",  
    "threshold": 0,  
    "unit": "Core"  
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "alarm_rule_id" : 91307490000416600  
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.02002SVCSTG_AMS_4000101",  
    "error_msg" : "Invalid alarm name",  
    "error_type" : "BAD_REQUEST",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2.12 Deleting a Threshold Rule

Function

This API is used to delete a threshold rule.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v2/{project_id}/alarm-rules/{alarm_rule_id}

Table 4-337 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .
alarm_rule_id	Yes	String	Threshold rule ID.

Request Parameters

Table 4-338 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Response Parameters

Status code: 200

OK: The request is successful.

Status code: 400**Table 4-339** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Trace ID, which is used to search for logs and locate faults. If 2xx is returned, trace_id is empty. If 4xx, trace_id is not empty.

Example Requests

Delete a threshold rule.

```
https://{{Endpoint}}/v2/{{project_id}}/alarm-rules/{{alarm_rule_id}}
```

Example Responses

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code" : "AOM.02005115",  
    "error_msg" : "Invalid request parameter",  
    "error_type" : "BAD_REQUEST",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2.13 Querying a Threshold Rule

Function

This API is used to query a threshold rule.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v2/{project_id}/alarm-rules/{alarm_rule_id}

Table 4-340 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .
alarm_rule_id	Yes	String	Threshold rule ID.

Request Parameters

Table 4-341 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	No	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Response Parameters

Status code: 200

Table 4-342 Response body parameters

Parameter	Type	Description
meta_data	MetaData object	Metadata, including pagination information.
thresholds	Array of QueryAlarmResult objects	Threshold rule list.

Table 4-343 MetaData

Parameter	Type	Description
count	Integer	Number of returned records.
start	String	Start of the next page, which is used for pagination. null: No more data.
total	Integer	Total number of records.

Table 4-344 QueryAlarmResult

Parameter	Type	Description
action_enabled	Boolean	Whether to enable notification.
alarm_actions	Array of strings	List of alarm notifications.
alarm_advice	String	Alarm clearance suggestion.
alarm_description	String	Threshold rule description.
alarm_level	String	Alarm severity.
alarm_rule_id	String	Threshold rule ID.
alarm_rule_name	String	Threshold rule name.
comparison_operator	String	Comparison operator.
dimensions	Array of Dimension objects	List of time series dimensions. To query the time series dimension list, call the API Querying Time Series Objects .
evaluation_periods	Integer	Interval.
id_turn_on	Boolean	Whether to enable the threshold rule.
insufficient_data_actions	Array of strings	List of insufficient data notifications.
metric_name	String	Time series name.
namespace	String	Time series objects' namespace.
ok_actions	Array of strings	List of normal status notifications.
period	Integer	Statistical period.
policy_name	String	Threshold rule name.
resources	Array of strings	Resource information (discarded).
state_reason	String	Cause description.

Parameter	Type	Description
state_updated_timestamp	String	Time when the status was updated.
state_value	String	Service status.
statistic	String	Statistic.
threshold	String	Threshold value.
type	String	Threshold rule type.
unit	String	Threshold unit.

Table 4-345 Dimension

Parameter	Type	Description
name	String	Dimension name.
value	String	Dimension value.

Status code: 400

Table 4-346 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Trace ID, which is used to search for logs and locate faults. If 2xx is returned, trace_id is empty. If 4xx , trace_id is not empty.

Example Requests

Obtain the details about the alarm rule whose ID is **alarm_rule_id**.

`https://{{Endpoint}}/v2/{{project_id}}/alarm-rules/{{alarm_rule_id}}`

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "meta_data": {  
        "count": 1,  
        "start": null,  
        "total": 1  
    },  
    "thresholds": [ {  
        "action_enabled": false,  
        "alarm_actions": null,  
        "alarm_advice": null,  
        "alarm_description": null,  
        "alarm_level": "3",  
        "alarm_rule_id": 2137,  
        "alarm_rule_name": "aom_rule",  
        "comparison_operator": ">=",  
        "dimensions": [ {  
            "name": "appName"  
        }, {  
            "value": "rhm-broker"  
        } ],  
        "evaluation_periods": 1,  
        "id_turn_on": true,  
        "insufficient_data_actions": null,  
        "metric_name": "cpuCoreLimit",  
        "namespace": "PAAS.CONTAINER",  
        "ok_actions": null,  
        "period": 60000,  
        "policy_name": "23,",  
        "resources": [ ],  
        "state_reason": null,  
        "state_updated_timestamp": null,  
        "statistic": "average",  
        "threshold": 0,  
        "type": "single,",  
        "unit": "Core"  
    } ]  
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "error_code": "AOM.02004115",  
    "error_msg": "Invalid request parameter",  
    "error_type": "BAD_REQUEST",  
    "trace_id": ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

Status Code	Description
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.2.14 Deleting Threshold Rules in Batches

Function

This API is used to delete threshold rules in batches.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v2/{project_id}/alarm-rules/delete

Table 4-347 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-348 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-349 Request body parameters

Parameter	Mandatory	Type	Description
alarm_rules	Yes	Array of strings	Name of the rule to be deleted.

Response Parameters

Status code: 200

OK: The request is successful.

Status code: 400

Table 4-350 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Trace ID, which is used to search for logs and locate faults. If 2xx is returned, trace_id is empty. If 4xx , trace_id is not empty.

Example Requests

Delete threshold rules in batches by rule name.

```
https://{{Endpoint}}/v2/{{project_id}}/alarm-rules/delete
{
    "alarm_rules" : [ ]
}
```

Example Responses

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
  "error_code": "AOM.02005115",  
  "error_msg": "Invalid request parameter",  
  "error_type": "BAD_REQUEST",  
  "trace_id": ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.3 Prometheus Monitoring

4.3.1 Querying Expression Calculation Results in a Specified Period Using the GET Method

Function

This API is used to query the calculation results of a PromQL expression in a specified period using the GET method.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/aom/api/v1/query_range

Table 4-351 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-352 Query Parameters

Parameter	Mandatory	Type	Description
query	Yes	String	PromQL expression. For details, see Prometheus official document .
start	Yes	String	Start timestamp (Unix, in seconds). Example: 2024-10-16 16:03:01 needs to be converted to Unix timestamp 1729065781 using a tool.
end	Yes	String	End timestamp (Unix, in seconds). Example: 2024-10-16 16:03:01 needs to be converted to Unix timestamp 1729065781 using a tool.
step	Yes	String	Query step, which indicates a query interval. By setting a step, the time range can be divided into multiple segments. Then calculation is performed for each segment. The step must match the data collection interval to ensure accurate and consistent data. If the step is too small, query performance may deteriorate. If the step is too large, some details may be missed.

Request Parameters

Table 4-353 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .

Response Parameters

Status code: 200

Table 4-354 Response body parameters

Parameter	Type	Description
status	String	Response status.
data	Object	Response data.

Status code: 403

Table 4-355 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 422

Table 4-356 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 503

Table 4-357 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Example Requests

Query the calculation result of PromQL expression "up" every 15s in a specified period.

```
https://{{EndPoint}}/v1/{{project_id}}/aom/api/v1/query_range?  
query=up&start=1630124012&end=1630127612&step=15s
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "status" : "success",  
    "data" : {  
        "resultType" : "matrix",  
        "result" : [ {  
            "metric" : {  
                "__name__" : "up",  
                "job" : "prometheus",  
                "instance" : "localhost:9090"  
            },  
            "values" : [ [ 1.435781430781E9, "1" ], [ 1.435781445781E9, "1" ], [ 1.435781460781E9, "1" ] ]  
        },  
        "metric" : {  
            "__name__" : "up",  
            "job" : "node",  
            "instance" : "localhost:9091"  
        },  
        "values" : [ [ 1.435781430781E9, "0" ], [ 1.435781445781E9, "0" ], [ 1.435781460781E9, "1" ] ]  
    }  
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
1:1: parse error: unexpected <op:>
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "auth",
```

```
        "error" : "auth project_id not pass."  
    }
```

Status code: 422

Unprocessable: The expression cannot be executed.

```
{  
    "status" : "error",  
    "errorType" : "excution",  
    "error" : "expression can't be executed."  
}
```

Status code: 503

Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "timeout",  
    "error" : "query timed out in query execution."  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
422	Unprocessable: The expression cannot be executed.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.3.2 (Recommended) Querying Expression Calculation Results in a Specified Period Using the POST Method

Function

This API is used to query the calculation results of a PromQL expression in a specified period using the POST method.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/aom/api/v1/query_range

Table 4-358 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-359 Query Parameters

Parameter	Mandatory	Type	Description
query	Yes	String	PromQL expression. For details, see Prometheus official document .
start	Yes	String	Start timestamp (Unix, in seconds).
end	Yes	String	End timestamp (Unix, in seconds).
step	Yes	String	Query step (in seconds). The task is executed on the step basis within the specified period.

Request Parameters

Table 4-360 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .

Response Parameters

Status code: 200

Table 4-361 Response body parameters

Parameter	Type	Description
status	String	Response status.
data	Object	Response data.

Status code: 403

Table 4-362 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 422

Table 4-363 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 503

Table 4-364 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Example Requests

Query the top N aom_node_status metrics on the step basis in a specified period.

```
https://{{EndPoint}}/v1/{{project_id}}/aom/api/v1/query_range?  
query=topk(2,aom_node_status)&start=1630386780&end=1630390380&step=15
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "status" : "success",  
    "data" : {  
        "resultType" : "matrix",  
        "result" : [ {  
            "metric" : {  
                "__name__" : "amm_node_status",  
                "clusterId" : "000000-0000-0000-0000-00000000",  
                "hostID" : "c9xxcb-2x6c-4h54-8fcf-f68xx85",  
                "nameSpace" : "default",  
                "nodeIP" : "1xx.1xx.0.1xx",  
                "nodeName" : "sis-xxn-amm"  
            },  
            "values" : [ [ 1630386780, "0" ], [ 1630388610, "0" ], [ 1630388625, "0" ] ]  
        }, {  
            "metric" : {  
                "__name__" : "amm_node_status",  
                "clusterId" : "00000000-0000-0000-0000-00000000",  
                "hostID" : "ec5xxxb-0xx8-4xxx-bxx-9ecxxf",  
                "nameSpace" : "default",  
                "nodeIP" : "1xx.168.0.1x",  
                "nodeName" : "fdx-ibxxst"  
            },  
            "values" : [ [ 1630388265, "0" ], [ 1630388280, "0" ], [ 1630388295, "0" ] ]  
        } ]  
    }  
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
1:1: parse error: unexpected <op:>
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "auth",  
    "error" : "auth project_id not pass."  
}
```

Status code: 422

Unprocessable: The expression cannot be executed.

```
{  
    "status" : "error",  
    "errorType" : "excution",  
    "error" : "expression can't be executed."  
}
```

Status code: 503

Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

```
{  
  "status" : "error",  
  "errorType" : "timeout",  
  "error" : "query timed out in query execution."  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
422	Unprocessable: The expression cannot be executed.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.3.3 Querying the Expression Calculation Result at a Specified Time Point Using the GET Method

Function

This API is used to query the calculation result of a PromQL expression at a specified time point using the GET method.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/aom/api/v1/query

Table 4-365 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-366 Query Parameters

Parameter	Mandatory	Type	Description
query	Yes	String	PromQL expression. For details, see Prometheus official document .
time	No	String	Timestamp specified for PromQL calculation (Unix, in seconds). Example: 2024-10-16 16:03:01 needs to be converted to Unix timestamp 1729065781 using a tool. If this parameter is not specified, the data of the current time will be queried.

Request Parameters

Table 4-367 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .

Response Parameters

Status code: 200

Table 4-368 Response body parameters

Parameter	Type	Description
status	String	Response status.
data	Object	Response data.

Status code: 400

Table 4-369 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 403

Table 4-370 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 422

Table 4-371 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 503

Table 4-372 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Example Requests

Query the calculation result of expression "up" at time point "1630124012".

```
https://{{EndPoint}}/v1/{{project_id}}/aom/api/v1/query?query=up&time=1630124012
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "status" : "success",  
    "data" : {  
        "resultType" : "vector",  
        "result" : [ ]  
    }  
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "bad_param",  
    "error" : "param is invalid."  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "auth",  
    "error" : "auth project_id not pass."  
}
```

Status code: 422

Unprocessable: The expression cannot be executed.

```
{  
    "status" : "error",  
    "errorType" : "excution",  
    "error" : "expression can't be executed."  
}
```

Status code: 503

Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "timeout",  
    "error" : "query timed out in query execution."  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
422	Unprocessable: The expression cannot be executed.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.3.4 (Recommended) Querying Expression Calculation Results at a Specified Time Point Using the POST Method

Function

This API is used to query the calculation result of a PromQL expression at a specified time point using the POST method.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/aom/api/v1/query

Table 4-373 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-374 Query Parameters

Parameter	Mandatory	Type	Description
query	Yes	String	PromQL expression. For details, see Prometheus official document .
time	No	String	Timestamp specified for PromQL calculation (Unix, in seconds).

Request Parameters

Table 4-375 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .

Response Parameters

Status code: 200

Table 4-376 Response body parameters

Parameter	Type	Description
status	String	Response status.
data	Object	Response data.

Status code: 400

Table 4-377 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 403

Table 4-378 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 422

Table 4-379 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 503

Table 4-380 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Example Requests

Query the top N aom_node_status metrics at time point "1630381536".

[https://{{EndPoint}}/v1/{{project_id}}/aom/api/v1/query?query=topk\(2,aom_node_status\)&time=1630381536](https://{{EndPoint}}/v1/{{project_id}}/aom/api/v1/query?query=topk(2,aom_node_status)&time=1630381536)

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "status" : "success",  
    "data" : {  
        "resultType" : "vector",  
        "result" : [ {  
            "metric" : {  
                "__name__" : "amm_node_status",  
                "value" : 100  
            }  
        }  
    }  
}
```

```
"clusterId" : "00000000-0000-0000-0000-00000000",
"hostID" : "g947xcxh-2xcxc-xxx-xxcd-f6xxx85",
"nameSpace" : "default",
"nodeIP" : "1x6.1xx.0.xxx",
"nodeName" : "sdxx-jxxgksi-axx"
},
"value" : [ 16303810036, "0" ]
}, {
"metric" : {
"__name__" : "amm_node_status",
"clusterId" : "00000000-0000-0000-0000-00000000",
"hostID" : "dc1xxxf7e-b095-4e77-bxx-914dhlxxbf7",
"nameSpace" : "default",
"nodeIP" : "1xx.1xx.0.xxx",
"nodeName" : "sds-jixxxsi-texxt"
},
"value" : [ 1630381536, "0" ]
}
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{
"status" : "error",
"errorType" : "bad_param",
"error" : "param is invalid."
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{
"status" : "error",
"errorType" : "auth",
"error" : "auth project_id not pass."
}
```

Status code: 422

Unprocessable: The expression cannot be executed.

```
{
"status" : "error",
"errorType" : "excution",
"error" : "expression can't be executed."
}
```

Status code: 503

Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

```
{
"status" : "error",
"errorType" : "timeout",
"error" : "query timed out in query execution."
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
422	Unprocessable: The expression cannot be executed.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.3.5 Querying Tag Values

Function

This API is used to query the values of a specified tag.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/aom/api/v1/label/{label_name}/values

Table 4-381 Path Parameters

Parameter	Mandatory	Type	Description
label_name	Yes	String	Tag specified for query. You can obtain tag names by calling the API Obtaining the Tag Name List Using the POST Method .
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-382 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .

Response Parameters

Status code: 200

Table 4-383 Response body parameters

Parameter	Type	Description
status	String	Response status.
data	Array of strings	Tag value.

Status code: 400

Table 4-384 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 403

Table 4-385 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 422

Table 4-386 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 503

Table 4-387 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Example Requests

Query all values of the "job" tag.

https://{{EndPoint}}/v1/{{project_id}}/aom/api/v1/label/job/values

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "status" : "success",  
    "data" : [ "node", "prometheus" ]  
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "bad_param",  
    "error" : "param is invalid."  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
}
```

```
    "errorType" : "auth",
    "error" : "auth project_id not pass."
}
```

Status code: 422

Unprocessable: The expression cannot be executed.

```
{
  "status" : "error",
  "errorType" : "excution",
  "error" : "expression can't be executed."
}
```

Status code: 503

Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

```
{
  "status" : "error",
  "errorType" : "timeout",
  "error" : "query timed out in query execution."
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
422	Unprocessable: The expression cannot be executed.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.3.6 Obtaining the Tag Name List Using the GET Method

Function

This API is used to obtain the tag name list using the GET method.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/aom/api/v1/labels

Table 4-388 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-389 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .

Response Parameters

Status code: 200

Table 4-390 Response body parameters

Parameter	Type	Description
status	String	Response status.
data	Array of strings	Tag value.

Status code: 400

Table 4-391 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 403**Table 4-392** Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 422**Table 4-393** Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 503**Table 4-394** Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Example Requests

Return the tag name list.

`https://{EndPoint}/v1/{project_id}/aom/api/v1/labels`

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "status": "success",  
    "data": [ "__name__", "call", "code", "config", "dialer_name", "endpoint", "event", "goversion", "handler",
```

```
    "instance", "slice", "version" ]  
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "bad_param",  
    "error" : "param is invalid."  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "auth",  
    "error" : "auth project_id not pass."  
}
```

Status code: 422

Unprocessable: The expression cannot be executed.

```
{  
    "status" : "error",  
    "errorType" : "excution",  
    "error" : "expression can't be executed."  
}
```

Status code: 503

Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "timeout",  
    "error" : "query timed out in query execution."  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
422	Unprocessable: The expression cannot be executed.

