09 Workspace API Reference

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1 Before You Start

1.1 Introduction

1.2 API Calling

1.3 Endpoint

1.4 Concepts

1.1 Introduction

Welcome to Huawei Cloud Workspace. Huawei Cloud Workspace is a workspace service based on cloud computing. Unlike conventional PCs and VDIs, Workspace enables enterprises to quickly build workspace environments without investing a large amount of money and spending days in deployment. Workspace supports multiple login modes, allowing you to flexibly access files and use applications for mobile office.

This document describes how to use application programming interfaces (APIs) to perform operations on workspaces, such as creating, querying, and deleting workspaces. For details about all supported operations, see **2 Overview**.

Before calling Workspace APIs, ensure that you fully understand Workspace concepts. For details, see Workspace User Guide (Administrator).

1.2 API Calling

Workspace supports Representational State Transfer (REST) APIs that can be called over HTTPS. For details about API calling, see **Calling APIs**.

1.3 Endpoint

An endpoint is the request address for calling an API. Endpoints vary depending on services and regions. You can obtain the endpoints of all services by referring to .

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1.4 Concepts

- Account

  The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity and should not be used directly to perform routine management. For security purposes, create IAM users and grant them permissions for routine management.

- User

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

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

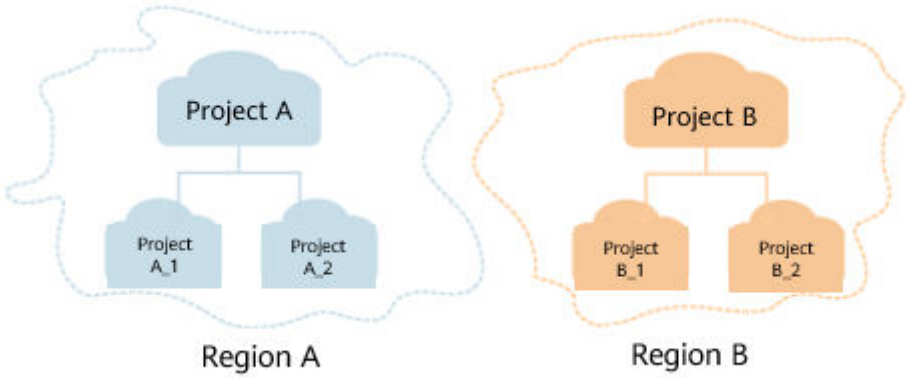
- Region
- Availability zone (AZ)

  An availability zone (AZ) contains one or more physical data centers. Each AZ has independent cooling, fire extinguishing, moisture-proof, and electricity facilities. Within an AZ, computing, network, storage, and other resources are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to support cross-AZ high-availability systems.

- Project

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

  Figure 1-1 Project isolation model



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2 Overview

Table 2-1 Workspace APIs

Type	Description
4.1 Huawei Cloud Workspace	Queries, enables, and deregisters the Huawei Cloud Office service.
4.2 Desktop	Queries, creates, modifies, and deletes desktops.
4.3 Desktop Statistics	Queries desktops that are not used in a specified period and queries the desktop usage duration.
4.4 User	Queries, creates, and deletes users.
4.5 User Group	Queries, creates, and deletes user groups.
4.6 Disk	Adds disks and expands disk capacity.
4.7 Connection information	Queries login information and exports connection records.
4.8 Access policy	Queries, creates, and deletes access policies.
4.9 Product Packages	Queries the product package list.
4.10 Authentication configuration	Queries and updates auxiliary authentication settings.
4.11 Quota	Queries tenant quotas.
4.12 Image	Queries the product image list.
4.13 AZ	Queries the AZ list.

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Type	Description
4.14 Desktop Tag	Queries a subtask.
4.15 Task.	Queries bound and unbound EIPs, binds EIPs to desktops, and enables the desktop Internet access.
4.16 Network	Queries and configures the terminal-desktop binding.

