



**Database Security Service**

# **API Documentation**

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# 1 Calling APIs

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## 1.1 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](#).
- **resource-path:**  
Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the **resource-path** of the API used to obtain a user token is **/v3/auth/tokens**.
- **query-string:**  
Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of "Parameter name=Parameter value". For example, **?limit=10** indicates that a maximum of 10 data records will be displayed.

#### NOTE

To simplify the URI display 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:** same as GET except that the server must return only the response header.
- **PATCH:** requests the server to update partial content of a specified resource. If the resource does not exist, a new resource will be created.

For example, in the case of the API used to obtain 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.
- **X-Auth-Token:** specifies a 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.

### NOTE

In addition to supporting token-based authentication, 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 [AK/SK-based 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 the **Content-Type** header field. The request body transfers content except the request header.

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.

In the case of the API used to obtain a user token, the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Set **username** to the name of a user, **domainname** to the name of the account that the user belongs to, **\*\*\*\*\*** to the user's login password, and **xxxxxxxxxxxxxxxxxxxx** to the project name, such as **eu-west-0**. You can learn more information about projects from [Regions and Endpoints](#). Check the value of the **Region** column.

 **NOTE**

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. For more information about this API, see "Obtaining a User Token".

```
POST https://{{endpoint}}/v3/auth/tokens
Content-Type: application/json
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "*****",
          "domain": {
            "name": "domainname"
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "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 to obtain a user token, **x-subject-token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

## 1.2 Authentication

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

- Token-based authentication: Requests are authenticated using a token.
- AK/SK-based authentication: Requests are authenticated by encrypting the request body using an AK/SK pair. This method is recommended because it provides higher security than token-based authentication.

## Token-based Authentication

### NOTE

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

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

The token can be obtained by calling the required API. For more information, see Obtaining a User Token. A project-level token is required for calling this API, that is, **auth.scope** must be set to **project** in the request body. Example:

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

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

```
POST https://{{endpoint}}/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

## 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.

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

- AK: access key ID, which is a unique identifier used in conjunction with a secret access key to sign requests cryptographically.
- SK: secret access key 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 [API Signature Guide](#).

**NOTICE**

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

## 1.3 Response

### Status Codes

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

A status code is a group of numbers ranging from 1xx to 5xx. It indicates the status of a response. For more information, see [Status Code](#).

For example, if status code **201** is returned for calling the API used to obtain a user token, the request is successful.

### Response Header

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

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

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

```

connection → keep-alive

content-type → application/json

date → Tue, 12 Feb 2019 06:52:13 GMT

server → Web Server

strict-transport-security → max-age=31536000; includeSubdomains;

transfer-encoding → chunked

via → proxy A

x-content-type-options → nosniff

x-download-options → noopen

x-frame-options → SAMEORIGIN

x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5

x-subject-token
→ MIIVXQVJKoZIhvcNAQcCoIIYJCCEoCAQExDTALBglghkgBZQMEAgEwgharBgkqhkiG9w0BBwGgghacBIIIWmHsidG9rZW4iOnsiZXhwaXJlc19hdCI6ijlwMTktMDItMTNUMC
fj3KJ56YgKnpVNRbW2eZ5eb78SZOkqjACgkqO1wi4JlGzrpdl8LGXK5tdfdq4lqHCYb8P4NaYONYeJcAgz/VeFYtLWT1GSO0zxKZmlQHqj82HBqHdglZO9fuEbL5dMhdavj+33wEI
xHRCe9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXI1jipPEGA270g1FruooL6jggfRkNPQuFSOU8+uSsttVwRtNfsC+qT22Rkd5MCqFGQ8LcuXc3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUbvpvGw-oPNFYxJECKnoH3HRozv0wN--n5d6Nbxg==

x-xss-protection → 1; mode=block;
    
```



## (Optional) Response Body

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

The following shows part of the response body for the API to obtain a user token. For the sake of space, only part of the content is displayed here.

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

```

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

```
{
  "error": {
    "message": "The request you have made requires authentication.",
    "title": "Unauthorized"
  }
}
```

In the preceding information, **error\_code** is an error code, and **error\_msg** describes the error.

# 2 API

---

## 2.1 Management APIs

### 2.1.1 Enabling or Disabling a Risk Rule

#### Function

This API is used to enable or disable a risk rule.

#### URI

POST /v1/{project\_id}/{instance\_id}/audit/rule/risk/switch

**Table 2-1** Path Parameters

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Instance ID
project_id	Yes	String	Project ID

#### Request Parameters

**Table 2-2** Request header parameters

Parameter	Mandatory	Type	Description
Content-type	Yes	String	The fixed value of this parameter is <b>application/json;charset=UTF-8</b> , which cannot be changed.

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

**Table 2-3** Request body parameters

Parameter	Mandatory	Type	Description
ids	Yes	String	Risk IDs. Values are separated by commas (,).Risk id can be obtained from this interface:/v1/{project_id}/{instance_id}/dbss/audit/rule/risk
status	Yes	String	Its value can be OFF or ON. Enumeration values: <ul style="list-style-type: none"> <li>• OFF</li> <li>• ON</li> </ul>

## Response Parameters

**Status code: 200**

**Table 2-4** Response body parameters

Parameter	Type	Description
status	String	response status

**Status code: 400**

**Table 2-5** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-6** ErrorDetail

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

**Status code: 403**

**Table 2-7** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-8** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{instance_id}/audit/rule/risk/switch  
  
{  
  "ids" : "c7lLB3kBCwCqSg3B2OpF",  
  "status" : "OFF"  
}
```

## Example Responses

**Status code: 200**

Request succeeded.

```
{  
  "status" : "SUCCESS"  
}
```

**Status code: 400**

Invalid request parameter.

```
{  
  "error" : {  
    "error_code" : "DBSS.XXX",  
    "error_msg" : "XXX"  
  }  
}
```

**Status code: 403**

Authentication failed.

```
{  
  "error": {  
    "error_code": "DBSS.XXX",  
    "error_msg": "XXX"  
  }  
}
```

## Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameter.
403	Authentication failed.

## Error Codes

See [Error Codes](#).

## 2.1.2 Enabling or Disabling an Agent

### Function

This API is used to enable or disable the agent. An enabled agent collects user access information.

### URI

POST /v1/{project\_id}/{instance\_id}/audit/agent/switch

**Table 2-9** Path Parameters

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Instance ID
project_id	Yes	String	Project ID

## Request Parameters

**Table 2-10** Request header parameters

Parameter	Mandatory	Type	Description
Content-type	Yes	String	The fixed value of this parameter is <b>application/json;charset=UTF-8</b> , which cannot be changed.
X-Auth-Token	Yes	String	User token.The token can be obtained by calling the IAM API used to obtain a user token. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 2-11** Request body parameters

Parameter	Mandatory	Type	Description
agent_id	Yes	String	Audit agent ID
status	Yes	Integer	Agent status. 1: enabled; 0: disabled

## Response Parameters

**Status code: 200**

**Table 2-12** Response body parameters

Parameter	Type	Description
result	String	Response status.

**Status code: 400**

**Table 2-13** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-14** ErrorDetail

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

**Status code: 403**

**Table 2-15** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-16** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{instance_id}/audit/agent/switch  
  
{  
  "agent_id" : "ASWDSDSDSWEWDSDS",  
  "status" : 1  
}
```

## Example Responses

**Status code: 200**

Request succeeded.

```
{  
  "result" : "SUCCESS"  
}
```

**Status code: 400**

Invalid request parameter.

```
{  
  "error" : {  
    "error_code" : "DBSS.XXX",  
    "error_msg" : "XXX"  
  }  
}
```

**Status code: 403**

Authentication failed.

```
{
  "error": {
    "error_code": "DBSS.XXX",
    "error_msg": "XXX"
  }
}
```

## Status Codes

Status Code	Description
200	Request succeeded.
400	Invalid request parameter.
403	Authentication failed.

## Error Codes

See [Error Codes](#).

## 2.1.3 Querying Quota Information About an Account

### Function

This API is used to query quota information about an account.

### URI

GET /v1/{project\_id}/dbss/audit/quota

**Table 2-17** Path Parameters

Parameter	Mandatory	Type	Description
project_id	No	String	Project ID

### Request Parameters

**Table 2-18** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token



## Response Parameters

### Status code: 200

**Table 2-19** Response body parameters

Parameter	Type	Description
audit_quota	Long	Remaining instance quota.
cpu	Long	Remaining CPU quota.
project_id	String	Project ID.
ram	Long	Remaining memory quota.

### Status code: 400

**Table 2-20** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-21** ErrorDetail

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

### Status code: 403

**Table 2-22** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-23** ErrorDetail

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

**Status code: 500**

**Table 2-24** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-25** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/dbss/audit/quota
```

## Example Responses

**Status code: 200**

Success

```
{
  "projectId" : "0250cb8a80c24c0b9f20f557cb159aad",
  "cpu" : 796,
  "ram" : 1622016,
  "audit_quota" : 1
}
```

**Status code: 400**

Client error.

```
{
  "error" : {
    "error_code" : "DBSS.XXXX",
    "error_msg" : "XXX"
  }
}
```

## Status Codes

Status Code	Description
200	Success
400	Client error.
403	Authentication failed.
500	Server error.

## Error Codes

See [Error Codes](#).

## 2.1.4 Querying ECS Specifications

### Function

This API is used to query ECS specifications.