Status Code	Description
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.3.7 (Recommended) Obtaining the Tag Name List Using the POST Method

Function

This API is used to obtain the tag name list using the POST method.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/aom/api/v1/labels

Table 4-395 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-396 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .

Response Parameters

Status code: 200

Table 4-397 Response body parameters

Parameter	Type	Description
status	String	Response status.
data	Array of strings	Tag value.

Status code: 400

Table 4-398 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 403

Table 4-399 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 422

Table 4-400 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 503

Table 4-401 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Example Requests

Return the tag name list.

```
https://{{EndPoint}}/v1/{{project_id}}/aom/api/v1/labels
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "status" : "success",  
    "data" : [ "__name__", "alarm_level", "adfName", "alertstate", "ammApplicationID",  
    "ammApplicationName", "appID", "appName", "clusterID", "clusterName", "cluster_id",  
    "comparisonOperator", "containerID", "containerName", "nameSpace", "namespace", "netDevice",  
    "nodeIP", "nodeName", "node_ip", "pailID", "pailName", "period_expr", "podID", "podName", "processCmd" ]  
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "bad_param",  
    "error" : "param is invalid."  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "auth",  
    "error" : "auth project_id not pass."  
}
```

Status code: 422

Unprocessable: The expression cannot be executed.

```
{  
    "status" : "error",  
    "errorType" : "excution",  
    "error" : "expression can't be executed."  
}
```

Status code: 503

Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "timeout",  
    "error" : "query timed out in query execution."  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
422	Unprocessable: The expression cannot be executed.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.3.8 Querying Metadata

Function

This API is used to query metric metadata.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/aom/api/v1/metadata

Table 4-402 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-403 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .

Response Parameters

Status code: 200

Table 4-404 Response body parameters

Parameter	Type	Description
status	String	Response status.
data	Object	Metadata information.

Status code: 400

Table 4-405 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 403

Table 4-406 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 422

Table 4-407 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Status code: 503

Table 4-408 Response body parameters

Parameter	Type	Description
status	String	Response status.
errorType	String	Error type.
error	String	Error message.

Example Requests

Obtain the metadata.

https://{{EndPoint}}/v1/{{project_id}}/aom/api/v1/metadata

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "status" : "success",  
    "data" : {  
        "aggregator_openapi_v2_regeneration_count" : [ {  
            "type" : "counter",  
            "help" : "[ALPHA] Counter of OpenAPI v2 spec regeneration count broken down by causing APIService name and reason.",  
        } ]  
    }  
}
```

```
        "unit" : ""  
    } ]  
}  
}
```

Status code: 400

Bad Request: The request is invalid. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "bad_param",  
    "error" : "param is invalid."  
}
```

Status code: 403

Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "auth",  
    "error" : "auth project_id not pass."  
}
```

Status code: 422

Unprocessable: The expression cannot be executed.

```
{  
    "status" : "error",  
    "errorType" : "excution",  
    "error" : "expression can't be executed."  
}
```

Status code: 503

Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

```
{  
    "status" : "error",  
    "errorType" : "timeout",  
    "error" : "query timed out in query execution."  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
422	Unprocessable: The expression cannot be executed.

Status Code	Description
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.4 Log

4.4.1 Querying Logs

Function

This API is used to query logs by different dimensions, such as by cluster, IP address, or application. Pagination queries are supported.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/als/action

Table 4-409 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-410 Query Parameters

Parameter	Mandatory	Type	Description
type	Yes	String	Log API call mode. When the value is querylogs, this API is used to query logs.

Request Parameters

Table 4-411 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json. Enumeration values: <ul style="list-style-type: none">• application/json

Table 4-412 Request body parameters

Parameter	Mandatory	Type	Description
category	Yes	String	Log type. Options:- app_log: application log.- node_log: host log.- custom_log: log in a custom path.
endTime	Yes	Long	End time of the query (UTC, in ms).
hideSyslog	No	Integer	Whether to hide system logs during search. <ul style="list-style-type: none">• 0 (default): Hide system logs.• 1: Show system logs.

Parameter	Mandatory	Type	Description
keyWord	No	String	<p>Keyword for search.</p> <ol style="list-style-type: none">1. Exact search by keyword is supported. A keyword is between two adjacent delimiters.2. Fuzzy search by keyword is supported. Example: RROR, ERRO?, ROR, ERR*, or ER*OR.3. Exact search by phrase is supported. Example: Start to refresh alm Statistic.4. Search using AND (&&) or OR () is supported. Example: query&&logs or query logs. <p>Note:</p> <p>Default delimiters: , "";=()[]{}@&<>/:\n\t\r</p>
lineNum	No	String	Sequence number of the final log in the last query result. This parameter is not required for the first query, but is required for subsequent pagination queries.
pageSize/size	No	String	<p>Number of logs queried each time. Default value: 5000. Recommended value: 100.</p> <p>For the first query, pageSize is used. For subsequent pagination queries, size is used.</p>
searchKey	Yes	SearchKey object	Log filter criteria, which vary by log source.
startTime	Yes	Long	Start time of the query (UTC, in ms).
type	No	String	Pagination query. This parameter is not required for the first query, but is required for subsequent pagination queries.

Parameter	Mandatory	Type	Description
isDesc	No	Boolean	<p>Whether to query logs based on lineNum in ascending or descending order.</p> <ul style="list-style-type: none">• true: lineNum in descending order (from the latest time to the earliest time).• false: lineNum in ascending order (from the earliest time to the latest time).

Table 4-413 SearchKey

Parameter	Mandatory	Type	Description
appName	No	String	Application name.
clusterId	Yes	String	CCE cluster ID.
hostIP	No	String	IP address of the VM where logs are located.
nameSpace	No	String	CCE cluster namespace.
pathFile	No	String	Log file name.
podName	No	String	Container instance name.

Response Parameters

Status code: 200

Table 4-414 Response body parameters

Parameter	Type	Description
errorCode	String	Response code. SVCSTG_AMS_2000000: Success response.
errorMessage	String	Response message.
result	String	Metadata, including results and the total number of returned records.

Status code: 400

Table 4-415 Response body parameters

Parameter	Type	Description
errorCode	String	Response code.
errorMessage	String	Response message.

Status code: 401

Table 4-416 Response body parameters

Parameter	Type	Description
errorCode	String	Response code.
errorMessage	String	Response message.

Status code: 403

Table 4-417 Response body parameters

Parameter	Type	Description
errorCode	String	Response code.
errorMessage	String	Response message.

Status code: 500

Table 4-418 Response body parameters

Parameter	Type	Description
errorCode	String	Response code.
errorMessage	String	Response message.

Status code: 503

Table 4-419 Response body parameters

Parameter	Type	Description
errorCode	String	Response code.
errorMessage	String	Response message.

Example Requests

- Example 1: Query application logs under a cluster.

```
"POST https://{endpoint}/v1/{project_id}/als/action?type=querylogs"

{
    "category" : "app_log",
    "endTime" : 15389000003,
    "hideSyslog" : 0,
    "keyWord" : "",
    "searchKey" : {
        "clusterId" : "c69xxxc-5xxx-1xxx-8xx5-02xxxx40"
    },
    "startTime" : 15389000003
}
```

- Example 2: Perform pagination queries.

- For pagination queries, the `lineNum` (sequence number of the final log in the last query result), `type` (value: `next`), and `size` parameters need to be added.
- The values of `category`, `searchKey`, `keyWord`, `startTime`, and `endTime` must be the same as those in the first query.
- To implement another pagination query, change the value of `lineNum` to the sequence number of the final log in the last query result. The rest may be deduced by analogy.

```
/v1/{project_id}/als/action?type=querylogs
```

```
{
    "category" : "app_log",
    "searchKey" : {
        "clusterId" : "874xxx9a2-xxx-xxx-8xx-02xxxx3"
    },
    "keyWord" : "",
    "startTime" : 156946300095,
    "endTime" : 15694600008895,
    "lineNum" : "1569463900000047",
    "type" : "next",
    "size" : 100,
    "hideSyslog" : 0
}
```

Notes:

Example Responses

Status code: 200

OK: The request is successful.

```
{
    "errorCode" : "SVCSTG.ALS.200.200",
    "errorMessage" : "Query data success",
    "result" : [
        {
            "data" : [
                {
                    "appName" : "axxs0712",
                    "category" : "apx",
                    "clusterId" : "c6xxxx7c-54cd-11e8-8055-025xxx1e40",
                    "collectTime" : 153900000983,
                    "containerName" : "contssner-0",
                    "hostIP" : "1xx.xxx.0.1xxx",
                    "hostId" : "c11xxxxx11-0000b-4925-bef4-d0xxxx9b0",
                    "hostName" : "1x2.168.0.xxx",
                    "lineNum" : "1xxx23xxxxxx2VW5xxxxxx0ZWdlcg==",
                    "logContent" : "This is a sample log entry for application axxs0712 under cluster c6xxxx7c-54cd-11e8-8055-025xxx1e40. It was collected at 153900000983. The container name is contssner-0. The host IP is 1xx.xxx.0.1xxx and the host ID is c11xxxxx11-0000b-4925-bef4-d0xxxx9b0. The log level is apx. The log message is 'This is a sample log entry for application axxs0712 under cluster c6xxxx7c-54cd-11e8-8055-025xxx1e40. It was collected at 153900000983. The container name is contssner-0. The host IP is 1xx.xxx.0.1xxx and the host ID is c11xxxxx11-0000b-4925-bef4-d0xxxx9b0. The log level is apx.'"
                }
            ]
        }
    ]
}
```

```
"logContent" : "warn:2018/10/09 06:57:01 helloworld.go:108: the main process is running now.",  
"logContentSize" : null,  
"loghash" : "4xxxxx0d40a83c17f262540xxxxxxxxfeaa30eb",  
"nameSpace" : "default",  
"pathFile" : "/xxx/xxx/xxx/xxx/xxx/xxx.trxe",  
"podName" : "axxx12-7xxf884-qxxwp",  
"serviceID" : ""  
} ],  
"total" : 5000  
}  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: The request is invalid. The client should not repeat the request without modifications.
401	Unauthorized: The authentication information is incorrect or invalid.
403	Forbidden: The request is rejected. The server has received the request and understood it, but the server refuses to respond to it. The client should not repeat the request without modifications.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.
503	Service Unavailable: The requested service is invalid. The client should not repeat the request without modifications.

Error Codes

See [Error Codes](#).

4.5 Prometheus Instance

4.5.1 Uninstalling a Hosted Prometheus Instance

Function

This API is used to uninstall a hosted Prometheus instance.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v1/{project_id}/aom/prometheus

Table 4-420 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID obtained from IAM. Generally, a project ID contains 32 characters.

Table 4-421 Query Parameters

Parameter	Mandatory	Type	Description
prom_id	Yes	String	Prometheus instance ID.

Request Parameters

Table 4-422 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM.
Content-Type	Yes	String	Content type, which is application/json.
Enterprise-Project-Id	Yes	String	Enterprise project ID. • To delete instances in an enterprise project, enter the enterprise project ID.

Response Parameters

Status code: 200

OK: The request is successful.

Status code: 400**Table 4-423** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Trace ID.

Example Requests

Delete the Prometheus instance whose **prom_id** is **08****2a-8b-45-b1-d1*****79**.

```
https://{{Endpoint}}/v1/{{project_id}}/aom/prometheus?prom_id=08****2a-8**b-4**5-b**1-d1*****79
```

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "08****2a-8**b-4**5-b**1-d1*****79" : true  
}
```

Status code: 400

No Prometheus instance is found.

```
{  
    "error_code" : "AOM.11017014",  
    "error_msg" : "prom instance not found",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	No Prometheus instance is found.

Error Codes

See [Error Codes](#).

4.5.2 Querying a Prometheus Instance

Function

This API is used to query a Prometheus instance.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{{project_id}}/aom/prometheus

Table 4-424 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID obtained from IAM. Generally, a project ID contains 32 characters.

Table 4-425 Query Parameters

Parameter	Mandatory	Type	Description
prom_id	No	String	Prometheus instance ID. If both prom_id and prom_type exist, only prom_id takes effect.
prom_type	No	String	Prometheus instance type (VPC and KUBERNETES are not supported). Enumeration values: <ul style="list-style-type: none">• default• ECS• VPC• CCE• REMOTE_WRITE• KUBERNETES• CLOUD_SERVICE• ACROSS_ACCOUNT
cce_cluster_enable	No	String	Whether to enable a CCE cluster. Enumeration values: <ul style="list-style-type: none">• true• false
prom_status	No	String	Prometheus instance status. Enumeration values: <ul style="list-style-type: none">• DELETED• NORMAL• ALL

Request Parameters

Table 4-426 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM.
Content-Type	No	String	Content type, which is application/json.
Enterprise-Project-Id	Yes	String	Enterprise project ID. <ul style="list-style-type: none"> • To query instances in an enterprise project, enter the enterprise project ID. • To query instances in all enterprise projects, enter all_granted_eps.

Response Parameters

Status code: 200

Table 4-427 Response body parameters

Parameter	Type	Description
prometheus	Array of PromInstanceEpsModel objects	Prometheus instance list.

Table 4-428 PromInstanceEpsModel

Parameter	Type	Description
prom_name	String	Prometheus instance name. Enter 1–100 characters and do not start or end with an underscore (_) or hyphen (-). Only letters, digits, underscores, and hyphens are allowed.
prom_id	String	Prometheus instance ID.

Parameter	Type	Description
prom_type	String	Prometheus instance type (VPC and KUBERNETES are not supported). Enumeration values: <ul style="list-style-type: none">• default• ECS• VPC• CCE• REMOTE_WRITE• KUBERNETES• CLOUD_SERVICE• ACROSS_ACCOUNT
prom_version	String	Prometheus instance version.
prom_create_time_stamp	Long	Timestamp when the Prometheus instance is created.
prom_update_time_stamp	Long	Timestamp when the Prometheus instance is updated.
prom_status	String	Prometheus instance status. Enumeration values: <ul style="list-style-type: none">• DELETED• NORMAL• ALL
enterprise_project_id	String	Enterprise project that the Prometheus instance belongs to.
project_id	String	ID of the project that the Prometheus instance belongs to.
is_deleted_tag	Long	Whether an instance has been deleted.
deleted_time	Long	Deletion time.
prom_spec_config	PromConfigMode object	Special configuration of the Prometheus instance.
cce_spec_config	String	Special configuration of the Prometheus instance in the CCE scenario.
prom_limits	PromLimits object	Prometheus instance limitations.
limits_update_time	Long	Time when the metric storage duration was modified.

Table 4-429 PromConfigModel

Parameter	Type	Description
remote_write_url	String	Remote write address of the Prometheus instance.
remote_read_url	String	Remote read address of the Prometheus instance.
prom_http_api_end_point	String	URL for calling the Prometheus instance.
dashboard_id	String	ID of the dashboard associated with the Prometheus instance (not used currently).
region_id	String	Region that the Prometheus instance belongs to.

Table 4-430 PromLimits

Parameter	Type	Description
compactor_blocks_retention_period	String	Metric storage duration. Only 15, 30, 60, and 90 days are supported. Enumeration values: <ul style="list-style-type: none">• "360h"• "720h"• "1440h"• "2160h"

Example Requests

- Query a Prometheus instance.
`https://{{Endpoint}}/v1/{{project_id}}/aom/prometheus`
- Query the Prometheus instance whose **prom_id** is **08****2a-8b-45-b1-d1*****79**.
`https://{{Endpoint}}/v1/{{project_id}}/aom/prometheus?prom_id=08****2a-8**b-4**5-b**1-d1*****79`

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "prometheus": [
    {
      "deleted_time": 0,
      "enterprise_project_id": "0",
      "project_id": "2a4***56cc***7f837***891***c1cf",
      "prom_create_timestamp": 1691718171483,
      "prom_id": "08****2a-8b-45-b1-d1*****79"
    }
  ]
}
```

```
"prom_id" : "08****2a-8**b-4**5-b**1-d1*****79",
"prom_name" : "aom_prometheus",
"prom_spec_config" : {
    "prom_http_api_endpoint" : "aom-internal.cn-***-*.*.com:***/v1/2a4***56cc***7f837***891***c1cf/
08****2a-8**b-4**5-b**1-d1*****79",
    "region_id" : "cn-***-*",
    "remote_read_url" : "aom-internal.cn-***-*.*.com:***/v1/2a4***56cc***7f837***891***c1cf/
08****2a-8**b-4**5-b**1-d1*****79/api/v1/read",
    "remote_write_url" : "aom-internal.cn-***-*.*.com:***/v1/2a4***56cc***7f837***891***c1cf/
08****2a-8**b-4**5-b**1-d1*****79/push"
},
"prom_type" : "CCE",
"prom_update_timestamp" : 1691718171483
} ]
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.5.3 Adding a Prometheus Instance

Function

This API is used to add a Prometheus instance.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/aom/prometheus

Table 4-431 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID obtained from IAM. Generally, a project ID contains 32 characters.

Request Parameters

Table 4-432 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM.
Content-Type	Yes	String	Content type, which is application/json.
region	Yes	String	Region to which the Prometheus instance belongs. Generally, it is the domain name or IP address of the server bearing the REST service endpoint. This parameter varies depending on the service and region.

Table 4-433 Request body parameters

Parameter	Mandatory	Type	Description
prom_name	Yes	String	Prometheus instance name. Enter 1–100 characters and do not start or end with an underscore (_) or hyphen (-). Only letters, digits, underscores, and hyphens are allowed.
prom_type	Yes	String	Prometheus instance type. <ul style="list-style-type: none">• ECS: Prometheus for ECS• CCE: Prometheus for CCE• REMOTE_WRITE: Common Prometheus instance• CLOUD_SERVICE: Prometheus for cloud services• ACROSS_ACCOUNT: Prometheus for multi-account aggregation (not supported currently)
prom_version	No	String	Prometheus instance version.
enterprise_project_id	No	String	Enterprise project that the Prometheus instance belongs to.

Parameter	Mandatory	Type	Description
project_id	No	String	ID of the project that the Prometheus instance belongs to.

Response Parameters

Status code: 200

Table 4-434 Response body parameters

Parameter	Type	Description
prometheus	Array of PromInstanceEps CreateModel objects	Prometheus instance list.

Table 4-435 PromInstanceEpsCreateModel

Parameter	Type	Description
prom_name	String	Prometheus instance name. Enter 1–100 characters and do not start or end with an underscore (_) or hyphen (-). Only letters, digits, underscores, and hyphens are allowed.
prom_id	String	Prometheus instance ID.
prom_type	String	Prometheus instance type (VPC and KUBERNETES are not supported). Enumeration values: <ul style="list-style-type: none">• ECS• VPC• CCE• REMOTE_WRITE• KUBERNETES• CLOUD_SERVICE• ACROSS_ACCOUNT
prom_version	String	Prometheus instance version.
prom_create_time_stamp	Long	Timestamp when the Prometheus instance was created.

Parameter	Type	Description
prom_update_timestamp	Long	Timestamp when the Prometheus instance was updated.
prom_status	String	Prometheus instance status. Enumeration values: <ul style="list-style-type: none">• DELETED• NORMAL• ALL
enterprise_project_id	String	Enterprise project that the Prometheus instance belongs to.
project_id	String	ID of the project that the Prometheus instance belongs to.
deleted_time	Long	Deletion time.
prom_spec_config	PromConfigMode Object	Special configuration of the Prometheus instance.
cce_spec_config	String	Special configuration of the Prometheus instance in the CCE scenario.

Table 4-436 PromConfigModel

Parameter	Type	Description
remote_write_url	String	Remote write address of the Prometheus instance.
remote_read_url	String	Remote read address of the Prometheus instance.
prom_http_api_endpoint	String	URL for calling the Prometheus instance.
dashboard_id	String	ID of the dashboard associated with the Prometheus instance (not used currently).
region_id	String	Region that the Prometheus instance belongs to.

Example Requests

Add a Prometheus instance for CCE.