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3 Calling APIs

3.1 Making an API Request

3.2 Authentication

3.3 Returned Values

3.1 Making an API Request

Scenario

This section describes the structure of a REST API request, and uses the IAM API for **obtaining a user token through password authentication** 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 consists of the following:

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

Table 3-1 URI parameters

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

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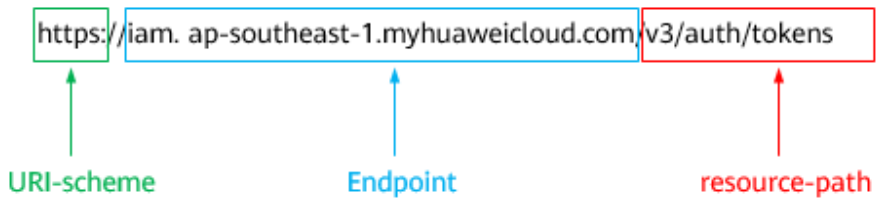
Parameter	Description
resource-path	Path in which the resource requested by the API is located. Obtain the path from the URI of an API. For example, **resource-path** of the API for obtaining a user token is **/v3/auth/tokens**.
query-string	(Optional) Query parameter. Ensure that a question mark (?) is included in front of 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 can be queried.

For example, to obtain an IAM token in the **CN North-Beijing1** region, obtain the endpoint of IAM (**iam.cn-north-1.myhuaweicloud.com**) for this region and the **resource-path** (**/v3/auth/tokens**) in the URI of the API used to **obtain a user token**. Then, construct the URI as follows:

```
https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
```

Figure 3-1 Example URI



NOTE

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

NOTE

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Request Method

HTTP defines the following request modes that can be used to send a request to the server:

- **GET**: requests a server to return specified resources.
- **PUT**: requests a server to update specified resources.
- **POST**: requests a server to add resources or perform special operations.

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- **DELETE**: requests the server to delete specified resources, for example, to delete an object.
- **HEAD**: requests the server to return the response header only.
- **PATCH**: requests a server to update a part of a specified resource. If the resource is unavailable, the PATCH method is used to create a resource.

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://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
```

Request Header

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

Table 3-2 lists common request header fields.

Table 3-2 Common request headers

Name	Description	Mandatory	Example
Host	Request server information, which is obtained from the URL of a service API. The value is in the format of *Hostname*:*Port number*. If the port number is not specified, the default port is used. The default port number for HTTPS is **443**.	No Mandatory for AK/SK-based authentication	code.test.com or code.test.com:443
Content-type	Type (or format) of the message body. The default value **application/json** is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Length of the request body. The unit is byte.	No	3495

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Name	Description	Mandatory	Example
X-Project-Id	Project ID. Obtain it by referring to **Obtaining a Project ID**.	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cbaa340f9c0f4
X-Auth-Token	User token. 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. After a response is returned, the value of **X-Subject-Token** in the response header is the token value.	Yes	The following is part of an example token: MIIPAgYJKoZIhvcNAQc-Co...ggg1BBIINPXsidG9rZ

NOTE

In addition to supporting token-based authentication, Workspace 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 details, see "AK/SK-based Authentication" in **AK/SK Authentication**.

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

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokensContent-Type: application/json
```

(Optional) Request Body

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

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the request header. If the request body contains Chinese characters, these characters must be encoded in UTF-8.

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

For the API used to **obtain a user token**, obtain the request parameters and parameter description in the API request. The following provides an example request with a body included. Replace *username*, *domainname*, ******** (login password), and *xxxxxxxxxx* (project ID) with the actual values. To learn how to obtain a project ID, see **Regions and Endpoints**.

NOTE

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

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json

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

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

3.2 Authentication

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

- Token-based authentication: Requests are authenticated using a token.
- Access Key ID/Secret Access Key (AK/SK)-based authentication: Requests are authenticated by encrypting the request body using an AK/SK.

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Token Authentication

NOTE

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

A token specifies temporary permissions in a computer system. Authentication using a token adds the token in a request as its header during API calling to obtain permissions to operate APIs. The token can be obtained by calling the API used to **obtain a user token**.

A cloud service can be deployed as either a project-level service or global service.

- For a project-level service, obtain a project-level token. When you call the API, set **auth.scope** in the request body to **project**.
- For a global service, obtain a global token. When you call the API, set **auth.scope** in the request body to **domain**.

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

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

After obtaining the token, add the **X-Auth-Token** header in a request 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 header as follows:

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

AK/SK Authentication

NOTE

AK/SK authentication supports API requests with a body no larger than 12 MB. For API requests with a larger body, use token authentication.

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

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- AK: access key ID. It is a unique ID associated with an SK. AK is used together with SK to sign requests.
- SK: secret access key. It is used together with an access key ID to identify a sender who initiates a request and to cryptographically sign requests, preventing the request from being modified.

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

NOTE

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

3.3 Returned Values

Status Code

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

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

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

Figure 3-2 shows the response header fields for the API used to **obtain a user token** is called. The **x-subject-token** header field is the desired user token. Then, you can use the token to authenticate the calling of other APIs.