### URI

GET /v1/{project\_id}/dbss/audit/specification

**Table 2-26** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

### Request Parameters

**Table 2-27** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

### Response Parameters

Status code: 200

**Table 2-28** Response body parameters

Parameter	Type	Description
specification	Array of <a href="#">EcsSpecificationBean</a> objects	ECS specifications set

**Table 2-29** EcsSpecificationBean

Parameter	Type	Description
azs	Array of strings	Az information list
id	String	ECS specification ID
level	String	Level. [low,medium,high]
name	String	Name. ECS Type name.
proxy	Integer	Proxy Database audit editions Basic:3 Database audit editions Professional:6 Database audit editions Advanced:30
ram	Integer	Memory
vcpus	Integer	CPU
azType	String	Retrun : [null]. There's meaningless at the moment

**Status code: 400**

**Table 2-30** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-31** ErrorDetail

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

**Status code: 403**

**Table 2-32** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-33** ErrorDetail

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

**Status code: 500**

**Table 2-34** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-35** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/dbss/audit/specification
```

## Example Responses

**Status code: 200**

Success

```
{
  "specification" : [ {
    "level" : "low",
    "id" : "s2.xlarge.4",
    "name" : "s2.xlarge.4",
    "vcpus" : 4,
    "ram" : 16384,
    "proxy" : 3,
    "azs" : [ "region-01-7a" ]
  }, {
    "level" : "medium",
    "id" : "s2.2xlarge.4",
    "name" : "s2.2xlarge.4",
    "vcpus" : 8,
    "ram" : 32768,
    "proxy" : 6,
    "azs" : [ "region-01-7a" ]
  }, {
    "level" : "high",
    "id" : "s3.4xlarge.4",
    "name" : "s3.4xlarge.4",
    "vcpus" : 16,
```

```
"ram" : 65536,  
"proxy" : 30,  
"azs" : [ "region-01-7a", "region-01-7b" ]  
}]  
}
```

**Status code: 400**

Client error.

```
{  
  "error" : {  
    "error_code" : "DBSS.XXXX",  
    "error_msg" : "XXX"  
  }  
}
```

## Status Codes

Status Code	Description
200	Success
400	Client error.
403	Authentication failed.
500	Server error.

## Error Codes

See [Error Codes](#).

## 2.1.5 Querying AZ Information

### Function

This API is used to query AZ information.

### URI

GET /v2/{project\_id}/dbss/audit/availability-zone

**Table 2-36** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

## Request Parameters

**Table 2-37** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

## Response Parameters

**Status code: 200**

**Table 2-38** Response body parameters

Parameter	Type	Description
azs	Array of <a href="#">AzInfo</a> objects	List of available zone information

**Table 2-39** AzInfo

Parameter	Type	Description
zone_name	String	available zone name
zone_number	Integer	available zone number
az_type	String	available zone type
alias	String	available zone alias
alias_us	String	available zone alias in English

**Status code: 400**

**Table 2-40** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-41** ErrorDetail

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error information.

**Status code: 403**

**Table 2-42** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-43** ErrorDetail

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

**Status code: 500**

**Table 2-44** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-45** ErrorDetail

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

## Example Requests

`/v2/{project_id}/dbss/audit/availability-zone`

## Example Responses

**Status code: 200**

Success



```
{
  "azs" : [ {
    "zone_name" : "region-01-7a",
    "zone_number" : 2,
    "az_type" : "normal",
    "alias" : "AZ 2",
    "alias_us" : "AZ2"
  }, {
    "zone_name" : "region-01-7b",
    "zone_number" : 1,
    "az_type" : "normal",
    "alias" : "AZ 1",
    "alias_us" : "AZ1"
  }, {
    "zone_name" : "region-01-7c",
    "zone_number" : 3,
    "az_type" : "normal",
    "alias" : "AZ3",
    "alias_us" : "AZ3"
  } ]
}
```

**Status code: 400**

Client error.

```
{
  "error" : {
    "error_code" : "DBSS.XXXX",
    "error_msg" : "XXX"
  }
}
```

## Status Codes

Status Code	Description
200	Success
400	Client error.
403	Authentication failed.
500	Server error.

## Error Codes

See [Error Codes](#).

## 2.1.6 Query Operation Logs

### Function

This API is used to query user operation logs.

### URI

POST /v1/{project\_id}/{instance\_id}/dbss/audit/operate-log

**Table 2-46** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
instance_id	Yes	String	Instance ID

## Request Parameters

**Table 2-47** Request header parameters

Parameter	Mandatory	Type	Description
Content-type	Yes	String	The fixed value of this parameter is <b>application/json; charset=UTF-8</b> , which cannot be changed.
X-Auth-Token	Yes	String	User token

**Table 2-48** Request body parameters

Parameter	Mandatory	Type	Description
time	No	<b>TimeRangeBean</b> object	Time range
user_name	No	String	Filter users to obtain operation logs
operate_name	No	String	Filter object names to obtain operation logs The value can be : DOWNLOAD
result	No	String	Filter execution results to obtain operation logs [success, fail]
page	No	String	Page number
size	No	String	Number of records on each page

**Table 2-49** TimeRangeBean

Parameter	Mandatory	Type	Description
end_time	No	String	Start time. This parameter must be used together with end_time. The format must be yyyy-MM-dd HH:mm:ss.(UTC)
start_time	No	String	End time. This parameter must be used together with start_time. The format must be yyyy-MM-dd HH:mm:ss. (UTC)
time_range	No	String	Query time segment. The value can be : HALF_HOUR HOUR THREE_HOUR TWELVE_HOUR DAY (24 hours), WEEK (7 days), or MONTH (30 days). Enumerated value: HALF_HOUR HOUR THREE_HOUR TWELVE_HOUR DAY WEEK MONTH

## Response Parameters

Status code: 200

**Table 2-50** Response body parameters

Parameter	Type	Description
total_num	Integer	Total
operate_log	Array of <a href="#">OperateLogInfo</a> objects	Operation log list

**Table 2-51** OperateLogInfo

Parameter	Type	Description
id	String	Operation log ID
user	String	Operation log user
time	String	Time when a record is generated. The format is timestamp.

Parameter	Type	Description
function	String	Function type of the record.[Create new protected database, Create new user's email config, Update user's email config, Update user's alarm config, Delete system alarm record, Rules -> Sensitive Data Protect and so on.]
action	String	Operation type of the record. create: create update: update operate: operation (switch) delete: delete
name	String	Operation object of the record.
description	String	Description of the record.
result	String	Execution result of the user in the record. success indicates success. fail indicates failure.

**Status code: 400**

**Table 2-52** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-53** ErrorDetail

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

**Status code: 403**

**Table 2-54** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-55** ErrorDetail

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

**Status code: 500**

**Table 2-56** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-57** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{instance_id}/dbss/audit/operate-log
{
  "time" : {
    "time_range" : "HOUR"
  },
  "page" : 1,
  "size" : 10
}
```

## Example Responses

**Status code: 200**

Success

```
{
  "total_num" : 3,
  "operate_log" : [ {
    "id" : "1LJP-HgBCwCqSg3BVuAp",
    "user" : "hby-test",
    "time" : "2021-04-22 06:40:52",
    "function" : "Database list",
    "action" : "Delete",
    "name" : "db01 ",
    "description" : "Delete an audited database.",
    "result" : "success"
  }, {
    "id" : "07JO-HgBCwCqSg3ByOAD",
    "user" : "hby-test",
```

```
"time" : "2021-04-22 06:40:15",  
"function" : "Database list",  
"action" : "Update",  
"name" : "db01 ",  
"description" : "Close the audit agent.",  
"result" : "success"  
}, {  
  "id" : "ULKM93gBCwCqSg3BZeD1",  
  "user" : "hby-test",  
  "time" : "2021-04-22 03:07:56",  
  "function" : "Database list",  
  "action" : "Create",  
  "name" : "db01",  
  "description" : "Create a database.",  
  "result" : "success"  
} ]  
}
```

**Status code: 400**

Invalid parameter.

```
{  
  "error" : {  
    "error_code" : "DBSS.XXXX",  
    "error_msg" : "XXX"  
  }  
}
```

**Status code: 500**

Internal server error.

```
{  
  "error" : {  
    "error_code" : "DBSS.XXXX",  
    "error_msg" : "XXX"  
  }  
}
```

## Status Codes

Status Code	Description
200	Success
400	Invalid parameter.
403	Authentication failed.
500	Internal server error.

## Error Codes

See [Error Codes](#).

## 2.1.7 Modifying a Security Group

### Function

This API is used to modify a security group.

## URI

POST /v1/{project\_id}/dbss/audit/security-group

**Table 2-58** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

## Request Parameters

**Table 2-59** Request header parameters

Parameter	Mandatory	Type	Description
Content-type	Yes	String	The fixed value of this parameter is <b>application/json;charset=UTF-8</b> , which cannot be changed.
X-Auth-Token	Yes	String	User token

**Table 2-60** Request body parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Resource ID (DBSS instances ID, the instance ID is not in the basic information.) This parameter can be obtained through the interface : GET /v1/{project_id}/dbss/audit/instances
securitygroup_ids	Yes	Array of strings	Security group ID list (Only one update is allowed at present)

## Response Parameters

Status code: 200

**Table 2-61** Response body parameters

Parameter	Type	Description
result	String	Response status.

**Status code: 400**

**Table 2-62** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-63** ErrorDetail

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

**Status code: 403**

**Table 2-64** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-65** ErrorDetail

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

**Status code: 500**

**Table 2-66** Response body parameters

Parameter	Type	Description
error	Object	Error message.