```
https://{{Endpoint}}/v1/{{project_id}}/aom/prometheus
```

```
{
```

```
"prom_type" : "CCE",
"prom_name" : "aom_prometheus"
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "prometheus" : [ {
    "deleted_time" : 0,
    "enterprise_project_id" : "0",
    "project_id" : "2a4***56cc***7f837***891***c1cf",
    "prom_create_timestamp" : 1691718171483,
    "prom_id" : "08***2a-8**b-4**5-b**1-d1*****79",
    "prom_name" : "aom_prometheus",
    "prom_spec_config" : {
      "prom_http_api_endpoint" : "aom-internal.cn-***-*.com:***/v1/2a4***56cc***7f837***891***c1cf/
08***2a-8**b-4**5-b**1-d1*****79",
      "remote_read_url" : "aom-internal.cn-***-*.com:***/v1/2a4***56cc***7f837***891***c1cf/
08***2a-8**b-4**5-b**1-d1*****79/api/v1/read",
      "remote_write_url" : "aom-internal.cn-***-*.com:***/v1/2a4***56cc***7f837***891***c1cf/
08***2a-8**b-4**5-b**1-d1*****79/push",
      "region_id" : "cn-***-"
    },
    "prom_type" : "CCE",
    "prom_update_timestamp" : 1691718171483
  }
]
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.5.4 Creating a Recording Rule for a Prometheus Instance

Function

This API is used to create a recording rule for a Prometheus instance.

Calling Method

For details, see [Calling APIs](#).

URI

POST /v1/{project_id}/{prometheus_instance}/aom/api/v1/rules

Table 4-437 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID obtained from IAM. Generally, a project ID contains 32 characters.
prometheus_instance	Yes	String	Prometheus instance ID.

Request Parameters

Table 4-438 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM.
Content-Type	Yes	String	Content type, which is application/json.

Table 4-439 Request body parameters

Parameter	Mandatory	Type	Description
recording_rule	Yes	String	Recording rule.

Response Parameters

Status code: 204

No Content: The request is successful, but no content is returned.

Status code: 500

Table 4-440 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Trace ID.

Example Requests

Create a recording rule for a Prometheus instance.

```
https://{{Endpoint}}/v1/{{project_id}}/{{prometheus_instance}}/aom/api/v1/rules

{
    "recording_rule": "groups:\n      - name: apiserver_request_total\n        interval: 60s\n        rules:\n          -\n            record: job_instance_mode:apiserver_request_total:avg_rate5m\n              expr: avg by (job, instance, mode)\n              (rate(apiserver_request_total[5m]))\n              labels:\n                team: operations\n              -\n                record:\n                  job:apiserver_request_total:sum_rate10m\n                    expr: sum by (job)(rate(apiserver_request_total[10m]))\n                    labels:\n                      team: operations"
}
```

Example Responses

Status code: 204

No Content: The request is successful, but no content is returned.

```
No Content
```

Status code: 500

The recording rule already exists.

```
{
    "error_code": "AOM.5001019",
    "error_msg": "recording rule exist for the prometheus instance"
}
```

Status Codes

Status Code	Description
204	No Content: The request is successful, but no content is returned.
500	The recording rule already exists.

Error Codes

See [Error Codes](#).

4.5.5 Obtaining the Credential for Calling a Prometheus Instance

Function

This API is used to obtain the credential for calling a Prometheus instance.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/access-code

Table 4-441 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID obtained from IAM. Generally, a project ID contains 32 characters.

Request Parameters

Table 4-442 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM.
Content-Type	No	String	Content type, which is application/json.

Response Parameters

Status code: 200

Table 4-443 Response body parameters

Parameter	Type	Description
access_codes	Array of AccessCodeMode objects	Access codes.

Table 4-444 AccessCodeModel

Parameter	Type	Description
access_code	String	Access code.
access_code_id	String	Access code ID.
create_at	Long	Creation time.
status	String	Status.

Example Requests

Obtain the credential for calling a Prometheus instance.

`https://{{Endpoint}}/v1/{{project_id}}/access-code`

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "access_codes" : [ {  
        "access_code" : "b***OOJpV***B4ciU*****NfR2f9xZ*****tgpba*****yQS66lh***a",  
        "access_code_id" : "c6*04***ee6e****092****45**3",  
        "create_at" : 1700796457506243016,  
        "status" : "enable"  
    } ]  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.5.6 Modifying a Prometheus Instance

Function

This API is used to modify a Prometheus instance.

Calling Method

For details, see [Calling APIs](#).

URI

`PUT /v1/{{project_id}}/aom/prometheus`

Table 4-445 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID obtained from IAM. Generally, a project ID contains 32 characters.

Request Parameters

Table 4-446 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM.
Content-Type	Yes	String	Content type, which is application/json.
Enterprise-Project-Id	Yes	String	Enterprise project ID. <ul style="list-style-type: none"> ● To modify the instances in an enterprise project, enter the enterprise project ID.

Table 4-447 Request body parameters

Parameter	Mandatory	Type	Description
prom_id	Yes	String	ID of the Prometheus instance to be modified.
prom_limits	No	PromLimits object	Metric storage duration, which can be modified only once a day.
prom_name	No	String	Name of the target Prometheus instance. Enter 1–100 characters and do not start or end with an underscore (_) or hyphen (-). Only letters, digits, underscores, and hyphens are allowed.

Table 4-448 PromLimits

Parameter	Mandatory	Type	Description
compactor_blocks_retention_period	No	String	Metric storage duration. Only 15, 30, 60, and 90 days are supported. Enumeration values: <ul style="list-style-type: none"> ● "360h" ● "720h" ● "1440h" ● "2160h"

Response Parameters

Status code: 200

Table 4-449 Response body parameters

Parameter	Type	Description
count	Long	Total number of Prometheus instances.
prometheus	Array of PromInstanceEpsModel objects	List of Prometheus instance names.

Table 4-450 PromInstanceEpsModel

Parameter	Type	Description
prom_name	String	Prometheus instance name. Enter 1–100 characters and do not start or end with an underscore (_) or hyphen (-). Only letters, digits, underscores, and hyphens are allowed.
prom_id	String	Prometheus instance ID.
prom_type	String	Prometheus instance type (VPC and KUBERNETES are not supported). Enumeration values: <ul style="list-style-type: none">• default• ECS• VPC• CCE• REMOTE_WRITE• KUBERNETES• CLOUD_SERVICE• ACROSS_ACCOUNT
prom_version	String	Prometheus instance version.
prom_create_time_stamp	Long	Timestamp when the Prometheus instance is created.
prom_update_time_stamp	Long	Timestamp when the Prometheus instance is updated.

Parameter	Type	Description
prom_status	String	Prometheus instance status. Enumeration values: <ul style="list-style-type: none">• DELETED• NORMAL• ALL
enterprise_project_id	String	Enterprise project that the Prometheus instance belongs to.
project_id	String	ID of the project that the Prometheus instance belongs to.
is_deleted_tag	Long	Whether an instance has been deleted.
deleted_time	Long	Deletion time.
prom_spec_config	PromConfigMode L object	Special configuration of the Prometheus instance.
cce_spec_config	String	Special configuration of the Prometheus instance in the CCE scenario.
prom_limits	PromLimits object	Prometheus instance limitations.
limits_update_time	Long	Time when the metric storage duration was modified.

Table 4-451 PromConfigModel

Parameter	Type	Description
remote_write_url	String	Remote write address of the Prometheus instance.
remote_read_url	String	Remote read address of the Prometheus instance.
prom_http_api_endpoint	String	URL for calling the Prometheus instance.
dashboard_id	String	ID of the dashboard associated with the Prometheus instance (not used currently).
region_id	String	Region that the Prometheus instance belongs to.

Table 4-452 PromLimits

Parameter	Type	Description
compactor_blocks _retention_period	String	Metric storage duration. Only 15, 30, 60, and 90 days are supported. Enumeration values: <ul style="list-style-type: none">• "360h"• "720h"• "1440h"• "2160h"

Status code: 400**Table 4-453** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Trace ID.

Status code: 401**Table 4-454** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Trace ID.

Status code: 500**Table 4-455** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.
error_type	String	Error type.
trace_id	String	Trace ID.

Example Requests

Modify the Prometheus instance name and metric storage duration.

```
https://{{Endpoint}}/v1/{{project_id}}/aom/prometheus

{
  "prom_id" : "a4a3****-****-4ef6-****-****d1cc****",
  "prom_limits" : {
    "compactor_blocks_retention_period" : "720h"
  },
  "prom_name" : "aomPrometheus"
}
```

Example Responses

Status code: 200

OK: The request is successful.

```
{
  "count" : 0,
  "prometheus" : [ {
    "deleted_time" : 0,
    "enterprise_project_id" : "0",
    "limits_update_time" : 0,
    "project_id" : "2a4***56cc***7f837***891***c1cf",
    "prom_create_timestamp" : 1691718171483,
    "prom_id" : "08****2a-8**b-4**5-b**1-d1*****79",
    "prom_name" : "aom_prometheus",
    "prom_spec_config" : {
      "prom_http_api_endpoint" : "aom-internal.cn-****-*.*.com:***/v1/2a4***56cc***7f837***891***c1cf/
08****2a-8**b-4**5-b**1-d1*****79",
      "region_id" : "cn-****-*",
      "remote_read_url" : "aom-internal.cn-****-*.*.com:***/v1/2a4***56cc***7f837***891***c1cf/
08****2a-8**b-4**5-b**1-d1*****79/api/v1/read",
      "remote_write_url" : "aom-internal.cn-****-*.*.com:***/v1/2a4***56cc***7f837***891***c1cf/
08****2a-8**b-4**5-b**1-d1*****79/push"
    },
    "prom_type" : "CCE",
    "prom_update_timestamp" : 1691718171483
  } ]
}
```

Status code: 400

Bad Request: Invalid request. The client should not repeat this request without modification.

```
{
  "error_code" : "AOM.11016014",
  "error_msg" : "prom instance not found",
  "trace_id" : ""
}
```

Status code: 401

Unauthorized: The authorization information provided by the client is incorrect or invalid.

```
{  
    "error_code" : "SVCSTG.AMS.4010000",  
    "error_msg" : "auth failed.",  
    "error_type" : "AUTH_FAILED",  
    "trace_id" : null  
}
```

Status code: 500

Internal Server Error: The server is able to receive the request but unable to understand the request.

```
{  
    "error_code" : "APM.00000500",  
    "error_msg" : "Internal Server Error",  
    "trace_id" : ""  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.
400	Bad Request: Invalid request. The client should not repeat this request without modification.
401	Unauthorized: The authorization information provided by the client is incorrect or invalid.
500	Internal Server Error: The server is able to receive the request but unable to understand the request.

Error Codes

See [Error Codes](#).

4.6 Configuration Management

4.6.1 Querying the Cloud Services for Which AOM 2.0 Has Been Granted Permissions

Function

This API is used to query the cloud services for which AOM 2.0 has been granted permissions.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/aom/auth/grant

Table 4-456 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID obtained from IAM. Generally, a project ID contains 32 characters.

Request Parameters

Table 4-457 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM.
Content-Type	No	String	Content type, which is application/json.

Response Parameters

Status code: 200

OK: The request is successful.

None

Example Requests

Query the cloud services for which AOM 2.0 has been granted permissions.

https://{{Endpoint}}/v1/{{project_id}}/aom/auth/grant

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "CES": {  
        "role_name": [ "CES ReadOnlyAccess" ],  
        "status": true  
    },  
    "ECS": {  
        "role_name": [ "ECS CommonOperations", "ECS ReadOnlyAccess" ],  
        "status": true  
    },  
    "CCE": {  
        "role_name": [ "CCE CommonOperations", "CCE ReadOnlyAccess" ],  
        "status": true  
    }  
}
```

```
        "role_name" : [ "CCE FullAccess" ],
        "status" : true
    },
    "CCI" : {
        "role_name" : [ "CCI FullAccess" ],
        "status" : true
    },
    "RMS" : {
        "role_name" : [ "RMS ReadOnlyAccess" ],
        "status" : true
    },
    "LTS" : {
        "role_name" : [ "LTS FullAccess" ],
        "status" : true
    },
    "DMS" : {
        "role_name" : [ "DMS UserAccess" ],
        "status" : true
    }
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.6.2 Querying the ICAgent Installed on a Host

Function

This API is used to query the ICAgent installed on a cluster host or a custom host.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v1/{project_id}/{cluster_id}/{namespace}/agents

Table 4-458 Path Parameters

Parameter	Mandatory	Type	Description
cluster_id	Yes	String	<ul style="list-style-type: none">Enter a cluster ID when a cluster host is queried.Enter APM when a custom host is queried.

Parameter	Mandatory	Type	Description
namespace	Yes	String	<ul style="list-style-type: none">Enter a namespace when a cluster host is queried.Enter APM when a custom host is queried.
project_id	Yes	String	Project ID obtained from IAM. Generally, a project ID contains 32 characters.

Request Parameters

Table 4-459 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM.
Content-Type	No	String	Content type, which is application/json.

Response Parameters

Status code: 200

OK: The request is successful.

None

Example Requests

Query the ICAgent installed on a host.

`https://{Endpoint}/v1/{project_id}/{cluster_id}/{namespace}/agents`

Example Responses

Status code: 200

OK: The request is successful.