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Figure 3-2 Response header for obtaining a user token

Response body (optional)

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

The following is part of the response body for the API used to **obtain a user token**. The following is part of the response body for the API used to obtain a user token.

```
{
    "token": {
        "expires_at": "2019-02-13T06:52:13.855000Z",
        "methods": [
            "password"
        ],
        "catalog": [
            {
                "endpoints": [
                    {
                        "region_id": "az-01",
.....
```

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

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

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

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4 Workspace APIs

4.1 Huawei Cloud Workspace
4.2 Desktop
4.3 Desktop Statistics
4.4 User
4.5 User Group
4.6 Disk
4.7 Connection information
4.8 Access policy
4.9 Product Packages
4.10 Authentication configuration
4.11 Quota
4.12 Image
4.13 AZ
4.14 Desktop Tag
4.15 Task.
4.16 Network
4.17 Binds a terminal to a desktop.

4.1 Huawei Cloud Workspace

4.1.1 Queries Huawei Cloud Workspace details.

Function

Queries Huawei Cloud Workspace details.

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Debugging

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

URI

GET /v2/{project_id}/workspaces

Table 4-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-2 Request header parameters

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

Response Parameters

Status code: 200

Table 4-3 Response body parameters

Parameter	Type	Description
id	String	Unique ID.
ad_domains	**AdInfo** object	Domain information.
vpc_id	String	VPC ID.
vpc_name	String	VPC name.

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Parameter	Type	Description
access_mode	String	Access mode. • INTERNET: access through Internet • DEDICATED: access through Direct Connect • DEDICATED: access through Internet or Direct Connect
dedicated_subnets	String	Direct Connect access CIDR. This parameter is returned only when **access_mode** is set to **DEDICATED** or **BOTH**.
dedicated_access_address	String	Direct Connect access address. This parameter is returned only when **access_mode** is set to **DEDICATED** or **BOTH**.
internet_access_address	String	Internet access address. This parameter is returned only when **access_mode** is set to **INTERNET** or **BOTH**.
internet_access_port	String	Internet access port.
status	String	Huawei Cloud Workspace service status. • PREPARING: The service is ready for subscription. • SUBSCRIBING: The service is being subscribed. • SUBSCRIBED: The service has been subscribed. • SUBSCRIPTION_FAILED: The service cannot be subscribed. • DEREGISTERING: The service is being unsubscribed. • DEREGISTRATION_FAILED: The service cannot be unsubscribed. • CLOSED: The service has been unsubscribed and is not subscribed.

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Parameter	Type	Description
access_status	String	Status of the task for switching between Internet access and Direct Connect access. • init: initial status after the service is subscribed to • available: The task has been executed and is restored to the normal state. • internetOpening: The Internet access is being enabled. • dedicatedOpening: The Direct Connect access is being enabled. • internetOpenFailed: The Internet access cannot be enabled. • dedicatedOpenFailed: The Direct Connect access cannot be enabled. • openSuccess: The Internet access has been enabled. • internetClosing: The Internet access is being disabled. • dedicatedClosing: The Direct Connect access is being disabled. • internetCloseFailed: The Internet access cannot be disabled. • dedicatedCloseFailed: The Direct Connect access cannot be disabled. • closeSuccess: The access mode has been disabled. • internetAccessPortModifying: The Internet access port is being modified. • internetAccessPortModifyFailed: The Internet access port cannot be modified.
subnet_ids	Array of **SubnetInfo** objects	Service subnet. You can specify the returned network ID to subscribe to a desktop.
management_subnet_cidr	String	Subnet CIDR of the management component.
infrastructure_security_group	**SecurityGroup** object	After the service is subscribed, a management component security group is created in the specified VPC.
desktop_security_group	**SecurityGroup** object	After the service is subscribed, a desktop security group is created in the specified VPC.
closable	Boolean	Whether the service can be unsubscribed.

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Parameter	Type	Description
config_status	String	Configuration status. • 0: The service has been subscribed and connected to the AD. • 1: The service has been subscribed but the AD configuration failed. • 2: The service has been subscribed but other errors occurred after the AD configuration failed. • 3: The service has been subscribed but the AD is not connected.
progress	String	Progress of subscribing to or unsubscribing from the service. The value is a percentage, for example, 100%.
job_id	String	ID of the task for subscribing to or unsubscribing from the service.
fail_code	Integer	Error code.
fail_reason	String	Failure cause.
enterprise_id	String	Enterprise ID.
is_send_email	Boolean	Whether to send a notification email upon desktop unsubscription.
dc_vnc_ip	String	User-defined Direct Connect VNC address.