**Table 2-67** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/dbss/audit/security-group
{
  "resource_id" : "062212d8-8e30-4783-9671-43f3f1f3bb1e",
  "securitygroup_ids" : [ "f0fbec06-bcf6-4c7e-99fa-f0ddfbb1d9bd" ]
}
```

## Example Responses

**Status code: 200**

Success

```
""
```

**Status code: 400**

Failure

```
{
  "error" : {
    "error_code" : "DBSS.XXXX",
    "error_msg" : "XXX"
  }
}
```

## Status Codes

Status Code	Description
200	Success
400	Failure
403	Authentication failed.
500	Server error.

## Error Codes

See [Error Codes](#).

## 2.2 Instance Purchase and Query APIs

## 2.2.1 Querying the Audit Instance List

### Function

This API is used to query the audit instance list.

### URI

GET /v1/{project\_id}/dbss/audit/instances

**Table 2-68** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

**Table 2-69** Query Parameters

Parameter	Mandatory	Type	Description
offset	No	String	Offset.
limit	No	String	Number of query records

### Request Parameters

**Table 2-70** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

### Response Parameters

**Status code: 200**

**Table 2-71** Response body parameters

Parameter	Type	Description
servers	Array of <b>AuditInstanceListBean</b> objects	Instance information list
total	Integer	Total

**Table 2-72** AuditInstanceListBean

Parameter	Type	Description
charge_model	String	Payment mode. Its value can be Period (yearly/monthly) or (Demand) pay-per-use.
comment	String	Remarks.
config_num	Integer	Total number of configured databases.
connect_ip	String	Connection address.
connect_ipv6	String	IPv6 address.
cpu	Integer	Number of CPUs
created	String	Creation time
database_limit	Integer	Total number of supported databases
effect	Integer	<b>1:</b> The resource is frozen and can be released. <b>2:</b> The resource is frozen and cannot be released. <b>3:</b> The resource is frozen and cannot be renewed. If the preceding information is not involved, null is returned.
expired	String	Expired time of instances.
id	String	ID (This is an auto-increment parameter and is meaningless at present.)
keep_days	String	Days until expiration.
name	String	Instance alias
new_version	String	If a value is returned, the upgrade is required. If no value is returned, the value is null.
port_id	String	ID of the port that the EIP is bound to
ram	Integer	Memory
region	String	Region where the instance is located
remain_days	String	Days past the expiration date.
resource_id	String	Resource ID (DBSS instances ID, the instance ID is not in the basic information.) This parameter can be obtained through the interface : GET /v1/{project_id}/dbss/audit/instances
resource_spec_code	String	Instance specifications

Parameter	Type	Description
scene	String	Scenario: Dictionary Value[POLICE,ILLEGAL,VERIFY,PARTNER,ARREARS,null]
security_group_id	String	Security group
specification	String	Instance specifications
status	String	Instance status. Its value can be: SHUTOFF (disabled), ACTIVE (operations allowed), DELETING (no operations allowed), BUILD (no operations allowed), DELETED (not displayed), ERROR (only deletion allowed), HAWAIT (waiting for the standby to be created; no operations allowed), FROZEN (only renewal, binding, and unbinding allowed) UPGRADING (no operations allowed)
subnet_id	String	Subnet ID
task	String	Task status. Its value can be: powering-on (the instance is being started and can be bound or unbound), powering-off (the instance is being stopped and can be bound or unbound) rebooting (the instance is being restarted and can be bound or unbound), delete_wait (the instance is waiting to be deleted and no operations are allowed on the cluster or instance), NO_TASK (the instance is not displayed)
version	String	Current version of the instance
vpc_id	String	VPC
zone	String	AZ
upgrade_log	String	Database instance upgrade log.

**Status code: 400**

**Table 2-73** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-74** ErrorDetail

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

**Status code: 403**

**Table 2-75** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-76** ErrorDetail

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

**Status code: 500**

**Table 2-77** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-78** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/dbss/audit/instances
```

## Example Responses

**Status code: 200**

### Success

```
{
  "servers": [ {
    "name": "DBSS-Test",
    "comment": "",
    "connect_ipv6": null,
    "status": "ACTIVE",
    "task": "NO_TASK",
    "id": "8c53ed03-8ed7-4ff2-ad97-7b2d6d1dd364",
    "specification": "Low | 3 Proxy",
    "zone": "region-01-7a",
    "created": "2021-04-21 04:37:54",
    "expired": null,
    "subnet_id": "97ef0bb5-3759-4db4-aa49-0d087ed49ce5",
    "cpu": 4,
    "ram": 16384,
    "region": "eu-de",
    "version": "21.04.16.164614",
    "charge_model": "Demand",
    "remain_days": null,
    "config_num": 1,
    "effect": null,
    "scene": null,
    "connect_ip": "192.168.0.229",
    "port_id": "dc4bd420-e01c-4d12-a7ff-814f17c63079",
    "resource_id": "062212d8-8e30-4783-9671-43f3f1f3bb1e",
    "vpc_id": "76d98391-5abc-46ed-b8a8-f664202cb166",
    "security_group_id": "f0fbec06-bcf6-4c7e-99fa-f0ddfbb1d9bd",
    "resource_spec_code": "dbss.bypassaudit.low",
    "keep_days": null,
    "new_version": null,
    "database_limit": 3
  } ],
  "total": 1
}
```

### Status code: 400

### Failure

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

## Status Codes

Status Code	Description
200	Success
400	Failure
403	Authentication failed.
500	Server error.

## Error Codes

See [Error Codes](#).

## 2.2.2 Query instance creation task information

### Function

This API is used to query instance creation task information.

### URI

GET /v1/{project\_id}/dbss/audit/jobs/{resource\_id}

**Table 2-79** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
resource_id	Yes	String	Resource ID (DBSS instances ID, the instance ID is not in the basic information.) This parameter can be obtained through the interface : GET /v1/{project_id}/dbss/audit/instances

### Request Parameters

**Table 2-80** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

### Response Parameters

Status code: 200

**Table 2-81** Response body parameters

Parameter	Type	Description
jobs	Array of <b>JobBean</b> objects	job list

**Table 2-82** JobBean

Parameter	Type	Description
job_id	String	Task ID, which is used for asynchronous query.
status	String	Status.[SUCCESS,RUNNING,FAIL,INIT,READY]
job_type	String	Job type.This field is not used
server_id	String	VM ID
server_name	String	VM name
begin_time	Long	Task Start time.Displayed with a 13-digit timestamp
end_time	Long	Task End time. Displayed with a 13-digit timestamp
charge_mode	String	Billing mode.[Period,Demand]
error_code	String	Error code(If the creation is successful, the returned value is null.)
fail_reason	String	Failure cause(If the creation is successful, the returned value is null.)

**Status code: 400**

**Table 2-83** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-84** ErrorDetail

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

**Status code: 403**

**Table 2-85** Response body parameters

Parameter	Type	Description
error	Object	Error message.



**Table 2-86** ErrorDetail

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

**Status code: 500**

**Table 2-87** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-88** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/dbss/audit/jobs/{resource_id}
```

## Example Responses

**Status code: 200**

Success

```
{
  "jobs": [ {
    "status": "SUCCESS",
    "job_type": null,
    "job_id": "8abf9647852a1daa01852e517e1a1a0b",
    "begin_time": 1671519371000,
    "end_time": 1671519417000,
    "error_code": null,
    "fail_reason": null,
    "charge_mode": "Demand",
    "server_name": "DBSS-qct-1220",
    "server_id": "0aa8f621-bc19-4822-b66d-7ab9ae3c8693"
  } ]
}
```

**Status code: 400**

Failure

```
{  
  "error": {  
    "error_code": "DBSS.XXXX",  
    "error_msg": "XXX"  
  }  
}
```

**Status code: 500**

Internal server error.

```
{  
  "error": {  
    "error_code": "DBSS.XXXX",  
    "error_msg": "XXX"  
  }  
}
```

### Status Codes

Status Code	Description
200	Success
400	Failure
403	Authentication failed.
500	Internal server error.

### Error Codes

See [Error Codes](#).

## 2.2.3 Creating an Audit Instance in Yearly/Monthly Billing Mode

### Function

This API is used to Creating an audit instance in yearly/monthly billing mode.

### URI

POST /v2/{project\_id}/dbss/audit/charge/period/order

**Table 2-89** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

## Request Parameters

**Table 2-90** Request header parameters

Parameter	Mandatory	Type	Description
Content-type	Yes	String	The fixed value of this parameter is <b>application/json;charset=UTF-8</b> , which cannot be changed.
X-Auth-Token	Yes	String	User token

**Table 2-91** Request body parameters

Parameter	Mandatory	Type	Description
flavor_ref	Yes	String	Specifies the ID of the specifications used by the ECS.
name	Yes	String	ECS name. Value range: Enter a maximum of 64 characters. Only letters, digits, underscores (_), and hyphens (-) are allowed. If the number of ECSs to be created is greater than 1, the length cannot exceed 59 characters.
vpc_id	Yes	String	VPC ID
availability_zone	Yes	String	Availability zone to which the ECS belongs. (Primary and secondary AZs are separated by commas. Example: az1.dc1,az2.dc2)
enterprise_project_id	Yes	String	Enterprise project ID.
nics	Yes	Array of <b>nics</b> objects	NIC of the ECS.
security_groups	Yes	Array of <b>security_groups</b> objects	Information about the security group to which the ECS belongs.
comment	No	String	Remarks
region	Yes	String	ID of the region where the ECS is located.
cloud_service_type	Yes	String	Service type. Default value: hws.service.type.dbss

Parameter	Mandatory	Type	Description
charging_mode	Yes	Integer	Billing mode: 0: yearly/ monthly 1: pay-per-use
period_type	Yes	Integer	Subscription period type: 0: day 1: week 2: month t3: year 4: hour 5: absolute time
period_num	Yes	Integer	Subscription period
subscription_num	Yes	Integer	Subscription quantity. Only one set of DBSS can be subscribed to.
product_infos	Yes	Array of <a href="#">product_infos</a> objects	Product list
tags	No	Array of <a href="#">KeyValueBean</a> objects	Resource tag
promotion_info	No	String	Discount information
is_auto_renew	No	Integer	Auto-renewal: The value 1 indicates auto-renewal is enabled, and the value 0 indicates auto-renewal is disabled.

**Table 2-92** nics

Parameter	Mandatory	Type	Description
subnet_id	Yes	String	Subnet ID of the NIC.
ip_address	No	String	Specifies the IP address. If the value of this parameter is left blank or is set to an empty string, the IP address is automatically assigned.

**Table 2-93** security\_groups

Parameter	Mandatory	Type	Description
id	Yes	String	Specifies the ID of the security group corresponding to the ECS. This ID takes effect for the NIC configured on the ECS.

**Table 2-94** product\_infos

Parameter	Mandatory	Type	Description
product_id	Yes	String	Product ID
cloud_service_type	Yes	String	Service type. Default value: hws.service.type.dbss
resource_type	Yes	String	Resource type. Default value: hws.resource.type.dbss
resource_spec_code	Yes	String	Resource specifications.dbss.bypassaudit.low, dbss.bypassaudit.medium, dbss.bypassaudit.high
product_spec_desc	Yes	String	Product specification description.

**Table 2-95** KeyValueBean

Parameter	Mandatory	Type	Description
key	Yes	String	Key
value	Yes	String	Value

## Response Parameters

**Status code: 200**

**Table 2-96** Response body parameters

Parameter	Type	Description
description	String	Description
code	String	Return code
order_id	String	Order ID

**Status code: 400**

**Table 2-97** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-98** ErrorDetail

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

**Status code: 403**

**Table 2-99** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-100** ErrorDetail

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

**Status code: 500**

**Table 2-101** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-102** ErrorDetail

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

## Example Requests