```
[ {  
    "ip" : "10.***.13",  
    "agentId" : "7b****93-7**1-4**e-8**b-3d***35**84",  
    "devCloudId" : "",  
    "nodeName" : "aom-docker-75079-iul66",  
    "status" : "running",  
    "lastModified" : "1700577655170",  
    "updateTime" : "1701141177267",  
    "version" : "5.13.110.52",  
    "osType" : "linux",  
    "pinpointVersion" : "1.0.29",  
}
```

```
"pinpointStatus" : "",  
"phpProbeVersion" : "",  
"dotnetProbeVersion" : "",  
"extendInfo" : null,  
"customHostTag" : null,  
"enterprise_project_id" : "d64fbcc8-c296-4a6f-8988-6850dfb08b47",  
"reserved" : {"\\"cpu_used\\"": "1.5", "\\"goroutine_used\\"": 9507, "\\"mem_used\\"": "181556", "\\"net_used\\"": 0.1923828125}"  
}]
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7 Dashboard

4.7.1 Querying the Dashboard List

Function

This API is used to query the dashboard list.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v2/{project_id}/aom/dashboards

Table 4-460 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Table 4-461 Query Parameters

Parameter	Mandatory	Type	Description
dashboard_type	No	String	Dashboard type.

Request Parameters

Table 4-462 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	No	String	Message body type or format. Content type, which is application/json.
Enterprise-Project-Id	No	String	Enterprise project ID. For details, see Obtaining an Enterprise Project ID . <ul style="list-style-type: none">• To query the instances in an enterprise project, enter the enterprise project ID.• To query the instances in all enterprise projects, enter all_granted_eps.

Response Parameters

Status code: 200

Table 4-463 Response body parameters

Parameter	Type	Description
page_size	String	Current page size.
dashboards	Array of Dashboard objects	Dashboard details list.

Table 4-464 Dashboard

Parameter	Type	Description
project_id	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .
dashboard_type	String	Dashboard type.
dashboard_title	String	Dashboard name.
dashboard_title_en	String	Dashboard name.
dashboard_id	String	Dashboard ID.
version	String	Dashboard version.
enterprise_project_id	String	ID of the enterprise project to which the dashboard belongs. For details, see Obtaining an Enterprise Project ID .
folder_name	String	Dashboard group name.
folder_id	String	Dashboard group ID.
sync_data	String	Number of dashboards to be synchronized.
is_create_action	Boolean	Whether to add a dashboard. <ul style="list-style-type: none">● false: Update a dashboard.● true: Add a dashboard. Enumeration values: <ul style="list-style-type: none">● true● false
dashboard_tags	Array of Map<String, String> objects	Dashboard tag list.
is_favorite	Boolean	Whether to add the dashboard to favorites. <ul style="list-style-type: none">● true: Add a dashboard to favorites.● false: Do not add a dashboard to favorites. Enumeration values: <ul style="list-style-type: none">● true● false
created	Long	Time when the dashboard was created.

Parameter	Type	Description
updated	Long	Time when the dashboard was updated.
created_by	String	Name of the account for adding the dashboard.
updated_by	String	Name of the account for updating the dashboard.
charts	Object	Dashboard graph details.
templating	Object	List of dashboard variables.
display	String	Display or not.
query_count	String	Total number of queries.
time_range	String	Default time range for query.

Example Requests

Query dashboard details.

https://{{Endpoint}}/v2/{{project_id}}/aom/dashboards

Example Responses

Status code: 200

OK: The request is successful.

```
{  
  "dashboards": [ {  
    "created": 1725009374,  
    "created_by": "auto_admin",  
    "dashboard_id": "387d****-5ff2-***-bcee-***cab9***",  
    "dashboard_tags": [ {  
      "application_name": "SYRN095Z_AutoAPPtest"  
    } ],  
    "dashboard_title": "1EuBp3Hf0Df",  
    "dashboard_type": "dashboard",  
    "display": true,  
    "enterprise_project_id": "0",  
    "is_create_action": false,  
    "is_favorite": false,  
    "project_id": "2a47****cca5***8373***1bff***",  
    "query_count": 1,  
    "updated": 1733398075812,  
    "version": "v1"  
  } ],  
  "page_size": 0  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7.2 Deleting a Dashboard

Function

This API is used to delete a dashboard.

Calling Method

For details, see [Calling APIs](#).

URI

DELETE /v2/{project_id}/aom/dashboards/{dashboard_id}

Table 4-465 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .
dashboard_id	Yes	String	Dashboard ID.

Request Parameters

Table 4-466 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json.

Parameter	Mandatory	Type	Description
Enterprise-Project-Id	No	String	<p>Enterprise project ID. For details, see Obtaining an Enterprise Project ID.</p> <ul style="list-style-type: none">• To delete the instances in an enterprise project, enter the enterprise project ID.• If this parameter is not specified, the instances in enterprise project 0 are deleted by default.

Response Parameters

Status code: 200

OK: The request is successful.

None

Example Requests

Delete the dashboard whose ID is **2439f2c7--43eb--cd1b***8b2e**.

```
https://{{Endpoint}}/v2/{{project_id}}/aom/dashboards/2439f2c7-***-43eb-***-cd1b***8b2e
```

Example Responses

None

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7.3 Querying Dashboard Details

Function

This API is used to query dashboard details.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v2/{project_id}/aom/dashboards/{dashboard_id}

Table 4-467 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .
dashboard_id	Yes	String	Dashboard ID.

Table 4-468 Query Parameters

Parameter	Mandatory	Type	Description
version	Yes	String	Dashboard version.

Request Parameters

Table 4-469 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	No	String	Message body type or format. Content type, which is application/json.
Enterprise-Project-Id	No	String	Enterprise project ID. For details, see Obtaining an Enterprise Project ID . <ul style="list-style-type: none">• To query the instances in an enterprise project, enter the enterprise project ID.• To query the instances in all enterprise projects, enter all_granted_eps.

Response Parameters

Status code: 200

Table 4-470 Response body parameters

Parameter	Type	Description
project_id	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .
dashboard_type	String	Dashboard type.
dashboard_title	String	Dashboard name.
dashboard_title_en	String	Dashboard name.
dashboard_id	String	Dashboard ID.
version	String	Dashboard version.
enterprise_project_id	String	ID of the enterprise project to which the dashboard belongs. For details, see Obtaining an Enterprise Project ID .
folder_name	String	Dashboard group name.
folder_id	String	Dashboard group ID.
sync_data	String	Number of dashboards to be synchronized.
is_create_action	Boolean	Whether to add a dashboard. <ul style="list-style-type: none">● false: Update a dashboard.● true: Add a dashboard. Enumeration values: <ul style="list-style-type: none">● true● false
dashboard_tags	Array of Map<String, String> objects	Dashboard tag list.
is_favorite	Boolean	Whether to add the dashboard to favorites. <ul style="list-style-type: none">● true: Add a dashboard to favorites.● false: Do not add a dashboard to favorites. Enumeration values: <ul style="list-style-type: none">● true● false

Parameter	Type	Description
created	Long	Time when the dashboard was created.
updated	Long	Time when the dashboard was updated.
created_by	String	Name of the account for adding the dashboard.
updated_by	String	Name of the account for updating the dashboard.
charts	Object	Dashboard graph details.
templating	Object	List of dashboard variables.
display	String	Display or not.
query_count	String	Total number of queries.
time_range	String	Default time range for query.

Example Requests

Query details about the dashboard whose ID is **f80****4-03-4f-b9-b***f32ff**.

https://{{Endpoint}}/v2/{{project_id}}/aom/dashboards/f80****4-0**3-4**f-b**9-b***f32f**f

Example Responses

Status code: 200

OK: The request is successful.

```
{  
    "created" : 1719327521188,  
    "updated" : 1719327521188,  
    "templating" : { },  
    "display" : true,  
    "project_id" : "2a****56cc***7f83***891b***cf",  
    "dashboard_type" : "dashboard",  
    "dashboard_title" : "aom_dashboard",  
    "dashboard_id" : "f80****4-0**3-4**f-b**9-b***f32f**f",  
    "version" : "v1",  
    "enterprise_project_id" : "0",  
    "folder_name" : "Dashboard Group",  
    "sync_data" : "{\"dashboard_id\":\"f80****4-0**3-4**f-b**9-b***f32f**f\"},\"version\":\"v1\"},\"folder_id\"":null,\"is_create_action\":true},  
    "is_create_action" : false,  
    "dashboard_tags" : [ {} ],  
    "is_favorite" : false,  
    "created_by" : "aom_ops_user2",  
    "query_count" : 0  
}
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7.4 Querying the Dashboard Group List

Function

This API is used to query the dashboard group list.

Calling Method

For details, see [Calling APIs](#).

URI

GET /v2/{project_id}/aom/dashboards-folder

Table 4-471 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .

Request Parameters

Table 4-472 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	No	String	Message body type or format. Content type, which is application/json.

Parameter	Mandatory	Type	Description
Enterprise-Project-Id	No	String	<p>Enterprise project ID. For details, see Obtaining an Enterprise Project ID.</p> <ul style="list-style-type: none">• To query the instances in an enterprise project, enter the enterprise project ID.• To query the instances in all enterprise projects, enter <code>all_granted_eps</code>.

Response Parameters

Status code: 200

Table 4-473 Response body parameters

Parameter	Type	Description
[items]	Array of DashBoardsFolder objects	Dashboard group list.

Table 4-474 DashBoardsFolder

Parameter	Type	Description
created	String	Time when the dashboard group was created.
updated	String	Time when the dashboard group was modified.
created_by	String	Account that created the dashboard group.
dashboard_ids	Array of strings	List of dashboard IDs in the dashboard group.
display	String	Whether to display the dashboard group.
enterprise_project_id	String	Enterprise project ID. For details, see Obtaining an Enterprise Project ID .
folder_id	String	Dashboard group ID.
folder_title	String	Dashboard group name.
folder_title_en	String	Dashboard group name.

Parameter	Type	Description
is_template	String	Whether the dashboard group is the default one.

Example Requests

Query the dashboard group list.

`https://{{Endpoint}}/v2/{{project_id}}/aom/dashboards-folder`

Example Responses

Status code: 200

OK: The request is successful.

```
[ {  
    "created" : 1712474334896,  
    "dashboard_ids" : [ "07994ceb-****-****-****-1e***3d***" ],  
    "display" : true,  
    "enterprise_project_id" : "0",  
    "folder_id" : "16ea61ea-**-****-****-cd***a3190a",  
    "folder_title" : "Dashboard",  
    "folder_title_en" : "Historical Dashboards",  
    "is_template" : false,  
    "updated" : 0  
} ]
```

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

4.7.5 Deleting a Dashboard Group

Function

This API is used to delete a dashboard group.

Calling Method

For details, see [Calling APIs](#).

URI

`DELETE /v2/{{project_id}}/aom/dashboards-folder/{{folder_id}}`

Table 4-475 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID, which can be obtained from the console or by calling an API. For details, see Obtaining a Project ID .
folder_id	Yes	String	Dashboard group ID.

Table 4-476 Query Parameters

Parameter	Mandatory	Type	Description
delete_all	Yes	Boolean	Whether to delete dashboards in a dashboard group.

Request Parameters

Table 4-477 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token obtained from IAM. For details, see Obtaining a Token .
Content-Type	Yes	String	Message body type or format. Content type, which is application/json.
Enterprise-Project-Id	No	String	Enterprise project ID. For details, see Obtaining an Enterprise Project ID . <ul style="list-style-type: none"> • To delete the instances in an enterprise project, enter the enterprise project ID. • If this parameter is not specified, the instances in enterprise project 0 are deleted by default.

Response Parameters

Status code: 200

OK: The request is successful.

None

Example Requests

Delete a dashboard group.

```
https://{{Endpoint}}/v2/{{project_id}}/aom/dashboards-folder/199dc141-****-****-****-fe706***3aa?  
delete_all=false
```

Example Responses

None

Status Codes

Status Code	Description
200	OK: The request is successful.

Error Codes

See [Error Codes](#).

5 Examples

5.1 Querying Time Series Objects

Scenario

This section describes how to query time series objects about a node's CPU usage.

Obtaining Basic Information

Before querying time series objects, obtain the value of the node ID from **dimensions** on the ECS console, and the value of the cluster ID from **dimensions** on the cluster management page of the CCE console.

For **metric_name** of CPU usage, see [Host Metrics](#). For the **name** corresponding to the cluster ID or node ID, see [Host Metrics - Dimension](#). For the namespace, see [Table4 QuerySeriesOptionParam](#).

Querying Time Series Objects

- URI format
POST /v2/{project_id}/series
- Example request

POST https://*{aom_endpoint}*/v2/{project_id}/series

To obtain the value of *{aom_endpoint}*, see [Regions and Endpoints](#).

Body:

```
{
  "series": [
    {
      "namespace": "PAAS.NODE",
      "metric_name": "aom_node_cpu_usage",
      "dimensions": [
        {
          "name": "clusterId",
          "value": "4fae3587-0202-11eb-9ba9-0255ac100b02"
        },
        {
          "name": "hostID",
          "value": "4100f512-c4e9-4b65-b0dd-2b94ea5e1a84"
        }
      ]
    }
  ]
}
```

- ```
 }
]
}

● Example response
{
 "meta_data": {
 "count": 0,
 "offset": 0,
 "total": 1,
 "nextToken": 9007148492074133276
 },
 "series": [
 {
 "namespace": "PAAS.NODE",
 "metric_name": "cpuUsage",
 "unit": "Percent",
 "dimensions": [
 {
 "name": "clusterId",
 "value": "4fae3587-0202-11eb-9ba9-0255ac100b02"
 },
 {
 "name": "clusterName",
 "value": "testdiskrate"
 },
 {
 "name": "hostID",
 "value": "4100f512-c4e9-4b65-b0dd-2b94ea5e1a84"
 },
 {
 "name": "nameSpace",
 "value": "default"
 },
 {
 "name": "nodeIP",
 "value": "192.168.0.123"
 },
 {
 "name": "nodeName",
 "value": "192.168.0.123"
 }
]
 }
}
```

## 5.2 Querying Time Series Data

### Scenario

This section describes how to query the time series data about a node's CPU usage.

### Obtaining Basic Information

Before querying time series data, obtain the value of the node ID from **dimensions** on the ECS console, and the value of the cluster ID from **dimensions** on the cluster management page of the CCE console.

Some metrics may be renamed due to format standardization. For the input parameter **metric\_name** for CPU usage used in this scenario, see the **metric\_name** (not renamed) returned when you call the API for [querying time series objects](#) (to call this API, set the input parameter **metric\_name** to the name queried in [Host Metrics](#)). In this example, the name is **aom\_node\_cpu\_usage** (renamed). For the **name** corresponding to the cluster ID or node ID, see [Host Metrics - Dimension](#). For the namespace, see [Table4 QuerySample](#).

## Querying Time Series Data

- URI format

**POST /v2/{project\_id}/samples**

- Example request

**POST [https://{{aom\\_endpoint}}/v2/{{project\\_id}}/samples](https://{{aom_endpoint}}/v2/{{project_id}}/samples)**

To obtain the value of `{aom_endpoint}`, see [Regions and Endpoints](#).

Body:

```
{
 "samples": [
 {
 "namespace": "PAAS.NODE",
 "metric_name": "cpuUsage",
 "dimensions": [{
 "name": "clusterId",
 "value": "4fae3587-0202-11eb-9ba9-0255ac100b02"
 },
 {
 "name": "hostID",
 "value": "4100f512-c4e9-4b65-b0dd-2b94ea5e1a84"
 }
]
],
 "period": 60,
 "time_range": "-1.-1.2",
 "statistics": [
 "maximum",
 "minimum",
 "sum"
]
}
```

- Example response

```
{
 "samples": [
 {
 "sample": {
 "namespace": "PAAS.NODE",
 "metric_name": "cpuUsage",
 "dimensions": [[
 {
 "name": "clusterId",
 "value": "4fae3587-0202-11eb-9ba9-0255ac100b02"
 },
 {
 "name": "hostID",
 "value": "4100f512-c4e9-4b65-b0dd-2b94ea5e1a84"
 }
] ,
 "data_points": [
 {
 "timestamp": 1608191880000,
 "unit": "Percent",
 "statistics": [
 {
 "statistic": "maximum",
 "value": 14.5
 },
 {
 "statistic": "minimum",
 "value": 14.5
 },
 {
 "statistic": "sum",
 "value": 14.5
 }
],
 "timestamp": 1608191940000,
 "unit": "Percent"
 }
]
 }
 }
]
}
```

```
"unit": "Percent",
"statistics": [
 {
 "statistic": "maximum",
 "value": 12.0
 },
 {
 "statistic": "minimum",
 "value": 12.0
 },
 {
 "statistic": "sum",
 "value": 12.0
 }
]
}]
```

## 5.3 Querying Details About a Specified Alarm Action Rule

### Scenario

This section describes how to query an alarm action rule by name.