Table 4-4 AdInfo

Parameter	Type	Description
domain_type	String	Domain type. • LITE_AS: local authentication • LOCAL_AD: local AD
domain_name	String	Domain name. This parameter is valid when **domain_type** is set to **LOCAL_AD**.
domain_admin_account	String	Domain administrator account. This parameter is valid when **domain_type** is set to **LOCAL_AD**.
active_domain_name	String	Name of the primary domain controller. This parameter is valid when **domain_type** is set to **LOCAL_AD**.

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Parameter	Type	Description
active_domain_ip	String	IP address of the primary domain controller. This parameter is valid when **domain_type** is set to **LOCAL_AD**.
standby_domain_name	String	Name of the backup domain controller. This parameter is valid when **domain_type** is set to **LOCAL_AD**.
standby_domain_ip	String	IP address of the backup domain controller. This parameter is valid when **domain_type** is set to **LOCAL_AD**.
active_dns_ip	String	IP address of the primary DNS server. This parameter is valid when **domain_type** is set to **LOCAL_AD**.
standby_dns_ip	String	IP address of the standby DNS server. This parameter is valid when **domain_type** is set to **LOCAL_AD**.
delete_computer_object	String	Whether to delete the corresponding computer object from the AD when deleting the desktop. The value 0 indicates that the computer object is not deleted, and the value 1 indicates that the computer object is deleted.
use_ldaps	Boolean	Whether to enable LDAPS.
tls_config	**TlsConfig** object	TLS information.

Table 4-5 TlsConfig

Parameter	Type	Description
cert_pem	String	PEM content. If the content exists, update it. Otherwise, upload it. The query result is not returned.
cert_start_time	String	Time when the certificate starts to take effect, for example, 2022-01-25T09:24:27.
cert_end_time	String	Time when the certificate expires, for example, 2022-01-25T09:24:27.

Table 4-6 SubnetInfo

Parameter	Type	Description
subnet_id	String	Subnet network ID.

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Table 4-7 SecurityGroup

Parameter	Type	Description
id	String	Security group ID.
name	String	Security group name.

Status code: 400

Table 4-8 Response body parameters

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

Status code: 401

Table 4-9 Response body parameters

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

Status code: 403

Table 4-10 Response body parameters

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

Status code: 404

Table 4-11 Response body parameters

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

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Status code: 500

Table 4-12 Response body parameters

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

Example Requests

```
GET /v2/29dfe82ada564ac2b927e1ff036d9a9b/workspaces
```

Example Responses

Status code: 200

Response to the request for querying Huawei Cloud Workspace details.

```
{
  "id" : "8aa1908f74824d8701748bf039600065",
  "status" : "SUBSCRIBED",
  "config_status" : "0",
  "closable" : false,
  "ad_domains" : {
    "domain_type" : "LOCAL_AD",
    "domain_admin_account" : "vdsadmin",
    "active_domain_name" : "ecs-ad.vdesktop.com",
    "active_domain_ip" : "192.168.0.131",
    "standby_domain_name" : "",
    "standby_domain_ip" : "",
    "active_dns_ip" : "192.168.0.131",
    "standby_dns_ip" : "",
    "domain_name" : "vdesktop.com",
    "use_ldaps" : true,
    "tls_config" : {
      "cert_start_time" : "2022-01-25T09:24:27",
      "cert_end_time" : "2023-01-25T09:34:27"
    }
  },
  "vpc_id" : "fd3b4069-ac1e-45d2-ba27-4c18cd692d26",
  "vpc_name" : "vpc-be75",
  "dedicated_access_address" : "https://192.168.0.53",
  "dedicated_subnets" : "192.168.0.0/24;10.0.0.0/16",
  "internet_access_address" : "https://172.16.25.134",
  "internet_access_port" : "443",
  "access_mode" : "BOTH",
  "subnet_ids" : [ {
    "subnet_id" : "5dee0216-2260-47c2-9368-98a27d910e55"
  } ],
  "management_subnet_cidr" : "192.168.0.0/24",
  "infrastructure_security_group" : {
    "id" : "ffba6eda-5170-4343-b8a3-c306e0f21c88",
    "name" : "WorkspaceManagerSecurityGroup"
  },
  "desktop_security_group" : {
    "id" : "04abbdf6-e848-4c90-bdb1-6de856fa8a34",
    "name" : "WorkspaceUserSecurityGroup"
  },
  "progress" : "100%",
  "access_status" : "openSuccess",
  "is_send_email" : true
}
```

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Status Codes

Status Code	Description
200	Response to the request for querying Huawei Cloud Workspace details.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.1.2 Subscribes to Huawei Cloud Workspace.