```
/v2/{project_id}/dbss/audit/charge/period/order
{
  "flavor_ref" : "st6.xlarge.4",
  "name" : "DBSS-acc3",
  "vpc_id" : "4c035747-f77b-4c6d-b23b-cb3a2b96c7e6",
  "availability_zone" : "region-north-7c",
  "comment" : "",
  "region" : "region-north-7",
  "nics" : [ {
    "subnet_id" : "6201dcf2-1374-43ec-ae8b-78b4081572d3"
  } ],
  "security_groups" : [ {
    "id" : "04088976-9c63-4e6b-9070-84e6a30c782b"
  } ],
  "cloud_service_type" : "hws.service.type.dbss",
  "charging_mode" : 0,
  "period_type" : 2,
  "period_num" : 1,
  "subscription_num" : 1,
  "is_auto_renew" : 0,
  "product_infos" : [ {
    "product_id" : "00301-225396-0--0",
    "cloud_service_type" : "hws.service.type.dbss",
    "resource_type" : "hws.resource.type.dbss",
    "resource_spec_code" : "dbss.bypassaudit.low",
    "product_spec_desc" : "test"
  } ],
  "promotion_info" : "",
  "enterprise_project_id" : "0",
  "tags" : [ {
    "key" : "key_test",
    "value" : "1"
  } ]
}
```

## Example Responses

### Status code: 200

Success

```
{
  "description" : " Success",
  "code" : "0",
  "order_id" : "CS1710190909OGQIS"
}
```

### Status code: 400

Failure

```
{
  "error" : {
    "error_code" : "DBSS.XXXX",
    "error_msg" : "XXX"
  }
}
```

## Status Codes

Status Code	Description
200	Success
400	Failure
403	Authentication failed.
500	Server error.

## Error Codes

See [Error Codes](#).

## 2.3 Database APIs

### 2.3.1 Querying Databases

#### Function

This API is used to query databases.

#### URI

GET /v1/{project\_id}/{instance\_id}/dbss/audit/databases

**Table 2-103** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
instance_id	Yes	String	Instance ID

**Table 2-104** Query Parameters

Parameter	Mandatory	Type	Description
status	No	String	Database status [ON,OFF]
offset	No	String	Offset
limit	No	String	Number of query records



## Request Parameters

**Table 2-105** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

## Response Parameters

Status code: 200

**Table 2-106** Response body parameters

Parameter	Type	Description
databases	Array of <a href="#">DataBaseBean</a> objects	Database information list
total	Integer	Total

**Table 2-107** DataBaseBean

Parameter	Type	Description
database	<a href="#">DataBase</a> object	Database information

**Table 2-108** DataBase

Parameter	Type	Description
id	String	Database ID. This parameter can be obtained through the interface provided by the RDS service: GET /v3/{project_id}/instances
name	String	Database name. This parameter can be obtained through the interface provided by the RDS service: GET /v3/{project_id}/instances
type	String	Type of the added database. Enumerated values: MYSQL ORACLE POSTGRESQL SQLSERVER DAMENG TAURUS DWS KINGBASE GAUSSDBOPENGAUSS GREENPLUM HIGHGO SHENTONG GBASE8A GBASE8S GBASEXDM MONGODB DDS
version	String	Database version

Parameter	Type	Description
charset	String	Database character set
ip	String	IP address
port	String	Database port
os	String	Database OS
status	String	<p>Database status. This parameter can be obtained through the interface provided by the RDS service: GET /v3/{project_id}/instances</p> <p>GET https://{Endpoint}/v3/{project_id}/instances? id={id}&amp;name={name}&amp;type={type}&amp;datastore_type={datastore_type}&amp;vpc_id={vpc_id}&amp;subnet_id={subnet_id}&amp;offset={offset}&amp;limit={limit}</p> <p>If the value is <b>BUILD</b>, the instance is being created.</p> <p>If the value is <b>ACTIVE</b>, the instance is normal.</p> <p>If the value is <b>FAILED</b>, the instance is abnormal.</p> <p>If the value is <b>MODIFYING</b>, the instance is being scaled up.</p> <p>If the value is <b>REBOOTING</b>, the instance is being rebooted.</p> <p>If the value is <b>RESTORING</b>, the instance is being restored.</p> <p>If the value is <b>MODIFYING INSTANCE TYPE</b>, the instance is changing from primary to standby.</p> <p>If the value is <b>SWITCHOVER</b>, the primary/standby switchover is being performed.</p> <p>If the value is <b>MIGRATING</b>, the instance is being migrated.</p> <p>If the value is <b>BACKING UP</b>, the instance is being backed up.</p> <p>If the value is <b>MODIFYING DATABASE PORT</b>, the database port is being changed.</p> <p>If the value is <b>SHUTDOWN</b>, the DB instance is stopped.</p>
instance_name	String	Database instance name
audit_status	String	Database running status. Enumerated values: ACTIVE SHUTOFF ERROR

Parameter	Type	Description
agent_url	Array of strings	Unique ID of the agent
db_classification	String	Database type. Its value can be: RDS,ECS (customer-built)
rds_id	String	Rds database ID
rds_obj_info	String	Full Log Audit Bucket Information.
dws_obj_info	String	Full Log Audit Bucket Information.

**Status code: 400**

**Table 2-109** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-110** ErrorDetail

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

**Status code: 403**

**Table 2-111** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-112** ErrorDetail

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

**Status code: 500**

**Table 2-113** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-114** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{instance_id}/dbss/audit/databases
```

## Example Responses

**Status code: 200**

Success

```
{
  "databases": [ {
    "database": {
      "id": "zLKv83gBCwCqSg3BJt0m",
      "name": "db01",
      "type": "MYSQL",
      "version": "5.0",
      "charset": "UTF8",
      "ip": "192.168.0.204",
      "port": "3306",
      "os": "LINUX64",
      "status": "OFF",
      "instance_name": "",
      "audit_status": null,
      "agent_url": [ "zrKw83gBCwCqSg3Bkt1P" ],
      "db_classification": "ECS"
    }
  } ]
}
```

**Status code: 400**

Invalid parameter.

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

**Status code: 500**

Internal server error.

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

## Status Codes

Status Code	Description
200	Success
400	Invalid parameter.
403	Authentication failed.
500	Internal server error.

## Error Codes

See [Error Codes](#).

## 2.3.2 Adding an Agent-Free RDS Database

### Function

This API is used to add an agent-free RDS database.