### Obtaining Basic Information

Before querying the details about an alarm action rule, obtain its rule name first. You can call the API for obtaining the alarm action rule list or go to the AOM 2.0 console to obtain the rule name.

### Querying Details About a Specified Alarm Action Rule

- URI format  
URI format: GET /v2/{project\_id}/alert/action-rules/{rule\_name}
- Example request  
GET https://{Endpoint}/v2/{project\_id}/alert/action-rules/{rule\_name}  
You can obtain the value of {aom\_endpoint} from [Regions and Endpoints](#).
- Example response

```
{
 "create_time": 1665991889597,
 "notification_template": "aom.built-in.template.zh",
 "project_id": "2xxxxxxxxxxxxxxxxxxxxxx",
 "rule_name": "111222",
 "smn_topics": [
 {
 "display_name": "",
 "name": "gxxxxxt",
 "push_policy": 0,
 "status": 0,
 "topic_urn": "urn:smn:xxxx:xxxxxxxxxxxxxxxxxxxxf:gxxxxxt"
 }
],
 "time_zone": "xx/XXX",
 "type": "1",
 "update_time": 1665991889597,
 "user_name": "kxxxxxxxt"
}
```

# 6 Permissions Policies and Supported Actions

## 6.1 Introduction

You can use Identity and Access Management (IAM) for fine-grained permissions management of your AOM. If your HUAWEI ID does not need individual IAM users, you can skip this topic.

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 or roles 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 AOM.

You can grant users permissions by using roles and policies. Roles are provided by IAM to define service-based permissions that match users' job responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

### NOTE

If you want to allow or deny the access to an API, use policy-based authorization.

Your account has all the permissions required to call all APIs, but IAM users under your account must be assigned the required permissions. The required permissions are determined by the actions supported by the API. Only users with the policies allowing for those actions can call the API successfully. For example, if an IAM user wants to query metrics using an API, the user must have been granted permissions that allow the **aom:metric:get** action.

## Supported Actions

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

- Permissions: statements in a policy that allow or deny certain operations

- APIs: REST APIs that can be called by a user who has been granted specific permissions.
- Actions: specific operations that are allowed or denied in a custom policy.
- Dependencies: actions which a specific action depends on. When allowing an action for a user, you also need to allow any existing action dependencies for that user.
- IAM projects/Enterprise projects: the authorization scope of a custom policy. A custom policy can be applied to IAM projects or enterprise projects or both. Policies that contain actions for both IAM and enterprise projects can be used and applied for both IAM and Enterprise Management. Policies that contain actions only for IAM projects can be used and applied to IAM only. Administrators can check whether an action supports IAM projects or enterprise projects in the action list. For details about the differences between IAM and enterprise management, see [What Are the Differences Between IAM and Enterprise Management?](#)

AOM supports the following actions that can be defined in custom policies:

- **Alarm APIs**: actions supported by alarm APIs, such as the API for querying alarms.
- **Monitoring APIs**: actions supported by monitoring APIs, such as the API for querying metrics.
- **Prometheus monitoring APIs**: actions supported by Prometheus monitoring APIs, such as the API for querying the expression calculation result in a specified period.
- **Log APIs**: actions supported by log APIs, such as the API for querying logs.
- **Prometheus instance APIs**: actions supported by Prometheus instance APIs, such as the API for uninstalling a hosted Prometheus instance.

## 6.2 Actions Supported by Policy-based Authorization

### 6.2.1 Alarm APIs



#### NOTE

✓: supported; ✗: not supported

**Table 6-1** Alarm APIs

| Permission                 | API                                    | Action                     | IAM Project | Enterprise Project |
|----------------------------|----------------------------------------|----------------------------|-------------|--------------------|
| Adding an event alarm rule | POST /v2/{project_id}/event2alarm-rule | aom:event2AlarmRule:create | ✓           | ✗                  |

| Permission                            | API                                                 | Action                     | IAM Project | Enterprise Project |
|---------------------------------------|-----------------------------------------------------|----------------------------|-------------|--------------------|
| Querying the event alarm rule list    | GET /v2/{project_id}/event2alarm-rule               | aom:event2AlarmRule:list   | ✓           | ✗                  |
| Modifying an event alarm rule         | PUT /v2/{project_id}/event2alarm-rule               | aom:event2AlarmRule:set    | ✓           | ✗                  |
| Deleting an event alarm rule          | DELETE /v2/{project_id}/event2alarm-rule            | aom:event2AlarmRule:delete | ✓           | ✗                  |
| Obtaining the sent alarm content      | GET /v2/{project_id}/alarm-notified-histories       | aom:alarm:list             | ✓           | ✗                  |
| Deleting a silence rule               | DELETE /v2/{project_id}/alert/mute-rules            | aom:muteRule:delete        | ✓           | ✓                  |
| Adding a silence rule                 | POST /v2/{project_id}/alert/mute-rules              | aom:muteRule:create        | ✓           | ✓                  |
| Modifying a silence rule              | PUT /v2/{project_id}/alert/mute-rules               | aom:muteRule:update        | ✓           | ✓                  |
| Querying the silence rule list        | GET /v2/{project_id}/alert/mute-rules               | aom:muteRule:list          | ✓           | ✓                  |
| Querying an alarm action rule by name | GET /v2/{project_id}/alert/action-rules/{rule_name} | aom:actionRule:get         | ✓           | ✓                  |
| Adding an alarm action rule           | POST /v2/{project_id}/alert/action-rules            | aom:actionRule:create      | ✓           | ✓                  |

| Permission                                      | API                                        | Action                 | IAM Project | Enterprise Project |
|-------------------------------------------------|--------------------------------------------|------------------------|-------------|--------------------|
| Deleting an alarm action rule                   | DELETE /v2/{project_id}/alert/action-rules | aom:action Rule:delete | ✓           | ✓                  |
| Modifying an alarm action rule                  | PUT /v2/{project_id}/alert/action-rules    | aom:action Rule:update | ✓           | ✓                  |
| Querying the alarm rule list                    | GET /v2/{project_id}/alert/action-rules    | aom:action Rule:list   | ✓           | ✓                  |
| Querying events and alarms                      | POST /v2/{project_id}/events               | aom:alarm:list         | ✓           | ✗                  |
| Counting events and alarms                      | POST /v2/{project_id}/events/statistic     | aom:alarm:list         | ✓           | ✗                  |
| Reporting events or alarms                      | PUT /v2/{project_id}/push/events           | aom:alarm:put          | ✓           | ✗                  |
| Querying metric or event alarm rules            | GET /v4/{project_id}/alarm-rules           | aom:alarm Rule:list    | ✓           | ✓                  |
| Adding or modifying metric or event alarm rules | POST /v4/{project_id}/alarm-rules          | aom:alarm Rule:create  | ✓           | ✓                  |

| Permission                                             | API                                                      | Action                                                                                                                                                       | IAM Project | Enterprise Project |
|--------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------|
| Deleting metric or event alarm rules                   | DELETE /v4/{project_id}/alarm-rules                      | aom:alarmRule:delete<br><b>NOTE</b><br>The resource type <b>alarmRule</b> of this action applies only to the <b>DELETE /v4/{project_id}/alarm-rules</b> API. | ✓           | ✓                  |
| Adding a message template                              | POST /v2/{project_id}/events/notification/templates      | aom:notificationTemplate:create                                                                                                                              | ✓           | ✓                  |
| Deleting a message template                            | DELETE /v2/{project_id}/events/notification/templates    | aom:notificationTemplate:delete                                                                                                                              | ✓           | ✓                  |
| Modifying a message template                           | PUT /v2/{project_id}/events/notification/templates       | aom:notificationTemplate:update                                                                                                                              | ✓           | ✓                  |
| Querying the message template list                     | GET /v2/{project_id}/events/notification/templates       | aom:notificationTemplate:list                                                                                                                                | ✓           | ✓                  |
| Querying a message template based on the template name | GET /v2/{project_id}/events/notification/template/{name} | aom:notificationTemplate:get                                                                                                                                 | ✓           | ✓                  |
| Deleting an alarm template                             | DELETE /v4/{project_id}/alarm-rules-template             | aom:alarmRule:delete                                                                                                                                         | ✓           | ✓                  |

| Permission                       | API                                       | Action              | IAM Project | Enterprise Project |
|----------------------------------|-------------------------------------------|---------------------|-------------|--------------------|
| Querying the alarm template list | GET /v4/{project_id}/alarm-rules-template | aom:alarm Rule:list | ✓           | ✓                  |

## 6.2.2 Monitoring APIs



✓: supported; x: not supported

**Table 6-2** Monitoring APIs

| Permission                                   | API                                               | Action                   | IAM Project | Enterprise Project |
|----------------------------------------------|---------------------------------------------------|--------------------------|-------------|--------------------|
| Querying time series objects                 | POST /v2/{project_id}/series                      | aom:metric: list         | ✓           | x                  |
| Querying time series data                    | POST /v2/{project_id}/samples                     | aom:metric: list         | ✓           | x                  |
| Querying metrics                             | POST /v1/{project_id}/ams/metrics                 | aom:metric: get          | ✓           | x                  |
| Querying monitoring data                     | POST /v1/{project_id}/ams/metricdata              | aom:metric: get          | ✓           | x                  |
| Adding monitoring data                       | POST /v1/{project_id}/ams/report/metricdata       | aom:metric: put          | ✓           | x                  |
| Adding or modifying a service discovery rule | PUT /v1/{project_id}/inv/servicediscoveryrules    | aom:discoveryRule:set    | ✓           | x                  |
| Deleting a service discovery rule            | DELETE /v1/{project_id}/inv/servicediscoveryrules | aom:discoveryRule:delete | ✓           | x                  |

| Permission                                | API                                                 | Action                 | IAM Project | Enterprise Project |
|-------------------------------------------|-----------------------------------------------------|------------------------|-------------|--------------------|
| Querying existing service discovery rules | GET /v1/{project_id}/inv/servicediscoveryrules      | aom:discoveryRule:list | ✓           | ✗                  |
| Adding a threshold rule                   | POST /v2/{project_id}/alarm-rules                   | aom:alarm Rule:create  | ✓           | ✗                  |
| Querying the threshold rule list          | GET /v2/{project_id}/alarm-rules                    | aom:alarm Rule:get     | ✓           | ✗                  |
| Modifying a threshold rule                | PUT /v2/{project_id}/alarm-rules                    | aom:alarm Rule:set     | ✓           | ✗                  |
| Deleting a threshold rule                 | DELETE /v2/{project_id}/alarm-rules/{alarm_rule_id} | aom:alarm Rule:delete  | ✓           | ✗                  |
| Querying a threshold rule                 | GET /v2/{project_id}/alarm-rules/{alarm_rule_id}    | aom:alarm Rule:get     | ✓           | ✗                  |
| Deleting threshold rules in batches       | POST /v2/{project_id}/alarm-rules/delete            | aom:alarm Rule:delete  | ✓           | ✗                  |

### 6.2.3 Prometheus Monitoring APIs



✓: supported; ✗: not supported

**Table 6-3 Prometheus monitoring APIs**

| Permission                                                           | API                                                       | Action          | IAM Project | Enterprise Project |
|----------------------------------------------------------------------|-----------------------------------------------------------|-----------------|-------------|--------------------|
| Querying the expression calculation result in a specified period     | GET /v1/{project_id}/aom/api/v1/query_range               | aom:metric:list | √           | √                  |
| Querying the expression calculation result in a specified period     | POST /v1/{project_id}/aom/api/v1/query_range              | aom:metric:list | √           | √                  |
| Querying the expression calculation result at a specified time point | GET /v1/{project_id}/aom/api/v1/query                     | aom:metric:list | √           | √                  |
| Querying the expression calculation result at a specified time point | POST /v1/{project_id}/aom/api/v1/query                    | aom:metric:list | √           | √                  |
| Querying tag values                                                  | GET /v1/{project_id}/aom/api/v1/label/{label_name}/values | aom:metric:list | √           | √                  |
| Obtaining the tag name list                                          | GET /v1/{project_id}/aom/api/v1/labels                    | aom:metric:list | √           | √                  |

| Permission                  | API                                      | Action          | IAM Project | Enterprise Project |
|-----------------------------|------------------------------------------|-----------------|-------------|--------------------|
| Obtaining the tag name list | POST /v1/{project_id}/aom/api/v1/labels  | aom:metric:list | ✓           | ✓                  |
| Querying metadata           | GET /v1/{project_id}/aom/api/v1/metadata | aom:metric:list | ✓           | ✓                  |

## 6.2.4 Prometheus Instance APIs



✓: supported; x: not supported

**Table 6-4** Prometheus instance APIs

| Permission                                          | API                                                          | Action            | IAM Project | Enterprise Project |
|-----------------------------------------------------|--------------------------------------------------------------|-------------------|-------------|--------------------|
| Uninstalling a hosted Prometheus instance           | DELETE /v1/{project_id}/aom/prometheus                       | aom:metric:delete | ✓           | ✓                  |
| Querying a Prometheus instance                      | GET /v1/{project_id}/aom/prometheus                          | aom:metric:list   | ✓           | ✓                  |
| Adding a Prometheus instance                        | POST /v1/{project_id}/aom/prometheus                         | aom:metric:put    | ✓           | ✓                  |
| Creating a recording rule for a Prometheus instance | POST /v1/{project_id}/{prometheus_instance}/aom/api/v1/rules | aom:metric:put    | ✓           | ✓                  |

| Permission                                                 | API                                 | Action         | IAM Project | Enterprise Project |
|------------------------------------------------------------|-------------------------------------|----------------|-------------|--------------------|
| Obtaining the credential for calling a Prometheus instance | GET /v1/{project_id}/access-code    | aom:icmgr:get  | ✓           | ✓                  |
| Modifying a Prometheus instance                            | PUT /v1/{project_id}/aom/prometheus | aom:metric:set | ✓           | ✓                  |

## 6.2.5 Configuration Management APIs



✓: supported; x: not supported

**Table 6-5** Configuration management APIs

| Permission                                                                 | API                                 | Action         | IAM Project | Enterprise Project |
|----------------------------------------------------------------------------|-------------------------------------|----------------|-------------|--------------------|
| Querying the cloud services for which AOM 2.0 has been granted permissions | GET /v1/{project_id}/aom/auth/grant | aom:agency:get | ✓           | x                  |

| Permission                               | API                                                  | Action         | IAM Project | Enterprise Project |
|------------------------------------------|------------------------------------------------------|----------------|-------------|--------------------|
| Querying the ICAgent installed on a host | GET /v1/{project_id}/{cluster_id}/{namespace}/agents | aom:icmgr:list | ✓           | ✗                  |

## 6.2.6 Dashboard APIs



✓: supported; ✗: not supported

**Table 6-6** Dashboard APIs

| Permission                        | API                                                       | Action          | IAM Project | Enterprise Project |
|-----------------------------------|-----------------------------------------------------------|-----------------|-------------|--------------------|
| Deleting a dashboard              | DELETE /v2/{project_id}/aom/dashboards/{dashboard_id}     | aom:view:delete | ✓           | ✓                  |
| Querying the dashboard list       | GET /v2/{project_id}/aom/dashboards                       | aom:view:get    | ✓           | ✓                  |
| Querying dashboard details        | GET /v2/{project_id}/aom/dashboards/{dashboard_id}        | aom:view:get    | ✓           | ✓                  |
| Querying the dashboard group list | GET /v2/{project_id}/aom/dashboards-folder                | aom:view:get    | ✓           | ✓                  |
| Deleting a dashboard group        | DELETE /v2/{project_id}/aom/dashboards-folder/{folder_id} | aom:view:delete | ✓           | ✓                  |

## 6.2.7 Log APIs



✓: supported; x: not supported

**Table 6-7** Log APIs

| Permission    | API                              | Action       | IAM Project | Enterprise Project |
|---------------|----------------------------------|--------------|-------------|--------------------|
| Querying logs | POST /v1/{project_id}/als/action | aom:log:list | ✓           | x                  |

## 6.2.8 CMDB APIs



✓: supported; x: not supported

**Table 6-8** CMDB APIs

| Permission                                | API                                      | Action                     | IAM Project | Enterprise Project |
|-------------------------------------------|------------------------------------------|----------------------------|-------------|--------------------|
| Adding an application                     | POST /v1/applications                    | aom:cmdbApplication:create | ✓           | x                  |
| Deleting an application                   | DELETE /v1/applications/{application_id} | aom:cmdbApplication:delete | ✓           | x                  |
| Querying the details about an application | GET /v1/applications/{application_id}    | aom:cmdbApplication:get    | ✓           | x                  |
| Modifying an application                  | PUT /v1/applications/{application_id}    | aom:cmdbApplication:update | ✓           | x                  |

| Permission                                | API                                      | Action                     | IAM Project | Enterprise Project |
|-------------------------------------------|------------------------------------------|----------------------------|-------------|--------------------|
| Adding a component                        | POST /v1/components                      | aom:cmdbComponent:create   | √           | ✗                  |
| Deleting a component                      | DELETE /v1/components/{component_id}     | aom:cmdbComponent:delete   | √           | ✗                  |
| Querying the details about a component    | GET /v1/components/{component_id}        | aom:cmdbComponent:get      | √           | ✗                  |
| Modifying a component                     | PUT /v1/components/{component_id}        | aom:cmdbComponent:update   | √           | ✗                  |
| Creating an environment                   | POST /v1/environments                    | aom:cmdbEnvironment:create | √           | ✗                  |
| Deleting an environment                   | DELETE /v1/environments/{environment_id} | aom:cmdbEnvironment:delete | √           | ✗                  |
| Querying the details about an environment | GET /v1/environments/{environment_id}    | aom:cmdbEnvironment:get    | √           | ✗                  |

| Permission                                     | API                                                                   | Action                     | IAM Project | Enterprise Project |
|------------------------------------------------|-----------------------------------------------------------------------|----------------------------|-------------|--------------------|
| Modifying an environment                       | PUT /v1/environments/{environment_id}                                 | aom:cmdbEnvironment:update | ✓           | ✗                  |
| Querying the list of resources bound to a node | POST /v1/resource/{rf_resource_type}/type/{type}/ci-relationships     | aom:cmdbResources:list     | ✓           | ✗                  |
| Querying the details about an application      | GET /v1/applications                                                  | aom:cmdbApplication:get    | ✓           | ✗                  |
| Querying the details about an environment      | GET /v1/environments/name/{environment_name}                          | aom:cmdbEnvironment:get    | ✓           | ✗                  |
| Querying the details about a component         | GET /v1/components/application/{application_id}/name/{component_name} | aom:cmdbComponent:get      | ✓           | ✗                  |

# 7 Appendix

## 7.1 Status Codes

[Table 7-1](#) describes status codes.