Function

Subscribes to Huawei Cloud Workspace.

An asynchronous API. If this API can be called, the background receives the request for subscribing to Huawei Cloud Workspace. However, you need to call the **GET /v2/{project_id}/workspace-sub-jobs** API to query the task execution status.

Debugging

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

URI

POST /v2/{project_id}/workspaces

Table 4-13 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-14 Request header parameters

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

Table 4-15 Request body parameters

Parameter	Mandatory	Type	Description
ad_domains	Yes	**AdDomain** object	Domain information.
enterprise_id	No	String	Enterprise ID. An enterprise ID is your unique identifier on Workspace. End users need to enter an enterprise ID upon login. If an enterprise ID is not customized, the system automatically generates one. The value contains a maximum of 32 characters and can only include digits, letters, hyphens (-), and underscores (_).
vpc_id	No	String	VPC ID.
subnet_ids	No	Array of **Subnet** objects	Network ID of the service subnet. The subnet ID cannot be the same as that of 172.16.0.0/12.
manage_subnet_cidr	No	String	Management subnet CIDR. Note: The value cannot be the same as the subnet CIDR of 172.16.0.0/12 or that specified by **subnet_ids**.

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Parameter	Mandatory	Type	Description
access_mode	No	String	Access mode. • INTERNET: access through Internet • DEDICATED: access through Direct Connect • BOTH: access through Internet or Direct Connect
dedicated_subnets	No	String	List of Direct Connect access network segments. Multiple network segments are separated by semicolons (;). The list contains a maximum of five network segments.
is_send_email	No	Boolean	Whether to send a notification email upon desktop unsubscription.

Table 4-16 AdDomain

Parameter	Mandatory	Type	Description
domain_type	Yes	String	Domain type. • LITE_AS: local authentication • LOCAL_AD: local AD When **domain_type** is set to **LOCAL_AD**, ensure that the selected VPC can be connected to the network to which the AD belongs.
domain_name	No	String	Domain name. This parameter is mandatory when domain type is set to **LOCAL_AD**. The domain name must be an existing domain name on the Windows AD server and can contain a maximum of 55 characters.

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Parameter	Mandatory	Type	Description
domain_admin_account	No	String	Domain administrator account. This parameter is mandatory when domain type is set to **LOCAL_AD**. The account must be an existing domain administrator account on the Windows AD server.
domain_password	No	String	Domain administrator account and password. This parameter is mandatory when domain type is set to **LOCAL_AD**.
active_domain_ip	No	String	Primary domain controller IP address. This parameter is mandatory when domain type is set to **LOCAL_AD**.
active_domain_name	No	String	Primary domain controller name. This parameter is mandatory when domain type is set to **LOCAL_AD**.
standby_domain_ip	No	String	Backup domain controller IP address. This parameter is mandatory when domain type is set to **LOCAL_AD** and the standby node is configured.
standby_domain_name	No	String	Backup domain controller name. This parameter is mandatory when domain type is set to **LOCAL_AD** and the standby node is configured.
active_dns_ip	No	String	Primary DNS IP address. This parameter is mandatory when domain type is set to **LOCAL_AD**.
standby_dns_ip	No	String	Standby DNS IP address. This parameter is mandatory when domain type is set to **LOCAL_AD** and the standby node is configured.

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Parameter	Mandatory	Type	Description
delete_computer_object	No	Integer	Whether to delete the corresponding computer object from the AD when deleting the desktop. The value 0 indicates that the computer object is not deleted, and the value 1 indicates that the computer object is deleted.
use_ldaps	No	Boolean	Whether to enable LDAPS.
tls_config	No	**TlsConfig** object	TLS information.

Table 4-17 TlsConfig

Parameter	Mandatory	Type	Description
cert_pem	No	String	PEM content. If the content exists, update it. Otherwise, upload it. The query result is not returned.
cert_start_time	No	String	Time when the certificate starts to take effect, for example, 2022-01-25T09:24:27.
cert_end_time	No	String	Time when the certificate expires, for example, 2022-01-25T09:24:27.

Table 4-18 Subnet

Parameter	Mandatory	Type	Description
subnet_id	Yes	String	Subnet network ID.