### URI

POST /v1/{project\_id}/{instance\_id}/dbss/audit/databases/rds

**Table 2-115** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
instance_id	Yes	String	Instance ID

## Request Parameters

**Table 2-116** Request header parameters

Parameter	Mandatory	Type	Description
Content-type	Yes	String	The fixed value of this parameter is <b>application/json;charset=UTF-8</b> , which cannot be changed.
X-Auth-Token	Yes	String	User token

**Table 2-117** Request body parameters

Parameter	Mandatory	Type	Description
databases	Yes	Array of <b>databases</b> objects	List of added databases
total_count	No	Integer	Total

**Table 2-118** databases

Parameter	Mandatory	Type	Description
id	Yes	String	Database ID. This parameter can be obtained through the interface provided by the RDS service: GET /v3/{project_id}/instances
db_name	Yes	String	Database name. This parameter can be obtained through the interface provided by the RDS service: GET /v3/{project_id}/instances

Parameter	Mandatory	Type	Description
status	Yes	String	<p>Database status. This parameter can be obtained through the interface provided by the RDS service: GET /v3/{project_id}/instances</p> <p>GET https://{Endpoint}/v3/{project_id}/instances?id={id}&amp;name={name}&amp;type={type}&amp;datastore_type={datastore_type}&amp;vpc_id={vpc_id}&amp;subnet_id={subnet_id}&amp;offset={offset}&amp;limit={limit}</p> <p>If the value is <b>BUILD</b>, the instance is being created.</p> <p>If the value is <b>ACTIVE</b>, the instance is normal.</p> <p>If the value is <b>FAILED</b>, the instance is abnormal.</p> <p>If the value is <b>MODIFYING</b>, the instance is being scaled up.</p> <p>If the value is <b>REBOOTING</b>, the instance is being rebooted.</p> <p>If the value is <b>RESTORING</b>, the instance is being restored.</p> <p>If the value is <b>MODIFYING INSTANCE TYPE</b>, the instance is changing from primary to standby.</p> <p>If the value is <b>SWITCHOVER</b>, the primary/standby switchover is being performed.</p> <p>If the value is <b>MIGRATING</b>, the instance is being migrated.</p> <p>If the value is <b>BACKING UP</b>, the instance is being backed up.</p> <p>If the value is <b>MODIFYING DATABASE PORT</b>, the database port is being changed.</p> <p>If the value is <b>SHUTDOWN</b>, the DB instance is stopped.</p>
port	Yes	String	Database port
ip	Yes	String	IP address

Parameter	Mandatory	Type	Description
instance_name	Yes	String	DB instance name
version	Yes	String	Database version.MySQL 8.0
type	Yes	String	Database type.Support RDS

## Response Parameters

**Status code: 200**

**Table 2-119** Response body parameters

Parameter	Type	Description
illegal_db_id	Array of strings	ID of the database instance that fails to be added.
legal_db_id	Array of strings	ID of the database instance that is successfully added.

**Status code: 400**

**Table 2-120** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-121** ErrorDetail

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

**Status code: 403**

**Table 2-122** Response body parameters

Parameter	Type	Description
error	Object	Error message.



**Table 2-123** ErrorDetail

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

**Status code: 500**

**Table 2-124** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-125** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{instance_id}/dbss/audit/databases/rds
{
  "databases": [ {
    "id": "123751d3ee2f47aea64822e98318c6a8in01",
    "db_name": "rds1",
    "status": "ACTIVE",
    "port": "3306",
    "ip": "192.168.0.119",
    "instance_name": "rds1",
    "version": "8.0",
    "type": "MySQL"
  }, {
    "id": "2343f7285d684fed8b09fac201c3fc7ain01",
    "db_name": "rds2",
    "status": "ACTIVE",
    "port": "3306",
    "ip": "192.168.0.92",
    "instance_name": "rds2",
    "version": "8.0",
    "type": "MySQL"
  }
  ]
}
```

## Example Responses

**Status code: 200**

Success

```
{  
  "illegal_db_id" : [ ],  
  "legal_db_id" : [ "123751d3ee2f47aea64822e98318c6a8in01", "2343f7285d684fed8b09fac201c3fc7ain01" ]  
}
```

**Status code: 400**

Failure

```
{  
  "error" : {  
    "error_code" : "DBSS.XXXX",  
    "error_msg" : "XXX"  
  }  
}
```

## Status Codes

Status Code	Description
200	Success
400	Failure
403	Authentication failed.
500	Server error.

## Error Codes

See [Error Codes](#).

## 2.4 Tag APIs

### 2.4.1 Querying Project Tags

#### Function

This API is used to query project tags.

#### URI

GET /v1/{project\_id}/{resource\_type}/tags

**Table 2-126** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
resource_type	Yes	String	Resource type.Default usage: auditInstance

## Request Parameters

**Table 2-127** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

## Response Parameters

**Status code: 200**

**Table 2-128** Response body parameters

Parameter	Type	Description
tags	Array of <a href="#">tags</a> objects	Tag list

**Table 2-129** tags

Parameter	Type	Description
key	String	Key. The value can contain up to 128 characters. The key must comply with the 3.1 KEY character set specifications.
values	Array of strings	Value list. Enter a maximum of 255 characters. The value must comply with specifications described in 3.2 Character Set Specifications for VALUE.

**Status code: 400**

**Table 2-130** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-131** ErrorDetail

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error information.

**Status code: 403**

**Table 2-132** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-133** ErrorDetail

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

**Status code: 500**

**Table 2-134** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-135** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{resource_type}/tags
```

## Example Responses

**Status code: 200**

Success

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

**Status code: 400**

Failure

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

## Status Codes

Status Code	Description
200	Success
400	Failure
403	Authentication failed.
500	Server error.

## Error Codes

See [Error Codes](#).

## 2.4.2 Querying Resource Instances by Tag

### Function

This API is used to query resource instances by tag.

### URI

POST /v1/{project\_id}/{resource\_type}/resource-instances/filter

**Table 2-136** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
resource_type	Yes	String	Resource type. Default usage: auditInstance

**Table 2-137** Query Parameters

Parameter	Mandatory	Type	Description
limit	No	String	Number of records to be queried. This parameter is not available when <b>action</b> is set to <b>count</b> . If <b>action</b> is set to <b>filter</b> , the default value is <b>1000</b> . The maximum value is <b>1000</b> , and the minimum value is <b>1</b> . The value cannot be a negative number.
offset	No	String	The index position. This parameter is not available when <b>action</b> is set to <b>count</b> . If <b>offset</b> is set to <i>N</i> , the resource query starts from the <i>N</i> +1 piece of data. If <b>action</b> is set to <b>filter</b> , the value of <b>offset</b> is <b>0</b> by default, indicating that the query starts from the first piece of data. The <b>offset</b> value must be a number and cannot be a negative number.

## Request Parameters

**Table 2-138** Request header parameters

Parameter	Mandatory	Type	Description
Content-type	Yes	String	The fixed value of this parameter is <b>application/json;charset=UTF-8</b> , which cannot be changed.
X-Auth-Token	Yes	String	User token

**Table 2-139** Request body parameters

Parameter	Mandatory	Type	Description
matches	No	Array of <b>matches</b> objects	Specifies the search field. The tag key is the field to be matched, for example, <b>resource_name</b> . The tag value indicates the value to be matched. The key is a fixed dictionary value and cannot be a duplicate key or unsupported key. Check whether fuzzy match is required based on the key value. For example, if key is set to resource_name, fuzzy search (case-insensitive) is performed by default. If value is empty, exact match is performed. Most services do not have resources without names. In this case, an empty list is returned. If key is resource_id, exact match is used. Only resource_name for key is supported. Other key values will be available later.
not_tags	No	Array of <b>TagKeyValueSBean</b> objects	Tags are excluded, a maximum of 50 tag keys are included, and each tag value can have a maximum of 10 values. Each tag value can be an empty array, but the tag structure cannot be missing. Keys must be unique and values of a key must be unique. The response returns instances containing no tag in this list. Keys are in the AND relationship and values in each key-value structure is in the OR relationship. If no filtering condition is specified, full data is returned.

Parameter	Mandatory	Type	Description
tags	No	Array of <b>TagKeyValue</b> sBean objects	The resources to be queried contain tags listed in <b>tags</b> . Each instance to be queried contains a maximum of 50 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key and each value of the same tag key must be unique. The response returns instances containing all tags in this list. Keys in this list are in the AND relationship and values in each key-value structure are in the OR relationship. If no tag filtering criteria is specified, full data is returned.
tags_any	No	Array of <b>TagKeyValue</b> sBean objects	Any tags are included. A maximum of 50 tag keys are included, and each tag key can have a maximum of 10 values. Each tag value can be an empty array, but the tag structure cannot be missing. Keys must be unique and values of a key must be unique. The response returns instances containing any tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no filtering condition is specified, full data is returned.



Parameter	Mandatory	Type	Description
not_tags_any	No	Array of <b>TagKeyValueBean</b> objects	Tags are excluded, a maximum of 50 tag keys are included, and each tag key can have a maximum of 10 values. Each tag value can be an empty array, but the tag structure cannot be missing. Keys must be unique and values of a key must be unique. The response returns resources containing no tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no filtering condition is specified, full data is returned.
without_any_tag	No	Boolean	If this parameter is set to true, all resources without tags are queried. In this case, the tags, tags_any, not_tags, and not_tags_any fields are ignored.

**Table 2-140** matches

Parameter	Mandatory	Type	Description
key	No	String	Key
value	No	String	Value

**Table 2-141** TagKeyValuesBean

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the tag key. It can contain up to 128 Unicode characters. It cannot be left blank. The system does not verify the character set of <b>key</b> when searching for resources. <b>key</b> cannot be empty, an empty string, or spaces. Before using <b>key</b> , delete single-byte character (SBC) spaces before and after the value.

Parameter	Mandatory	Type	Description
values	Yes	Array of strings	Specifies the tag values. Each value contains a maximum of 255 Unicode characters. Before verifying and using <b>values</b> , delete SBC spaces before and after the value. The tag value can be an empty array but cannot be left blank. If values is left blank, it indicates any_value (querying any value). All values of a tag key are in the OR relationship.

## Response Parameters

Status code: 200

Table 2-142 Response body parameters

Parameter	Type	Description
resources	Array of <b>resources</b> objects	Resource instance list
total_count	Integer	Total number of records.

Table 2-143 resources

Parameter	Type	Description
resource_detail	Object	Resource details. Resource details are used for extension. This parameter is left blank by default.
resource_id	String	Resource ID (DBSS instances ID, the instance ID is not in the basic information.) This parameter can be obtained through the interface : GET /v1/{project_id}/dbss/audit/instances
resource_name	String	Specifies the resource name. If the resource does not have a name, the ID is returned.
tags	Array of <b>tags</b> objects	The tag list. This parameter is an empty array by default if there is no tag.