**Table 7-1** Status codes

| Status Code | Message                       | Description                                                                                                                                                                                |
|-------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 100         | Continue                      | The client should continue with its request.<br>This interim response is used to inform the client that the initial part of the requests has been received and not rejected by the server. |
| 101         | Switching Protocols           | The protocol should be switched. The protocol can only be switched to a more advanced protocol.<br>For example, a new HTTP protocol.                                                       |
| 200         | OK                            | The request has succeeded.                                                                                                                                                                 |
| 201         | Created                       | The request has been fulfilled, resulting in the creation of a new resource.                                                                                                               |
| 202         | Accepted                      | The request has been accepted, but the processing has not been completed.                                                                                                                  |
| 203         | Non-Authoritative Information | The server successfully processed the request, but is returning information that may be from another source.                                                                               |
| 204         | No Content                    | The server has successfully processed the request, but does not return any content.<br>The status code is returned in response to an HTTP OPTIONS request.                                 |
| 205         | Reset Content                 | The server has fulfilled the request, but the requester is required to reset the content.                                                                                                  |

| Status Code | Message           | Description                                                                                                                                                                                                                       |
|-------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 206         | Partial Content   | The server has successfully processed a part of the GET request.                                                                                                                                                                  |
| 300         | Multiple Choices  | There are multiple options for the location of the requested resource. The response contains a list of resource characteristics and addresses from which a user terminal (such as a browser) can choose the most appropriate one. |
| 301         | Moved Permanently | The requested resource has been assigned with a new permanent URI. This new URI is contained in the response.                                                                                                                     |
| 302         | Found             | The requested resource resides temporarily under a different URI.                                                                                                                                                                 |
| 303         | See Other         | The response to the request can be found under a different URI.<br>It should be retrieved using a GET or POST method.                                                                                                             |
| 304         | Not Modified      | The requested resource has not been modified. When the server returns this status code, it does not return any resources.                                                                                                         |
| 305         | Use Proxy         | The requested resource must be accessed through a proxy.                                                                                                                                                                          |
| 306         | Unused            | This HTTP status code is no longer used.                                                                                                                                                                                          |
| 400         | Bad Request       | The request is invalid.<br>The client should not repeat the request without modifications.                                                                                                                                        |
| 401         | Unauthorized      | The authorization information provided by the client is incorrect or invalid.                                                                                                                                                     |
| 402         | Payment Required  | This status code is reserved for future use.                                                                                                                                                                                      |
| 403         | Forbidden         | The request is rejected.<br>The server has received the request and understood it, but the server is refusing to respond to it. The client should not repeat the request without modifications.                                   |
| 404         | Not Found         | The requested resource cannot be found.<br>The client should not repeat the request without modifications.                                                                                                                        |

| Status Code | Message                         | Description                                                                                                                                                                                                                                                                            |
|-------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 405         | Method Not Allowed              | The method specified in the request is not supported by the requested resource.<br>The client should not repeat the request without modifications.                                                                                                                                     |
| 406         | Not Acceptable                  | The server cannot fulfill the request based on the content characteristics of the request.                                                                                                                                                                                             |
| 407         | Proxy Authentication Required   | This status code is similar to 401, but indicates that the client must authenticate itself with the proxy first.                                                                                                                                                                       |
| 408         | Request Timeout                 | The client does not produce a request within the time that the server was prepared to wait.<br>The client may repeat the request without modifications later.                                                                                                                          |
| 409         | Conflict                        | The request cannot be processed due to a conflict.<br>The resource that the client attempts to create already exists, or the request fails to be processed because of the update of the conflict request.                                                                              |
| 410         | Gone                            | The requested resource cannot be found.<br>The requested resource has been deleted permanently.                                                                                                                                                                                        |
| 411         | Length Required                 | The server refuses to process the request without a defined Content-Length.                                                                                                                                                                                                            |
| 412         | Precondition Failed             | The server does not meet one of the preconditions that the requester puts on the request.                                                                                                                                                                                              |
| 413         | Request Entity Too Large        | The server refuses to process a request because the request entity is too large. The server may disable the connection to prevent the client from sending requests consecutively. If the server cannot process the request temporarily, the response will contain a Retry-After field. |
| 414         | Request-URI Too Long            | The request URI is too long for the server to process.                                                                                                                                                                                                                                 |
| 415         | Unsupported Media Type          | The server cannot process the media format in the request.                                                                                                                                                                                                                             |
| 416         | Requested Range Not Satisfiable | The requested range is invalid.                                                                                                                                                                                                                                                        |
| 417         | Expectation Failed              | The server fails to meet the requirements of the Expect request-header field.                                                                                                                                                                                                          |

| Status Code | Message                    | Description                                                                                                                                                                                                                                                                                                                                                      |
|-------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 422         | Unprocessable Entity       | The request is well-formed but is unable to be processed due to semantic errors.                                                                                                                                                                                                                                                                                 |
| 429         | Too Many Requests          | The client sends excessive requests to the server within a given time (exceeding the limit on the access frequency of the client), or the server receives excessive requests within a given time (beyond its processing capability). In this case, the client should repeat requests after the time specified in the Retry-After header of the response expires. |
| 500         | Internal Server Error      | The server is able to receive the request but unable to understand the request.                                                                                                                                                                                                                                                                                  |
| 501         | Not Implemented            | The server does not support the function required to fulfill the request.                                                                                                                                                                                                                                                                                        |
| 502         | Bad Gateway                | The server acting as a gateway or proxy receives an invalid response from a remote server.                                                                                                                                                                                                                                                                       |
| 503         | Service Unavailable        | The requested service is invalid.<br>The client should not repeat the request without modifications.                                                                                                                                                                                                                                                             |
| 504         | Server Timeout             | The request cannot be fulfilled within a given time. This status code is returned to the client only when the timeout parameter is specified in the request.                                                                                                                                                                                                     |
| 505         | HTTP Version Not Supported | The server does not support the HTTP protocol version used in the request.                                                                                                                                                                                                                                                                                       |

## 7.2 Error Codes

If an error code starting with **APIGW** is returned after you call an API, rectify the fault according to [APIG Error Codes](#).

| Status Code | Error Code         | Message | Description                       | Solution                                             |
|-------------|--------------------|---------|-----------------------------------|------------------------------------------------------|
| 200         | SVCSTG.INV.2000000 | null    | The request is properly executed. | No action is required after the request is executed. |

| Status Code | Error Code         | Message                                       | Description                                   | Solution                                             |
|-------------|--------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------------------|
| 200         | SVCSTG_AMS_2000000 | null                                          | The request is properly executed.             | No action is required after the request is executed. |
| 300         | AOM.08001300       | The maximum number of rules has been reached. | The maximum number of rules has been reached. | Delete unneeded rules and try again.                 |
| 400         | AOM.0400           | Bad request.                                  | Incorrect request parameter.                  | Check whether the parameter meets requirements.      |
| 400         | AOM.02001101       | Invalid rule name.                            | Invalid rule name.                            | Check whether the parameter meets requirements.      |
| 400         | AOM.02001102       | The rule name already exists.                 | The rule name already exists.                 | Check whether the parameter meets requirements.      |
| 400         | AOM.02001103       | Invalid description.                          | Invalid description.                          | Check whether the parameter meets requirements.      |
| 400         | AOM.02001104       | Invalid threshold.                            | Invalid threshold.                            | Check whether the parameter meets requirements.      |
| 400         | AOM.02001105       | Invalid period.                               | Invalid period.                               | Check whether the parameter meets requirements.      |
| 400         | AOM.02001106       | Invalid email.                                | Invalid email.                                | Check whether the parameter meets requirements.      |
| 400         | AOM.02001107       | The maximum number of rules has been reached. | The maximum number of rules has been reached. | Check whether the parameter meets requirements.      |

| Status Code | Error Code   | Message                                | Description                            | Solution                                        |
|-------------|--------------|----------------------------------------|----------------------------------------|-------------------------------------------------|
| 400         | AOM.02001108 | Invalid time range.                    | Invalid time range.                    | Check whether the parameter meets requirements. |
| 400         | AOM.02001109 | Threshold rule xxx does not exist.     | Threshold rule xxx does not exist.     | Check whether the parameter meets requirements. |
| 400         | AOM.02001110 | Invalid limit.                         | Invalid limit.                         | Check whether the parameter meets requirements. |
| 400         | AOM.02001111 | Invalid offset.                        | Invalid offset.                        | Check whether the parameter meets requirements. |
| 400         | AOM.02001112 | Invalid request parameter.             | Invalid request parameter.             | Check whether the parameter meets requirements. |
| 400         | AOM.02001115 | Invalid request parameter.             | Invalid request parameter.             | Check whether the parameter meets requirements. |
| 400         | AOM.02001118 | Invalid number of consecutive periods. | Invalid number of consecutive periods. | Check whether the parameter meets requirements. |
| 400         | AOM.02001119 | Invalid statistic.                     | Invalid statistic.                     | Check whether the parameter meets requirements. |
| 400         | AOM.02001120 | Invalid comparison operator.           | Invalid comparison operator.           | Check whether the parameter meets requirements. |
| 400         | AOM.02001121 | The rule does not exist.               | The rule does not exist.               | Check whether the parameter meets requirements. |

| Status Code | Error Code   | Message                                       | Description                                   | Solution                                        |
|-------------|--------------|-----------------------------------------------|-----------------------------------------------|-------------------------------------------------|
| 400         | AOM.02001400 | Bad request.                                  | Bad request.                                  | Check whether the parameter meets requirements. |
| 400         | AOM.02002101 | Invalid rule.                                 | Invalid rule.                                 | Check whether the parameter meets requirements. |
| 400         | AOM.02002102 | The rule name already exists.                 | The rule name already exists.                 | Check whether the parameter meets requirements. |
| 400         | AOM.02002103 | Invalid description.                          | Invalid description.                          | Check whether the parameter meets requirements. |
| 400         | AOM.02002104 | Invalid threshold.                            | Invalid threshold.                            | Check whether the parameter meets requirements. |
| 400         | AOM.02002105 | Invalid period.                               | Invalid period.                               | Check whether the parameter meets requirements. |
| 400         | AOM.02002106 | Invalid email.                                | Invalid email.                                | Check whether the parameter meets requirements. |
| 400         | AOM.02002107 | The maximum number of rules has been reached. | The maximum number of rules has been reached. | Check whether the parameter meets requirements. |
| 400         | AOM.02002108 | Invalid time range.                           | Invalid time range.                           | Check whether the parameter meets requirements. |
| 400         | AOM.02002109 | Invalid project ID.                           | Invalid project ID.                           | Check whether the parameter meets requirements. |

| Status Code | Error Code   | Message                                | Description                            | Solution                                        |
|-------------|--------------|----------------------------------------|----------------------------------------|-------------------------------------------------|
| 400         | AOM.02002110 | Invalid limit.                         | Invalid limit.                         | Check whether the parameter meets requirements. |
| 400         | AOM.02002111 | Invalid offset.                        | Invalid offset.                        | Check whether the parameter meets requirements. |
| 400         | AOM.02002112 | Invalid request parameter.             | Invalid request parameter.             | Check whether the parameter meets requirements. |
| 400         | AOM.02002115 | Invalid request parameter.             | Invalid request parameter.             | Check whether the parameter meets requirements. |
| 400         | AOM.02002118 | Invalid number of consecutive periods. | Invalid number of consecutive periods. | Check whether the parameter meets requirements. |
| 400         | AOM.02002119 | Invalid statistic.                     | Invalid statistic.                     | Check whether the parameter meets requirements. |
| 400         | AOM.02002120 | Invalid comparison operator.           | Invalid comparison operator.           | Check whether the parameter meets requirements. |
| 400         | AOM.02002121 | The rule does not exist.               | The rule does not exist.               | Check whether the parameter meets requirements. |
| 400         | AOM.02002400 | Bad request.                           | Bad request.                           | Check whether the parameter meets requirements. |
| 400         | AOM.02003101 | Invalid rule.                          | Invalid rule.                          | Check whether the parameter meets requirements. |

| Status Code | Error Code   | Message                                       | Description                                   | Solution                                        |
|-------------|--------------|-----------------------------------------------|-----------------------------------------------|-------------------------------------------------|
| 400         | AOM.02003102 | The rule name already exists.                 | The rule name already exists.                 | Check whether the parameter meets requirements. |
| 400         | AOM.02003103 | Invalid description.                          | Invalid description.                          | Check whether the parameter meets requirements. |
| 400         | AOM.02003104 | Invalid threshold.                            | Invalid threshold.                            | Check whether the parameter meets requirements. |
| 400         | AOM.02003105 | Invalid period.                               | Invalid period.                               | Check whether the parameter meets requirements. |
| 400         | AOM.02003106 | Invalid email.                                | Invalid email.                                | Check whether the parameter meets requirements. |
| 400         | AOM.02003107 | The maximum number of rules has been reached. | The maximum number of rules has been reached. | Check whether the parameter meets requirements. |
| 400         | AOM.02003108 | Invalid time range.                           | Invalid time range.                           | Check whether the parameter meets requirements. |
| 400         | AOM.02003109 | Invalid project ID.                           | Invalid project ID.                           | Check whether the parameter meets requirements. |
| 400         | AOM.02003110 | Invalid limit.                                | Invalid limit.                                | Check whether the parameter meets requirements. |
| 400         | AOM.02003111 | Invalid offset.                               | Invalid offset.                               | Check whether the parameter meets requirements. |

| Status Code | Error Code   | Message                                | Description                            | Solution                                        |
|-------------|--------------|----------------------------------------|----------------------------------------|-------------------------------------------------|
| 400         | AOM.02003112 | Invalid request parameter.             | Invalid request parameter.             | Check whether the parameter meets requirements. |
| 400         | AOM.02003115 | Invalid request parameter.             | Invalid request parameter.             | Check whether the parameter meets requirements. |
| 400         | AOM.02003118 | Invalid number of consecutive periods. | Invalid number of consecutive periods. | Check whether the parameter meets requirements. |
| 400         | AOM.02003119 | Invalid statistic.                     | Invalid statistic.                     | Check whether the parameter meets requirements. |
| 400         | AOM.02003120 | Invalid comparison operator.           | Invalid comparison operator.           | Check whether the parameter meets requirements. |
| 400         | AOM.02003121 | The rule does not exist.               | The rule does not exist.               | Check whether the parameter meets requirements. |
| 400         | AOM.02003400 | Bad request.                           | Bad request.                           | Check whether the parameter meets requirements. |
| 400         | AOM.02004101 | Invalid rule.                          | Invalid rule.                          | Check whether the parameter meets requirements. |
| 400         | AOM.02004102 | The rule name already exists.          | The rule name already exists.          | Check whether the parameter meets requirements. |
| 400         | AOM.02004103 | Invalid description.                   | Invalid description.                   | Check whether the parameter meets requirements. |