**Table 2-144** tags

Parameter	Type	Description
key	String	Key
value	String	Value

**Table 2-145** sys\_tags

Parameter	Type	Description
key	String	Key
value	String	Value

**Status code: 400**

**Table 2-146** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-147** ErrorDetail

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

**Status code: 403**

**Table 2-148** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-149** ErrorDetail

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error information.

**Status code: 500**

**Table 2-150** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-151** ErrorDetail

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

## Example Requests

```

/v1/{project_id}/{resource_type}/resource-instances/filter
{
  "matches": [ {
    "key": "resource_name",
    "value": "resource1"
  } ],
  "not_tags": [ {
    "key": "key1",
    "values": [ "*"value1", "value2" ]
  } ],
  "tags": [ {
    "key": "key1",
    "values": [ "*"value1", "value2" ]
  } ],
  "tags_any": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ],
  "not_tags_any": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  } ]
}

```

## Example Responses

**Status code: 200**

Success

```

{
  "resources": [ {

```

```

"resource_detail" : null,
"resource_id" : "cdfs_cefs_wesas_12_dsad",
"resource_name" : "resouece1",
"tags" : [ {
  "key" : "key1",
  "value" : "value1"
}, {
  "key" : "key2",
  "value" : "value1"
} ]
"total_count" : 1000
}

```

**Status code: 400**

Failure

```

{
  "error" : {
    "error_code" : "DBSS.XXXX",
    "error_msg" : "XXX"
  }
}

```

## Status Codes

Status Code	Description
200	Success
400	Failure
403	Authentication failed.
500	Server error.

## Error Codes

See [Error Codes](#).

## 2.4.3 Querying the Number of Resource Instances by Tag

### Function

This API is used to query the number of resource instances by tag.

### URI

POST /v1/{project\_id}/{resource\_type}/resource-instances/count

**Table 2-152** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

Parameter	Mandatory	Type	Description
resource_type	Yes	String	Resource type.Default usage: auditInstance

## Request Parameters

**Table 2-153** Request header parameters

Parameter	Mandatory	Type	Description
Content-type	Yes	String	The fixed value of this parameter is <b>application/json;charset=UTF-8</b> , which cannot be changed.
X-Auth-Token	Yes	String	User token

**Table 2-154** Request body parameters

Parameter	Mandatory	Type	Description
matches	No	Array of <b>matches</b> objects	Specifies the search field. The tag key is the field to be matched, for example, <b>resource_name</b> . The tag value indicates the value to be matched. The key is a fixed dictionary value and cannot be a duplicate key or unsupported key. Check whether fuzzy match is required based on the key value. For example, if key is set to resource_name, fuzzy search (case-insensitive) is performed by default. If value is empty, exact match is performed. Most services do not have resources without names. In this case, an empty list is returned. If key is resource_id, exact match is used. Only resource_name for key is supported. Other key values will be available later.

Parameter	Mandatory	Type	Description
not_tags	No	Array of <b>TagKeyValue</b> sBean objects	Tags are excluded, a maximum of 50 tag keys are included, and each tag value can have a maximum of 10 values. Each tag value can be an empty array, but the tag structure cannot be missing. Keys must be unique and values of a key must be unique. The response returns instances containing no tag in this list. Keys are in the AND relationship and values in each key-value structure is in the OR relationship. If no filtering condition is specified, full data is returned.
tags	No	Array of <b>TagKeyValue</b> sBean objects	The resources to be queried contain tags listed in <b>tags</b> . Each instance to be queried contains a maximum of 50 keys. Each tag key has a maximum of 10 tag values. The tag value corresponding to each tag key can be an empty array but the structure cannot be missing. Each tag key and each value of the same tag key must be unique. The response returns instances containing all tags in this list. Keys in this list are in the AND relationship and values in each key-value structure are in the OR relationship. If no tag filtering criteria is specified, full data is returned.

Parameter	Mandatory	Type	Description
tags_any	No	Array of <b>TagKeyValue</b> <b>sBean</b> objects	Any tags are included. A maximum of 50 tag keys are included, and each tag key can have a maximum of 10 values. Each tag value can be an empty array, but the tag structure cannot be missing. Keys must be unique and values of a key must be unique. The response returns instances containing any tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no filtering condition is specified, full data is returned.
not_tags_any	No	Array of <b>TagKeyValue</b> <b>sBean</b> objects	Tags are excluded, a maximum of 50 tag keys are included, and each tag key can have a maximum of 10 values. Each tag value can be an empty array, but the tag structure cannot be missing. Keys must be unique and values of a key must be unique. The response returns resources containing no tag in this list. Keys in this list are in the OR relationship and values in each key-value structure are also in the OR relationship. If no filtering condition is specified, full data is returned.
without_any_tag	No	Boolean	If this parameter is set to true, all resources without tags are queried. In this case, the tags, tags_any, not_tags, and not_tags_any fields are ignored.

**Table 2-155** matches

Parameter	Mandatory	Type	Description
key	No	String	Key



Parameter	Mandatory	Type	Description
value	No	String	Value

**Table 2-156** TagKeyValuesBean

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the tag key. It can contain up to 128 Unicode characters. It cannot be left blank. The system does not verify the character set of <b>key</b> when searching for resources. <b>key</b> cannot be empty, an empty string, or spaces. Before using <b>key</b> , delete single-byte character (SBC) spaces before and after the value.
values	Yes	Array of strings	Specifies the tag values. Each value contains a maximum of 255 Unicode characters. Before verifying and using <b>values</b> , delete SBC spaces before and after the value. The tag value can be an empty array but cannot be left blank. If values is left blank, it indicates any_value (querying any value). All values of a tag key are in the OR relationship.

## Response Parameters

Status code: 200

**Table 2-157** Response body parameters

Parameter	Type	Description
resources	Array of <b>resources</b> objects	Resource instance list
total_count	Integer	Total number of records.

**Table 2-158** resources

Parameter	Type	Description
resource_detail	Object	Resource details. Resource details are used for extension. This parameter is left blank by default.
resource_id	String	Resource ID (DBSS instances ID, the instance ID is not in the basic information.) This parameter can be obtained through the interface : GET /v1/{project_id}/dbss/audit/instances
resource_name	String	Specifies the resource name. If the resource does not have a name, the ID is returned.
tags	Array of <b>tags</b> objects	The tag list. This parameter is an empty array by default if there is no tag.

**Table 2-159** tags

Parameter	Type	Description
key	String	Key
value	String	Value

**Table 2-160** sys\_tags

Parameter	Type	Description
key	String	Key
value	String	Value

**Status code: 400**

**Table 2-161** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-162** ErrorDetail

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

**Status code: 403**

**Table 2-163** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-164** ErrorDetail

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

**Status code: 500**

**Table 2-165** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-166** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{resource_type}/resource-instances/count  
  
{  
  "matches": [ {  
    "key": "resource_name",  
    "value": "resource1"  
  }  
}
```

```
    }],  
    "not_tags" : [ {  
      "key" : "key1",  
      "values" : [ "value1", "value2" ]  
    }],  
    "tags" : [ {  
      "key" : "key1",  
      "values" : [ "value1", "value2" ]  
    }],  
    "tags_any" : [ {  
      "key" : "key1",  
      "values" : [ "value1", "value2" ]  
    }],  
    "not_tags_any" : [ {  
      "key" : "key1",  
      "values" : [ "value1", "value2" ]  
    }]  
  }  
}
```

## Example Responses

### Status code: 200

Success

```
{  
  "total_count" : 1000  
}
```

### Status code: 400

Failure

```
{  
  "error" : {  
    "error_code" : "DBSS.XXXX",  
    "error_msg" : "XXX"  
  }  
}
```

## Status Codes

Status Code	Description
200	Success
400	Failure
403	Authentication failed.
500	Server error.

## Error Codes

See [Error Codes](#).

## 2.4.4 Adding Resource Tags in Batches

### Function

This API is used to add resource tags in batches.

### URI

POST /v1/{project\_id}/{resource\_type}/{resource\_id}/tags/create

**Table 2-167** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
resource_type	Yes	String	Resource type.Default usage: auditInstance
resource_id	Yes	String	Resource ID (DBSS instances ID, the instance ID is not in the basic information.) This parameter can be obtained through the interface : GET /v1/{project_id}/dbss/audit/instances

### Request Parameters

**Table 2-168** Request header parameters

Parameter	Mandatory	Type	Description
Content-type	Yes	String	The fixed value of this parameter is <b>application/json;charset=UTF-8</b> , which cannot be changed.
X-Auth-Token	Yes	String	User token

**Table 2-169** Request body parameters

Parameter	Mandatory	Type	Description
tags	No	Array of <b>KeyValueBean</b> objects	Tag list This parameter is mandatory for tenants. For users with the op_service permission, choose either this field or sys_tags.
sys_tags	No	Array of <b>KeyValueBean</b> objects	System tag list This field is available only to the op_service permission. Choose either this field or tags. Currently, TMS invokes only one resource_tag structure. The key is fixed as _sys_enterprise_project_id. The value is UUID or 0. 0 indicates the enterprise project by default.

**Table 2-170** KeyValueBean

Parameter	Mandatory	Type	Description
key	Yes	String	Key
value	Yes	String	Value

## Response Parameters

**Status code: 400**

**Table 2-171** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-172** ErrorDetail

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

**Status code: 403**

**Table 2-173** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-174** ErrorDetail

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

**Status code: 500**

**Table 2-175** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-176** ErrorDetail

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

**Example Requests**

```

/v1/{project_id}/{resource_type}/{resource_id}/tags/create
{
  "tags" : [ {
    "key" : "key1"
  }, {
    "key" : "key2",
    "value" : "value3"
  } ],
  "sys_tags" : [ {
    "key" : "_sys_enterprise_project_id",
    "value" : "5aa119a8-d25b-45a7-8d1b-88e127885635"
  } ]
}

```

## Example Responses

**Status code: 204**

Success

**Status code: 400**

Failure

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

## Status Codes

Status Code	Description
204	Success
400	Failure
403	Authentication failed.
500	Server error.

## Error Codes

See [Error Codes](#).

## 2.4.5 Batch Deleting Resource Tags

### Function

This API is used to batch delete resource tags.

### URI

DELETE /v1/{project\_id}/{resource\_type}/{resource\_id}/tags/delete

**Table 2-177** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
resource_type	Yes	String	Resource type. Default usage: auditInstance



Parameter	Mandatory	Type	Description
resource_id	Yes	String	Resource ID (DBSS instances ID, the instance ID is not in the basic information.) This parameter can be obtained through the interface : GET /v1/{project_id}/dbss/audit/instances

## Request Parameters

**Table 2-178** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

**Table 2-179** Request body parameters

Parameter	Mandatory	Type	Description
tags	No	Array of <a href="#">KeyValueBean</a> objects	Tag list This parameter is mandatory for tenants. For users with the op_service permission, choose either this field or sys_tags.
sys_tags	No	Array of <a href="#">KeyValueBean</a> objects	System tag list This field is available only to the op_service permission. Choose either this field or tags. Currently, TMS invokes only one resource_tag structure. The key is fixed as _sys_enterprise_project_id. The value is UUID or 0. 0 indicates the enterprise project by default.

**Table 2-180** KeyValueBean

Parameter	Mandatory	Type	Description
key	Yes	String	Key

Parameter	Mandatory	Type	Description
value	Yes	String	Value

## Response Parameters

**Status code: 400**

**Table 2-181** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-182** ErrorDetail

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

**Status code: 403**

**Table 2-183** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-184** ErrorDetail

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

**Status code: 500**

**Table 2-185** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-186** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{resource_type}/{resource_id}/tags/delete
{
  "tags": [ {
    "key": "key1"
  }, {
    "key": "key2",
    "value": "value3"
  } ]
}
```

## Example Responses

**Status code: 204**

Success

**Status code: 400**

Failure

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

## Status Codes

Status Code	Description
204	Success
400	Failure
403	Authentication failed.
500	Server error.

## Error Codes

See [Error Codes](#).

## 2.5 Instance Rule APIs

### 2.5.1 Querying the Audit Scope Policy List

#### Function

This API is used to query the audit scope policy list.

#### URI

GET /v1/{project\_id}/{instance\_id}/dbss/audit/rule/scopes

**Table 2-187** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
instance_id	Yes	String	Instance ID

**Table 2-188** Query Parameters

Parameter	Mandatory	Type	Description
offset	No	String	Offset
limit	No	String	Number of query records

#### Request Parameters

**Table 2-189** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

#### Response Parameters

Status code: 200

**Table 2-190** Response body parameters

Parameter	Type	Description
scopes	Array of <a href="#">RuleScopeInfo</a> objects	Audit scope rule list
total	Integer	Total

**Table 2-191** RuleScopeInfo

Parameter	Type	Description
id	String	Audit scope rule ID
name	String	Audit scope name
action	String	Actions in the audit scope [REVOKE,DROP_TABLE,SELECT_FOR_UPDATE,SELECT,ROLLBACK,CREATE_TABLESPACE,DELETE,GRANT,DROP_USER,DROP_TABLESPACE,UPDATE,INSERT,CREATE_USER,CREATE_TABLE,LOGIN]
status	String	Audit scope rule status [Enabled,Disabled]
exception_ips	String	Exception IP address of the audit scope
source_ips	String	Source IP address of the audit scope rule
source_ports	String	Port of the audit scope rule
db_ids	String	Database ID
db_names	String	Database name
db_users	String	Database account
all_audit	Boolean	Full audit or not true : Full audit false : not Full audit

**Status code: 400**

**Table 2-192** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-193** ErrorDetail

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

**Status code: 403**

**Table 2-194** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-195** ErrorDetail

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

**Status code: 500**

**Table 2-196** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-197** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{instance_id}/dbss/audit/rule/scopes
```

## Example Responses

**Status code: 200**

### Success

```
{
  "scopes": [ {
    "id": "zX4W2ngBo47GiyUSBuNs",
    "name": "Full audit rule",
    "action": "",
    "status": "ON",
    "exception_ips": "",
    "source_ips": "",
    "source_ports": "",
    "db_ids": "",
    "db_names": "",
    "db_users": "",
    "all_audit": true
  } ],
  "total": 1
}
```

### Status code: 400

Invalid parameter.

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

### Status code: 500

Internal server error.

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

## Status Codes

Status Code	Description
200	Success
400	Invalid parameter.
403	Authentication failed.
500	Internal server error.

## Error Codes

See [Error Codes](#).

## 2.5.2 Querying a SQL Injection Rule Policy

### Function

This API is used to query a SQL injection rule policy.

### URI

POST /v1/{project\_id}/{instance\_id}/dbss/audit/rule/sql-injections

**Table 2-198** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
instance_id	Yes	String	Instance ID

### Request Parameters

**Table 2-199** Request header parameters

Parameter	Mandatory	Type	Description
Content-type	Yes	String	The fixed value of this parameter is <b>application/json;charset=UTF-8</b> , which cannot be changed.
X-Auth-Token	Yes	String	User token

**Table 2-200** Request body parameters

Parameter	Mandatory	Type	Description
risk_levels	No	String	Risk level: (Use commas (,) to separate multiple queries.) HIGH MEDIUM LOW

### Response Parameters

Status code: 200



**Table 2-201** Response body parameters

Parameter	Type	Description
rules	Array of <a href="#">rules</a> objects	SQL rule list
total	Integer	Total number of items in the current scope

**Table 2-202** rules

Parameter	Type	Description
id	String	SQL Rule ID
name	String	SQL rule name
status	String	Rule status: ON OFF
risk_level	String	Risk level: HIGH MEDIUM LOW
type	String	System default rules or user-defined rules. [SYSTEM,CUSTOMIZE]
rank	Integer	The priority of this rule, with values ranging from 1 to 8. The smaller the value, the higher the priority
feature	String	SQL command feature For example : Delete *
regex	String	Regular expression
keywords	String	Keyword defined in the system rule. This field is available only for preset rules.

**Status code: 400**

**Table 2-203** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-204** ErrorDetail

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

**Status code: 403**

**Table 2-205** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-206** ErrorDetail

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

**Status code: 500**

**Table 2-207** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-208** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{instance_id}/dbss/audit/rule/sql-injections
{
  "risk_levels": "HIGH"
}
```

## Example Responses

**Status code: 200**

Success

```
{
  "rules": [ {
```

```

    "id" : "zX4W2ngBo47GiyUSBuNs",
    "name" : "MySQL error based SQL injection",
    "status" : "ON",
    "type" : "SYSTEM",
    "risk_level" : "HIGH",
    "rank" : 1,
    "feature" : "Regular expression",
    "regex" : "(.*)?(select)\s+[0-9]+\s+from\s+|\s+(\s*\s*select\s+count(.*)?(concat)\s*(.*)?(from)\s*(information_schema.tables)(.*)?(group)\s+(by)(.*)?)"
  } ],
  "total" : 1
}

```

**Status code: 400**

Invalid parameter.

```

{
  "error" : {
    "error_code" : "DBSS.XXXX",
    "error_msg" : "XXX"
  }
}

```

**Status code: 500**

Internal server error.

```

{
  "error" : {
    "error_code" : "DBSS.XXXX",
    "error_msg" : "XXX"
  }
}

```

**Status Codes**

Status Code	Description
200	Success
400	Invalid parameter.
403	Authentication failed.
500	Internal server error.

**Error Codes**

See [Error Codes](#).

**2.5.3 Querying a Risk Rule Policy**

**Function**

This API is used to query a risk rule policy.

## URI

GET /v1/{project\_id}/{instance\_id}/dbss/audit/rule/risk

**Table 2-209** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
instance_id	Yes	String	Instance ID

**Table 2-210** Query Parameters

Parameter	Mandatory	Type	Description
name	No	String	Risk name
risk_levels	No	String	Risk level [LOW,MEDIUM,HIGH,NO_RISK ]

## Request Parameters

**Table 2-211** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

## Response Parameters

**Status code: 200**

**Table 2-212** Response body parameters

Parameter	Type	Description
rules	Array of <b>rules</b> objects	List of risk rules
total	Integer	Total

**Table 2-213** rules

Parameter	Type	Description
id	String	Risk rule ID
name	String	Risk rule name
type	String	Risk type [OPERATION, LOGIN]
feature	String	Risk characteristics CLIENT[Any]OPERATE[LOGIN][REVOKE,DROP TABLE,SELECT FOR UPDATE,SELECT,ROLLBACK,CREATE TABLESPACE,DELETE,GRANT,DROP USER,DROP TABLESPACE,UPDATE,INSERT,CREATE USER,CREATE TABLE]OBJECT[Any]
status	String	Risk rule status[On,OFF]
rank	Integer	Risk rule priority [1~8]
risk_level	String	Risk level [No Risk,Low,Moderate,High]