| Status Code | Error Code   | Message                                       | Description                                   | Solution                                        |
|-------------|--------------|-----------------------------------------------|-----------------------------------------------|-------------------------------------------------|
| 400         | AOM.02004104 | Invalid threshold.                            | Invalid threshold.                            | Check whether the parameter meets requirements. |
| 400         | AOM.02004105 | Invalid period.                               | Invalid period.                               | Check whether the parameter meets requirements. |
| 400         | AOM.02004106 | Invalid email.                                | Invalid email.                                | Check whether the parameter meets requirements. |
| 400         | AOM.02004107 | The maximum number of rules has been reached. | The maximum number of rules has been reached. | Check whether the parameter meets requirements. |
| 400         | AOM.02004108 | Invalid time range.                           | Invalid time range.                           | Check whether the parameter meets requirements. |
| 400         | AOM.02004109 | Invalid project ID.                           | Invalid project ID.                           | Check whether the parameter meets requirements. |
| 400         | AOM.02004110 | Invalid limit.                                | Invalid limit.                                | Check whether the parameter meets requirements. |
| 400         | AOM.02004111 | Invalid offset.                               | Invalid offset.                               | Check whether the parameter meets requirements. |
| 400         | AOM.02004112 | Invalid request parameter.                    | Invalid request parameter.                    | Check whether the parameter meets requirements. |
| 400         | AOM.02004115 | Invalid request parameter.                    | Invalid request parameter.                    | Check whether the parameter meets requirements. |

| Status Code | Error Code   | Message                                | Description                            | Solution                                        |
|-------------|--------------|----------------------------------------|----------------------------------------|-------------------------------------------------|
| 400         | AOM.02004118 | Invalid number of consecutive periods. | Invalid number of consecutive periods. | Check whether the parameter meets requirements. |
| 400         | AOM.02004119 | Invalid statistic.                     | Invalid statistic.                     | Check whether the parameter meets requirements. |
| 400         | AOM.02004120 | Invalid comparison operator.           | Invalid comparison operator.           | Check whether the parameter meets requirements. |
| 400         | AOM.02004121 | The rule does not exist.               | The rule does not exist.               | Check whether the parameter meets requirements. |
| 400         | AOM.02004400 | Bad request.                           | Bad request.                           | Check whether the parameter meets requirements. |
| 400         | AOM.02005101 | Invalid rule.                          | Invalid rule.                          | Check whether the parameter meets requirements. |
| 400         | AOM.02005102 | The rule name already exists.          | The rule name already exists.          | Check whether the parameter meets requirements. |
| 400         | AOM.02005103 | Invalid description.                   | Invalid description.                   | Check whether the parameter meets requirements. |
| 400         | AOM.02005104 | Invalid threshold.                     | Invalid threshold.                     | Check whether the parameter meets requirements. |
| 400         | AOM.02005105 | Invalid period.                        | Invalid period.                        | Check whether the parameter meets requirements. |

| Status Code | Error Code   | Message                                       | Description                                   | Solution                                        |
|-------------|--------------|-----------------------------------------------|-----------------------------------------------|-------------------------------------------------|
| 400         | AOM.02005106 | Invalid email.                                | Invalid email.                                | Check whether the parameter meets requirements. |
| 400         | AOM.02005107 | The maximum number of rules has been reached. | The maximum number of rules has been reached. | Check whether the parameter meets requirements. |
| 400         | AOM.02005108 | Invalid time range.                           | Invalid time range.                           | Check whether the parameter meets requirements. |
| 400         | AOM.02005109 | Invalid project ID.                           | Invalid project ID.                           | Check whether the parameter meets requirements. |
| 400         | AOM.02005110 | Invalid limit.                                | Invalid limit.                                | Check whether the parameter meets requirements. |
| 400         | AOM.02005111 | Invalid offset.                               | Invalid offset.                               | Check whether the parameter meets requirements. |
| 400         | AOM.02005112 | Invalid request parameter.                    | Invalid request parameter.                    | Check whether the parameter meets requirements. |
| 400         | AOM.02005115 | Invalid request parameter.                    | Invalid request parameter.                    | Check whether the parameter meets requirements. |
| 400         | AOM.02005118 | Invalid number of consecutive periods.        | Invalid number of consecutive periods.        | Check whether the parameter meets requirements. |
| 400         | AOM.02005119 | Invalid statistic.                            | Invalid statistic.                            | Check whether the parameter meets requirements. |

| Status Code | Error Code   | Message                                                   | Description                                  | Solution                                        |
|-------------|--------------|-----------------------------------------------------------|----------------------------------------------|-------------------------------------------------|
| 400         | AOM.02005120 | Invalid comparison operator.                              | Invalid comparison operator.                 | Check whether the parameter meets requirements. |
| 400         | AOM.02005121 | The rule does not exist.                                  | The rule does not exist.                     | Check whether the parameter meets requirements. |
| 400         | AOM.02005400 | Bad request.                                              | Bad request.                                 | Check whether the parameter meets requirements. |
| 400         | AOM.02021011 | The number of alarm rules exceeds the limit.              | The number of alarm rules exceeds the limit. | Delete unnecessary alarm rules.                 |
| 400         | AOM.02017001 | Invalid parameters.                                       | Invalid parameters.                          | Check whether the parameter meets requirements. |
| 400         | AOM.02025026 | Input alarmParams is invalid: rule name or type is empty. | The rule name or type cannot be empty.       | Check whether the parameter meets requirements. |
| 400         | AOM.04007101 | Invalid namespace.                                        | Invalid namespace.                           | Check whether the parameter meets requirements. |
| 400         | AOM.04007102 | Invalid inventory ID.                                     | Invalid inventory ID.                        | Check whether the parameter meets requirements. |
| 400         | AOM.04007103 | The project ID cannot be left blank.                      | The project ID cannot be left blank.         | Check whether the parameter meets requirements. |
| 400         | AOM.04007104 | Invalid type.                                             | Invalid type.                                | Check whether the parameter meets requirements. |

| Status Code | Error Code   | Message                                     | Description                                 | Solution                                        |
|-------------|--------------|---------------------------------------------|---------------------------------------------|-------------------------------------------------|
| 400         | AOM.04007105 | Invalid limit.                              | Invalid limit.                              | Check whether the parameter meets requirements. |
| 400         | AOM.04007106 | Invalid offset.                             | Invalid offset.                             | Check whether the parameter meets requirements. |
| 400         | AOM.04007107 | Invalid parent inventory ID.                | Invalid parent inventory ID.                | Check whether the parameter meets requirements. |
| 400         | AOM.04007108 | Invalid type and relation.                  | Invalid type and relation.                  | Check whether the parameter meets requirements. |
| 400         | AOM.04007109 | Invalid metric name.                        | Invalid metric name.                        | Check whether the parameter meets requirements. |
| 400         | AOM.04007110 | Invalid relation.                           | Invalid relation.                           | Check whether the parameter meets requirements. |
| 400         | AOM.04007111 | The type and relation cannot be left blank. | The type and relation cannot be left blank. | Check whether the parameter meets requirements. |
| 400         | AOM.04007112 | Invalid request parameter.                  | Invalid request parameter.                  | Check whether the parameter meets requirements. |
| 400         | AOM.04007115 | Invalid request parameter.                  | Invalid request parameter.                  | Check whether the parameter meets requirements. |
| 400         | AOM.04007118 | Invalid number of consecutive periods.      | Invalid number of consecutive periods.      | Check whether the parameter meets requirements. |

| Status Code | Error Code   | Message                              | Description                          | Solution                                        |
|-------------|--------------|--------------------------------------|--------------------------------------|-------------------------------------------------|
| 400         | AOM.04007119 | Invalid statistic.                   | Invalid statistic.                   | Check whether the parameter meets requirements. |
| 400         | AOM.04007120 | Invalid comparison operator.         | Invalid comparison operator.         | Check whether the parameter meets requirements. |
| 400         | AOM.04007400 | Bad request.                         | Bad request.                         | Check whether the parameter meets requirements. |
| 400         | AOM.04008101 | Invalid namespace.                   | Invalid namespace.                   | Check whether the parameter meets requirements. |
| 400         | AOM.04008102 | Invalid inventory ID.                | Invalid inventory ID.                | Check whether the parameter meets requirements. |
| 400         | AOM.04008103 | The project ID cannot be left blank. | The project ID cannot be left blank. | Check whether the parameter meets requirements. |
| 400         | AOM.04008104 | Invalid type.                        | Invalid type.                        | Check whether the parameter meets requirements. |
| 400         | AOM.04008105 | Invalid limit.                       | Invalid limit.                       | Check whether the parameter meets requirements. |
| 400         | AOM.04008106 | Invalid offset.                      | Invalid offset.                      | Check whether the parameter meets requirements. |
| 400         | AOM.04008107 | Invalid parent inventory ID.         | Invalid parent inventory ID.         | Check whether the parameter meets requirements. |

| Status Code | Error Code   | Message                                     | Description                                 | Solution                                        |
|-------------|--------------|---------------------------------------------|---------------------------------------------|-------------------------------------------------|
| 400         | AOM.04008108 | Invalid type and relation.                  | Invalid type and relation.                  | Check whether the parameter meets requirements. |
| 400         | AOM.04008109 | Invalid metric name.                        | Invalid metric name.                        | Check whether the parameter meets requirements. |
| 400         | AOM.04008110 | Invalid relation.                           | Invalid relation.                           | Check whether the parameter meets requirements. |
| 400         | AOM.04008111 | The type and relation cannot be left blank. | The type and relation cannot be left blank. | Check whether the parameter meets requirements. |
| 400         | AOM.04008112 | Invalid request parameter.                  | Invalid request parameter.                  | Check whether the parameter meets requirements. |
| 400         | AOM.04008115 | Invalid request parameter.                  | Invalid request parameter.                  | Check whether the parameter meets requirements. |
| 400         | AOM.04008118 | Invalid number of consecutive periods.      | Invalid number of consecutive periods.      | Check whether the parameter meets requirements. |
| 400         | AOM.04008119 | Invalid statistic.                          | Invalid statistic.                          | Check whether the parameter meets requirements. |
| 400         | AOM.04008120 | Invalid comparison operator.                | Invalid comparison operator.                | Check whether the parameter meets requirements. |
| 400         | AOM.04008400 | Bad request.                                | Bad request.                                | Check whether the parameter meets requirements. |

| Status Code | Error Code   | Message                              | Description                          | Solution                                        |
|-------------|--------------|--------------------------------------|--------------------------------------|-------------------------------------------------|
| 400         | AOM.07001400 | Invalid parameter.                   | Invalid parameter.                   | Check whether the parameter meets requirements. |
| 400         | AOM.11015003 | The request body is empty.           | The request body is empty.           | Check whether the parameter meets requirements. |
| 400         | AOM.11015004 | Parse request parameter failed.      | Parse request parameter failed.      | Check whether the parameter meets requirements. |
| 400         | AOM.11015005 | Too many Prometheus instances.       | Too many Prometheus instances.       | Check whether the parameter meets requirements. |
| 400         | AOM.11017013 | The Prometheus instance ID is empty. | The Prometheus instance ID is empty. | Check whether the parameter meets requirements. |
| 400         | AOM.11017014 | Prometheus instance not found.       | Prometheus instance not found.       | Check whether the parameter meets requirements. |
| 400         | AOM.11017015 | Invalid Prometheus instance name     | Invalid Prometheus instance name.    | Check whether the parameter meets requirements. |
| 400         | AOM.11017016 | Invalid Prometheus instance ID.      | Invalid Prometheus instance ID.      | Check whether the parameter meets requirements. |
| 400         | AOM.11017017 | Invalid Prometheus instance type.    | Invalid Prometheus instance type.    | Check whether the parameter meets requirements. |
| 400         | AOM.11017018 | Invalid Prometheus instance status.  | Invalid Prometheus instance status.  | Check whether the parameter meets requirements. |

| Status Code | Error Code         | Message                                    | Description                          | Solution                                        |
|-------------|--------------------|--------------------------------------------|--------------------------------------|-------------------------------------------------|
| 400         | AOM.11017019       | Invalid application name.                  | Invalid application name.            | Check whether the parameter meets requirements. |
| 400         | AOM.4001021        | Duplicate group name.                      | Duplicate group name.                | Check whether the parameter meets requirements. |
| 400         | AOM.4001023        | Group name must be set.                    | The group name cannot be empty.      | Check whether the parameter meets requirements. |
| 400         | AOM.4001024        | The recording field cannot be empty.       | The recording field cannot be empty. | Check whether the parameter meets requirements. |
| 400         | AOM.4001025        | The expression cannot be empty.            | The expression cannot be empty.      | Check whether the parameter meets requirements. |
| 400         | AOM.4001026        | Recording rule format invalid.             | Invalid recording rule format.       | Check whether the parameter meets requirements. |
| 400         | AOM.4001028        | The requested content exceeds the maximum. | The request is too long.             | Check whether the parameter meets requirements. |
| 400         | AOM.05001002       | The dashboard type is empty.               | The dashboard type is empty.         | Check whether the parameter meets requirements. |
| 400         | SVCSTG.INV.4000115 | Invalid request parameter.                 | Invalid request parameter.           | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000001 | Invalid request parameter.                 | Invalid request parameter.           | Check whether the parameter meets requirements. |

| Status Code | Error Code         | Message                                                                  | Description                                                              | Solution                                        |
|-------------|--------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------|
| 400         | SVCSTG_AMS_4000002 | Invalid namespace.                                                       | Invalid namespace.                                                       | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000003 | Dimensions cannot be left blank.                                         | Dimensions cannot be left blank.                                         | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000005 | Invalid metric data type.                                                | Invalid metric data type.                                                | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000006 | The metric data value cannot be left blank.                              | The metric data cannot be left blank.                                    | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000007 | Invalid dimension.                                                       | Invalid dimension.                                                       | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000008 | The request exceeds 40 KB.                                               | The request cannot exceed 40 KB.                                         | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000009 | The number of elements in the dimension array exceeds the allowed limit. | Too many elements in the dimension array.                                | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000010 | Invalid collection time.                                                 | Invalid collection time.                                                 | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000101 | The namespace or alarm name is invalid, or the project ID is left blank. | The namespace or alarm name is invalid, or the project ID is left blank. | Check whether the parameter meets requirements. |

| Status Code | Error Code         | Message                                                                                                           | Description                                                                                                       | Solution                                                                               |
|-------------|--------------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 400         | SVCSTG_AMS_4000102 | The inventory ID is invalid, the metric data value is left blank, or the threshold rule name already exists.      | The inventory ID is invalid, the metric data value is left blank, or the threshold rule name already exists.      | Check whether the parameter meets requirements, or change the rule name and try again. |
| 400         | SVCSTG_AMS_4000103 | Invalid range or alarm description.                                                                               | Invalid range or alarm description.                                                                               | Check whether the parameter meets requirements.                                        |
| 400         | SVCSTG_AMS_4000104 | Invalid statistics or alarm threshold.                                                                            | Invalid statistics or alarm threshold.                                                                            | Check whether the parameter meets requirements.                                        |
| 400         | SVCSTG_AMS_4000105 | Invalid limit, metric, or alarm period.                                                                           | Invalid limit, metric, or alarm period.                                                                           | Check whether the parameter meets requirements.                                        |
| 400         | SVCSTG_AMS_4000106 | Invalid offset, time range, or email.                                                                             | Invalid offset, time range, or email.                                                                             | Check whether the parameter meets requirements.                                        |
| 400         | SVCSTG_AMS_4000107 | The number of data points in a time range exceeds 1440 or the maximum number of threshold rules has been reached. | The number of data points in a time range exceeds 1440 or the maximum number of threshold rules has been reached. | Check whether the parameter meets the requirements or contact technical support.       |
| 400         | SVCSTG_AMS_4000108 | Invalid time range.                                                                                               | Invalid time range.                                                                                               | Check whether the parameter meets requirements.                                        |
| 400         | SVCSTG_AMS_4000109 | Invalid metric name or project ID.                                                                                | Invalid metric name or project ID.                                                                                | Check whether the parameter meets requirements.                                        |

| Status Code | Error Code         | Message                                | Description                            | Solution                                        |
|-------------|--------------------|----------------------------------------|----------------------------------------|-------------------------------------------------|
| 400         | SVCSTG_AMS_4000110 | Invalid filled value or limit.         | Invalid filled value or limit.         | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000111 | Invalid offset.                        | Invalid offset.                        | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000115 | Invalid request parameter.             | Invalid request parameter.             | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000118 | Invalid number of consecutive periods. | Invalid number of consecutive periods. | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000119 | Invalid statistic.                     | Invalid statistic.                     | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000120 | Invalid comparison operator.           | Invalid comparison operator.           | Check whether the parameter meets requirements. |
| 400         | SVCSTG_AMS_4000121 | The rule does not exist.               | The rule does not exist.               | Check whether the threshold rule exists.        |
| 400         | SVCSTG_AMS_4001019 | Invalid MetricData parameter.          | Invalid MetricData parameter.          | Check whether the parameter meets requirements. |
| 400         | AOM.02006404       | The rule to be deleted does not exist. | The rule does not exist.               | Check whether the threshold rule exists.        |
| 400         | AOM.02005404       | The rule does not exist.               | The rule does not exist.               | Check whether the threshold rule exists.        |
| 400         | AOM.02004404       | The rule does not exist.               | The rule does not exist.               | Check whether the threshold rule exists.        |