**Status code: 400**

**Table 2-214** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-215** ErrorDetail

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

**Status code: 403**

**Table 2-216** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-217** ErrorDetail

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

**Status code: 500**

**Table 2-218** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-219** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{instance_id}/dbss/audit/rule/risk
```

## Example Responses

**Status code: 200**

Success

```
{
  "rules": [ {
    "id": "xX4W2ngBo47GiyUSBeOy",
    "name": "Database_drag_detection",
    "type": "OPERATE",
    "feature": "CLIENT[Any]OPERATE[[SELECT]OBJECT[Any]",
    "status": "ON",
    "rank": 1,
    "risk_level": "HIGH"
  }, {
    "id": "xn4W2ngBo47GiyUSBeP4",
    "name": "Database_Slow_SQL_Detection",
    "type": "OPERATE",
    "feature": "CLIENT[Any]OPERATE[[SELECT]OBJECT[Any]",
    "status": "ON",
    "rank": 2,
    "risk_level": "LOW"
  } ],
  "total": 2
}
```

**Status code: 400**

Invalid parameter.

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

**Status code: 500**

Internal server error.

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

## Status Codes

Status Code	Description
200	Success
400	Invalid parameter.
403	Authentication failed.
500	Internal server error.

## Error Codes

See [Error Codes](#).

## 2.5.4 Querying a Specified Risk Rule Policy

### Function

This API is used to query a specified risk rule policy.

### URI

GET /v1/{project\_id}/{instance\_id}/dbss/audit/rule/risk/{risk\_id}

**Table 2-220** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
instance_id	Yes	String	Instance ID
risk_id	Yes	String	Risk Rule ID

## Request Parameters

**Table 2-221** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

## Response Parameters

**Status code: 200**

**Table 2-222** Response body parameters

Parameter	Type	Description
rule_id	String	Risk rule ID
rule_name	String	Risk name
status	String	Risk rule status. Enumerated values: OFF ON
action	String	Operation set. Values are separated by commas (.). Allowed operations include: LOGIN CREATE_TABLE CREATE_TABLESPACE DROP_TABLE DROP_TABLESPACE DELETE INSERT INSERT_SELECT SELECT SELECT_FOR_UPDATE UPDATE CREATE_USER DROP_USER GRANT OPERATE ALL
schemas	Array of <a href="#">schemas</a> objects	Schema list
rank	Integer	Risk rule priority
ignore_case	Boolean	Case insensitive or not
risk_level	String	Risk level Enumerated values: LOW MEDIUM HIGH NO_RISK
db_ids	String	Database ID. Values are separated by commas (.). A single ID can contain up to 256 characters.
execution_symbol	String	Relationship between the execution duration and the execution duration threshold Enumerated value: GREATER EQUAL LESS GREATER_EQUAL LESS_EQUAL NO_MATCH
execution_time	Integer	Execution duration threshold



Parameter	Type	Description
affect_symbol	String	Relationship between the number of affected rows and the row quantity threshold: Enumerated value: GREATER_EQUAL LESS GREATER_EQUAL LESS_EQUAL NO_MATCH
affect_rows	Integer	Threshold of affected rows
client_ips	String	Client IP address segment:The value is in the IP-IP format or IP/XX format. IP address segments are separated by commas (,).

**Table 2-223** schemas

Parameter	Type	Description
schema	String	Schema name
table	String	Table
column	String	Column name

**Status code: 400**

**Table 2-224** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-225** ErrorDetail

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

**Status code: 403**

**Table 2-226** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-227** ErrorDetail

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

**Status code: 500**

**Table 2-228** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-229** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{instance_id}/dbss/audit/rule/risk/{risk_id}
```

## Example Responses

**Status code: 200**

Success

```
{
  "status": "OFF",
  "action": "LOGIN,SELECT,INSERT",
  "schemas": [ {
    "schema": "dbss_audit",
    "table": null,
    "column": null
  } ],
  "rank": 6,
  "ignore_case": false,
  "rule_id": "AWT0HznX7At9UslqwTfm",
  "rule_name": "risk_rule_name_00",
  "risk_level": "MEDIUM",
  "db_ids": "11111,22222",
  "execution_symbol": "GREATER",
  "execution_time": 10000,
  "affect_symbol": "GREATER",
  "affect_rows": 30,
  "client_ips": "192.168.0.1"
}
```

**Status code: 400**

Invalid parameter.

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

**Status code: 500**

Internal server error.

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

## Status Codes

Status Code	Description
200	Success
400	Invalid parameter.
403	Authentication failed.
500	Internal server error.

## Error Codes

See [Error Codes](#).

## 2.5.5 Querying a Privacy Data Masking Rule

### Function

This API is used to query a privacy data masking rule.

### URI

GET /v1/{project\_id}/{instance\_id}/dbss/audit/sensitive/masks

**Table 2-230** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
instance_id	Yes	String	Instance ID

**Table 2-231** Query Parameters

Parameter	Mandatory	Type	Description
offset	No	String	Offset
limit	No	String	Number of query records

## Request Parameters

**Table 2-232** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

## Response Parameters

**Status code: 200**

**Table 2-233** Response body parameters

Parameter	Type	Description
rules	Array of <a href="#">rules</a> objects	Rule list
total	Integer	Total

**Table 2-234** rules

Parameter	Type	Description
id	String	Rule ID
name	String	Rule name [default:GPS Information]
type	String	Rule type[default,User-defined]
regex	String	Rule regular expression
mask_value	String	Substitution value
status	String	Rule status[ON,OFF]
operate_time	String	Operation time

**Status code: 400**

**Table 2-235** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-236** ErrorDetail

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

**Status code: 403**

**Table 2-237** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-238** ErrorDetail

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

**Status code: 500**

**Table 2-239** Response body parameters

Parameter	Type	Description
error	Object	Error message.

**Table 2-240** ErrorDetail

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

## Example Requests

```
/v1/{project_id}/{instance_id}/dbss/audit/sensitive/masks
```

## Example Responses

### Status code: 200

Success

```
{
  "rules": [ {
    "id": "n34W2ngBo47GiyUSKOVl",
    "name": "GPS Information",
    "type": "BUILD_IN",
    "regex": "-",
    "mask_value": "###",
    "status": "ON",
    "operate_time": "2030-01-01 00:00:06"
  } ]
}
```

### Status code: 400

Invalid parameter.

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

### Status code: 500

Internal server error.

```
{
  "error": {
    "error_code": "DBSS.XXXX",
    "error_msg": "XXX"
  }
}
```

## Status Codes

Status Code	Description
200	Success
400	Invalid parameter.
403	Authentication failed.
500	Internal server error.

## Error Codes

See [Error Codes](#).

# 3 Appendix

## 3.1 Status Codes

- Normal

Returned Value	Description
200	The request is successfully processed.

- Abnormal

Status Code	Error	Description
400	Bad Request	The server fails to process the request.
401	Unauthorized	A username and a password are required.
403	Forbidden	Access to the requested page is denied.
404	Not Found	The server fails to find the requested page.
405	Method Not Allowed	Method specified in the request is not allowed.
406	Not Acceptable	The response generated by the server could not be received by the client.
407	Proxy Authentication Required	Proxy authentication is required before the request is processed.
408	Request Timeout	The request timed out.
409	Conflict	The request is not processed due to a conflict.

Status Code	Error	Description
500	Internal Server Error	The request is not processed due to a server error.
501	Not Implemented	The request is not processed because the server does not support the requested function.
502	Bad Gateway	Failed to complete the request because the server has received an invalid response.
503	Service Unavailable	Failed to complete the request because the system is unavailable.
504	Gateway Timeout	A gateway timeout error occurs.

## 3.2 Error Codes

Status Code	Error Codes	Error Message	Description	Solution
400	DBSS.10000001	Enter a valid request message	Enter a valid request message	check parameter
400	DBSS.10020101	Enter a valid request message	Enter a valid request message	check parameter
400	DBSS.10020102	Enter a valid request message	Enter a valid request message	check parameter
400	DBSS.10020118	Failed to add database, exceeding the limit	Failed to add database, exceeding the limit	Delete unnecessary databases or purchase new instances
400	DBSS.10020140	Illegal order ID	Illegal order ID	check order ID
400	DBSS.100210016	Insufficient quota	Insufficient quota	Contact administrator
400	DBSS.10020010	The request parameter is incorrect	Request message param error	Modifying Request Parameters



Status Code	Error Codes	Error Message	Description	Solution
400	DBSS.10020009	The request message format is invalid	Request message format error	Modifying Request Parameters
401	DBSS.10020100	Failed to authenticate the token in the request	Failed to authenticate the token in the request	check token
404	DBSS.10021004	ECS can not found the request page	ECS can not found the request page	Check the ECS path configuration
404	DBSS.10020007	No such server found	No such server found	Check the Connection to the Server
404	DBSS.10021010	ECS internal server error	ECS internal server error	Check the ECS Server
500	DBSS.11000000	Internal system exception. Contact technical support engineers	Internal system exception. Contact technical support engineers	Contact technical support engineers

### 3.3 Obtaining a Project ID

1. Obtain the token.

For details, see [Token-based Authentication](#).

2. Obtain the project ID.

The API for obtaining the project ID is **GET <https://iam.eu-west-0.myhuaweicloud.com/v3/projects>**.

Add **X-Auth-Token** to the request header, and set the value of **X-Auth-Token** to the token obtained in the preceding step.

The following is an example response. **id** indicates the project ID.

```
{
  "links": {},
  "projects": [
    {
      "is_domain": ,
      "description": "",
      "links": {},
      "enabled": true,
      "id": "", //Project ID
      "parent_id": "",
      "domain_id": ""
    }
  ]
}
```

```
    "name": ""  
  },  
  ...  
]  
}
```