| Status Code | Error Code   | Message                               | Description                           | Solution                                        |
|-------------|--------------|---------------------------------------|---------------------------------------|-------------------------------------------------|
| 400         | AOM.02004001 | Incorrect request parameter.          | Incorrect request parameter.          | Check whether the parameter meets requirements. |
| 400         | AOM.02005001 | Incorrect request parameter.          | Incorrect request parameter.          | Check whether the parameter meets requirements. |
| 400         | AOM.02003001 | Incorrect request parameter.          | Incorrect request parameter.          | Check whether the parameter meets requirements. |
| 400         | AOM.02021006 | The action rule does not exist.       | The action rule does not exist.       | Check whether the parameter meets requirements. |
| 400         | AOM.02011400 | Incorrect request parameter.          | Incorrect request parameter.          | Check whether the parameter meets requirements. |
| 400         | AOM.02013125 | Failed to send data to Kafka.         | Failed to send data to Kafka.         | Contact technical support.                      |
| 400         | AOM.02024016 | The alarm rule is empty.              | The alarm rule is empty.              | Check whether the parameter meets requirements. |
| 400         | AOM.08015002 | The silence rule name does not exist. | The silence rule name does not exist. | Check whether the parameter meets requirements. |
| 400         | AOM.08011001 | The silence rule name already exists. | The silence rule name already exists. | Check whether the parameter meets requirements. |
| 400         | AOM.08012003 | Invalid request parameter.            | Incorrect request body parameter.     | Check whether the parameter meets requirements. |
| 400         | AOM.08018012 | The alarm action rule already exists. | The alarm action rule already exists. | Check whether the parameter meets requirements. |

| Status Code | Error Code                  | Message                               | Description                           | Solution                                                     |
|-------------|-----------------------------|---------------------------------------|---------------------------------------|--------------------------------------------------------------|
| 400         | AOM.08020006                | The alarm action rule does not exist. | The alarm action rule does not exist. | Check whether the parameter meets requirements.              |
| 400         | AOM.08019006                | The alarm action rule does not exist. | The alarm action rule does not exist. | Check whether the parameter meets requirements.              |
| 400         | AOM.08032002                | Invalid request body.                 | Invalid request body.                 | Check whether the parameter meets requirements.              |
| 400         | AOM.08033002                | Invalid request body.                 | Invalid request body.                 | Check whether the parameter meets requirements.              |
| 400         | AOM.02001SVCSTG_AMS_4000115 | Invalid request parameter.            | Incorrect request parameter.          | Check whether the parameter meets requirements.              |
| 400         | AOM.02003SVCSTG_AMS_4000123 | The rule does not exist.              | The rule does not exist.              | Check whether the parameter meets requirements.              |
| 400         | AOM.02001102                | The threshold rule already exists.    | The threshold rule already exists.    | Check whether the parameter meets requirements.              |
| 400         | AOM.320000003               | Invalid parameter.                    | Invalid parameter.                    | Enter a valid parameter.                                     |
| 400         | AOM.320000005               | The object does not exist.            | The object does not exist.            | Enter a valid parameter.                                     |
| 401         | AOM.0401                    | Unauthorized.                         | Incorrect authentication information. | Check the authentication information carried in the request. |
| 401         | AOM.02001401                | Unauthorized.                         | Unauthorized.                         | Contact technical support.                                   |
| 401         | AOM.02002401                | Unauthorized.                         | Unauthorized.                         | Contact technical support.                                   |

| Status Code | Error Code         | Message                | Description               | Solution                                                     |
|-------------|--------------------|------------------------|---------------------------|--------------------------------------------------------------|
| 401         | AOM.02003401       | Unauthorized.          | Unauthorized.             | Contact technical support.                                   |
| 401         | AOM.02004401       | Unauthorized.          | Unauthorized.             | Contact technical support.                                   |
| 401         | AOM.02005401       | Unauthorized.          | Unauthorized.             | Contact technical support.                                   |
| 401         | AOM.04007401       | Request unauthorized.  | Request unauthorized.     | Contact technical support.                                   |
| 401         | AOM.04008401       | Request unauthorized.  | Request unauthorized.     | Contact technical support.                                   |
| 401         | AOM.05401000       | Authentication failed. | Authentication failed.    | Check the authentication information carried in the request. |
| 401         | SVCSTG.AMS.2000051 | Authentication failed. | Authentication failed.    | Check the authentication information carried in the request. |
| 401         | SVCSTG.AMS.4010000 | Authentication failed. | Authentication failed.    | Check the authentication information carried in the request. |
| 403         | AOM.0403           | Forbidden.             | Insufficient permissions. | Check your permissions.                                      |
| 403         | AOM.02001403       | Forbidden.             | Forbidden.                | Contact technical support.                                   |
| 403         | AOM.02002403       | Forbidden.             | Forbidden.                | Contact technical support.                                   |
| 403         | AOM.02003403       | Forbidden.             | Forbidden.                | Contact technical support.                                   |
| 403         | AOM.02004403       | Forbidden.             | Forbidden.                | Contact technical support.                                   |
| 403         | AOM.02005403       | Forbidden.             | Forbidden.                | Contact technical support.                                   |
| 403         | AOM.04007403       | Request forbidden.     | Request forbidden.        | Contact technical support.                                   |

| Status Code | Error Code         | Message                              | Description                          | Solution                                        |
|-------------|--------------------|--------------------------------------|--------------------------------------|-------------------------------------------------|
| 403         | AOM.04008403       | Request forbidden.                   | Request forbidden.                   | Contact technical support.                      |
| 403         | AOM.07001403       | Insufficient permissions.            | Insufficient permissions.            | Obtain required permissions.                    |
| 403         | SVCSTG.INV.4030000 | Insufficient permissions.            | Insufficient permissions.            | Use an authorized account.                      |
| 403         | AOM.32000002       | No permission.                       | No permission.                       | Contact technical support.                      |
| 404         | SVCSTG.INV.4040000 | Inventory does not exists.           | The resource does not exist.         | Check whether the resource exists.              |
| 429         | AOM.07001429       | The traffic has been restricted.     | The traffic has been restricted.     | Send fewer API call requests.                   |
| 429         | AOM.08001429       | Too many requests.                   | Too many requests.                   | Check whether the parameter meets requirements. |
| 500         | AOM.0500           | Internal server error.               | Internal server error.               | Contact technical support.                      |
| 500         | AOM.12000002       | Internal server error.               | Internal server error.               | Contact technical support.                      |
| 500         | AOM.02001500       | Internal server error.               | Internal server error.               | Contact technical support.                      |
| 500         | AOM.02001501       | The Cassandra session is null.       | The Cassandra session is null.       | Contact technical support.                      |
| 500         | AOM.02001502       | The Cassandra execution is abnormal. | The Cassandra execution is abnormal. | Contact technical support.                      |
| 500         | AOM.02002500       | Internal server error.               | Internal server error.               | Contact technical support.                      |
| 500         | AOM.02002501       | The Cassandra session is null.       | The Cassandra session is null.       | Contact technical support.                      |
| 500         | AOM.02002502       | The Cassandra execution is abnormal. | The Cassandra execution is abnormal. | Contact technical support.                      |

| Status Code | Error Code   | Message                              | Description                          | Solution                   |
|-------------|--------------|--------------------------------------|--------------------------------------|----------------------------|
| 500         | AOM.02003500 | Internal server error.               | Internal server error.               | Contact technical support. |
| 500         | AOM.02003501 | The Cassandra session is null.       | The Cassandra session is null.       | Contact technical support. |
| 500         | AOM.02003502 | The Cassandra execution is abnormal. | The Cassandra execution is abnormal. | Contact technical support. |
| 500         | AOM.02004500 | Internal server error.               | Internal server error.               | Contact technical support. |
| 500         | AOM.02004501 | The Cassandra session is null.       | The Cassandra session is null.       | Contact technical support. |
| 500         | AOM.02004502 | The Cassandra execution is abnormal. | The Cassandra execution is abnormal. | Contact technical support. |
| 500         | AOM.02005500 | Internal server error.               | Internal server error.               | Contact technical support. |
| 500         | AOM.02005501 | The Cassandra session is null.       | The Cassandra session is null.       | Contact technical support. |
| 500         | AOM.02005502 | The Cassandra execution is abnormal. | The Cassandra execution is abnormal. | Contact technical support. |
| 500         | AOM.02021500 | Internal server error.               | Internal server error.               | Contact technical support. |
| 500         | AOM.02022500 | Internal server error.               | Internal server error.               | Contact technical support. |
| 500         | AOM.02024500 | Internal server error.               | Internal server error.               | Contact technical support. |
| 500         | AOM.04007500 | Internal server error.               | Internal server error.               | Contact technical support. |
| 500         | AOM.04007501 | The Cassandra session is null.       | The Cassandra session is null.       | Contact technical support. |

| Status Code | Error Code         | Message                                  | Description                              | Solution                   |
|-------------|--------------------|------------------------------------------|------------------------------------------|----------------------------|
| 500         | AOM.04007502       | The Cassandra execution is abnormal.     | The Cassandra execution is abnormal.     | Contact technical support. |
| 500         | AOM.04008500       | Internal server error.                   | Internal server error.                   | Contact technical support. |
| 500         | AOM.04008501       | The Cassandra session is null.           | The Cassandra session is null.           | Contact technical support. |
| 500         | AOM.04008502       | The Cassandra execution is abnormal.     | The Cassandra execution is abnormal.     | Contact technical support. |
| 500         | AOM.11014001       | Internal server error.                   | Internal server error.                   | Contact technical support. |
| 500         | AOM.11014002       | Incorrect conversion result.             | Incorrect conversion result.             | Contact technical support. |
| 500         | AOM.05001005       | Internal server error.                   | Internal server error.                   | Contact technical support. |
| 500         | AOM.5001010        | Internal server error.                   | Internal server error.                   | Contact technical support. |
| 500         | AOM.5001019        | The rule already exists.                 | The rule already exists.                 | Contact technical support. |
| 500         | APM.00000500       | Internal Server Error                    | Internal server error.                   | Contact technical support. |
| 500         | AOM.08001500       | Internal Server Error                    | Internal server error.                   | Contact technical support. |
| 500         | AOM.08020500       | Internal server error.                   | Internal server error.                   | Contact technical support. |
| 500         | AOM.02001500       | Internal server error.                   | Internal server error.                   | Contact technical support. |
| 500         | SVCSTG.INV.5000001 | The Elasticsearch session is null.       | The Elasticsearch session is null.       | Contact technical support. |
| 500         | SVCSTG.INV.5000002 | The Elasticsearch execution is abnormal. | The Elasticsearch execution is abnormal. | Contact technical support. |

| Status Code | Error Code         | Message                                       | Description                                   | Solution                                   |
|-------------|--------------------|-----------------------------------------------|-----------------------------------------------|--------------------------------------------|
| 500         | SVCSTG.INV.5000003 | The ICMGR invocation is abnormal.             | The ICMGR invocation is abnormal.             | Contact technical support.                 |
| 500         | SVCSTG.INV.5000006 | The rule name already exists.                 | The rule name already exists.                 | Use another name.                          |
| 500         | SVCSTG.INV.5000007 | The maximum number of rules has been reached. | The maximum number of rules has been reached. | Delete unnecessary rules and add new ones. |
| 500         | SVCSTG_AMS_5000000 | Internal server error.                        | Internal server error.                        | Contact technical support.                 |
| 500         | AOM.320000000      | Internal service error.                       | An internal error occurred.                   | Contact technical support.                 |
| 500         | AOM.32000013       | The Agent ID does not exist.                  | The Agent ID does not exist.                  | Contact technical support.                 |
| 500         | AOM.32000016       | Database operation failed.                    | Database operation failed.                    | Contact technical support.                 |
| 500         | AOM.32000023       | The Agent is abnormal.                        | The Agent is abnormal.                        | Contact technical support.                 |
| 503         | AOM.0503           | Server unavailable.                           | Server unavailable.                           | Contact technical support.                 |
| 503         | AOM.02001503       | Server unavailable.                           | Server unavailable.                           | Contact technical support.                 |
| 503         | AOM.02002503       | Server unavailable.                           | Server unavailable.                           | Contact technical support.                 |
| 503         | AOM.02003503       | Server unavailable.                           | Server unavailable.                           | Contact technical support.                 |
| 503         | AOM.02004503       | Server unavailable.                           | Server unavailable.                           | Contact technical support.                 |
| 503         | AOM.02005503       | Server unavailable.                           | Server unavailable.                           | Contact technical support.                 |
| 503         | AOM.04007503       | Server unavailable.                           | Server unavailable.                           | Contact technical support.                 |

| Status Code | Error Code         | Message                              | Description                          | Solution                                     |
|-------------|--------------------|--------------------------------------|--------------------------------------|----------------------------------------------|
| 503         | AOM.04008503       | Server unavailable.                  | Server unavailable.                  | Contact technical support.                   |
| 503         | AOM.07001503       | Service error.                       | Service error.                       | Check whether the backend service is normal. |
| 503         | SVCSTG_AMS_5030001 | The Cassandra session is null.       | The Cassandra session is null.       | Contact technical support.                   |
| 503         | SVCSTG_AMS_5030002 | The Cassandra execution is abnormal. | The Cassandra execution is abnormal. | Contact technical support.                   |

## 7.3 Obtaining an Account ID, Project ID, and Enterprise Project ID

### Obtaining an Account ID and Project ID from the Console

When making API calls, you may need to enter the username, user ID, project name, and project ID in some URLs. You can obtain them on the [My Credentials](#) page.

**Step 1** Log in to the management console.

**Step 2** Hover over the username in the upper right corner, and choose [My Credentials](#).

**Step 3** On the [API Credentials](#) page, view the username, account ID, project name, and project ID.

----End

### Obtaining a Project ID by Calling an API

You can also call the API for [querying project information based on the specified criteria](#) to obtain a project ID.

The API is **GET https://{{Endpoint}}/v3/projects/**, where {{Endpoint}} indicates the Identity and Access Management (IAM) endpoint. For details, see [Regions and Endpoints](#). For details about API authentication, see [3.2 Authentication](#).

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

```
{
 "projects": [
 {
 "domain_id": "65382450e8f64ac0870cd180d14e684b",
 "is_domain": false,
 "parent_id": "65382450e8f64ac0870cd180d14e684b",
 }
]
}
```

```
 "name": "cn-north-4",
 "description": "",
 "links": [
 {
 "next": null,
 "previous": null,
 "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22cd05f897d6b99"
 },
 {
 "id": "a4a5d4098fb4474fa22cd05f897d6b99",
 "enabled": true
 }
],
 "links": [
 {
 "next": null,
 "previous": null,
 "self": "https://www.example.com/v3/projects"
 }
]
 }
```

## Obtaining an Enterprise Project ID from the Console

When making API calls, you may need to enter an enterprise project ID in some URIs. You can obtain it on the **Project Management** page.

**Step 1** Log in to the Enterprise Project Management Service console.

**Step 2** Access the **Project Management** page.

**Step 3** To obtain the enterprise project ID, go to the **Name/ID** column or click the name of the target enterprise project to go to the details page.

----End

## 7.4 Common Request Headers

**Table 7-2** Common request headers

| Name         | Description                                                                              | Mandatory                          | Example                        |
|--------------|------------------------------------------------------------------------------------------|------------------------------------|--------------------------------|
| X-Auth-Token | User token.                                                                              | Yes for token-based authentication | -                              |
| Content-Type | Content type.<br>Enter <b>application/json; charset=utf-8</b> .                          | Yes                                | application/json; charset=utf8 |
| x-sdk-date   | Time to send a request.<br>The format is <b>YYYYMMDD'T'HHMMSS'Z'</b> . GMT time is used. | Yes for AK/SK-based authentication | 20160629T101459Z               |

| Name          | Description                                                                                                                                                                                                        | Mandatory                          | Example |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------|
| Authorization | Signature authentication information.<br>It can be obtained from the result of request signing.                                                                                                                    | Yes for AK/SK-based authentication | -       |
| Host          | Request server information, which is obtained from the URL of a service API. The value is <b>hostname[:port]</b> . If no port is specified, the default port will be used. For HTTPS, port 443 is used by default. | Yes for AK/SK-based authentication | -       |

## 7.5 Common Response Headers

A response usually contains the following headers:

**Table 7-3** Response headers

| Name           | Description                                                                                                          | Example                          |
|----------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Date           | (Standard HTTP header)<br>Time when a message is sent. This field complies with RFC822 definitions.                  | Mon, 12 Nov 2007<br>15:55:01 GMT |
| Server         | (Standard HTTP header)<br>Software that a server uses to process the request.                                        | Apache                           |
| Content-Length | (Standard HTTP header)<br>Length of the response body, which is represented by a decimal number and stored in bytes. | xxx                              |

| Name         | Description                                                                      | Example          |
|--------------|----------------------------------------------------------------------------------|------------------|
| Content-Type | (Standard HTTP header)<br>Media type of the response body sent to the recipient. | application/json |