Response Parameters

Status code: 200

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Table 4-19 Response body parameters

Parameter	Type	Description
job_id	String	ID of the task for subscribing to Huawei Cloud Workspace.

Status code: 400

Table 4-20 Response body parameters

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

Status code: 401

Table 4-21 Response body parameters

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

Status code: 403

Table 4-22 Response body parameters

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

Status code: 404

Table 4-23 Response body parameters

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

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Status code: 500

Table 4-24 Response body parameters

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

Example Requests

- POST /v2/fb2e5ec048384c8f9469d22db0037908/workspaces

```
{
  "ad_domains" : {
    "domain_type" : "LITE_AS"
  },
  "vpc_id" : "e8f985fa-5161-4cb8-bf5a-155058ea58c9",
  "subnet_ids" : [ {
    "subnet_id" : "067b30a9-1b73-4804-a808-699c5f6c4e09"
  } ],
  "access_mode" : "INTERNET",
  "is_send_email" : true
}
```

- ```
  {
    "ad_domains" : {
      "domain_type" : "LOCAL_AD",
      "domain_admin_account" : "vdsadmin",
      "active_domain_ip" : "192.161.43.66",
      "standby_domain_ip" : "192.161.43.67",
      "domain_name" : "xxxx.xxxx.com",
      "domain_password" : "xxxxxxxxxx@",
      "active_domain_name" : "AD-xxx-0001.vdesktop.huawei.com",
      "active_dns_ip" : "192.161.43.66",
      "standby_domain_name" : "AD-xxx-0002.vdesktop.huawei.com",
      "standby_dns_ip" : "192.161.43.67"
    },
    "vpc_id" : "27823fc4-5808-4f3b-a5bc-24c7a80742b8",
    "subnet_ids" : [ {
      "subnet_id" : "598d4599-059f-40ca-9cce-841b784d13e6"
    } ],
    "access_mode" : "INTERNET",
    "is_send_email" : true
  }
  ```

- ```
  {
    "ad_domains" : {
      "domain_type" : "LOCAL_AD",
      "domain_admin_account" : "vdsadmin",
      "active_domain_ip" : "192.161.43.66",
      "standby_domain_ip" : "192.161.43.67",
      "domain_name" : "xxxx.xxxx.com",
      "domain_password" : "xxxxxxxxxx@",
      "active_domain_name" : "AD-xxx-0001.vdesktop.huawei.com",
      "active_dns_ip" : "192.161.43.66",
      "standby_domain_name" : "AD-xxx-0002.vdesktop.huawei.com",
      "standby_dns_ip" : "192.161.43.67"
    },
    "vpc_id" : "27823fc4-5808-4f3b-a5bc-24c7a80742b8",
    "subnet_ids" : [ {
      "subnet_id" : "598d4599-059f-40ca-9cce-841b784d13e6"
    } ],
    "access_mode" : "DEDICATED",
    "is_send_email" : true,
  ```

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```
  "dedicated_subnets" : "192.168.0.0/24;10.0.0.0/16"
}
```

Example Responses

Status code: 200

Response to the request for subscribing to Huawei Cloud Workspace.

```
{
  "job_id" : "0000000059071dbc01591661d3990019"
}
```

Status Codes

Status Code	Description
200	Response to the request for subscribing to Huawei Cloud Workspace.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.1.3 Unsubscribes from Huawei Cloud Workspace.

Function

Unsubscribes from Huawei Cloud Workspace. Ensure that the desktop of the current user has been deleted before unsubscription. The desktop cannot be restored after unsubscription.

Debugging

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

URI

DELETE /v2/{project_id}/workspaces

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Table 4-25 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-26 Request header parameters

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

Response Parameters

Status code: 202

Table 4-27 Response body parameters

Parameter	Type	Description
job_id	String	ID of the task for unsubscribing from Huawei Cloud Workspace.

Status code: 400

Table 4-28 Response body parameters

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

Status code: 401

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Table 4-29 Response body parameters

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

Status code: 403

Table 4-30 Response body parameters

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

Status code: 404

Table 4-31 Response body parameters

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

Status code: 500

Table 4-32 Response body parameters

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

Example Requests

None

Example Responses

Status code: 202

Response to the request for unsubscribing from Huawei Cloud Workspace.

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```
{
  "job_id" : "0000000059071dbc01591661d3990019"
}
```

Status Codes

Status Code	Description
202	Response to the request for unsubscribing from Huawei Cloud Workspace.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.1.4 Modifies attributes of Huawei Cloud Workspace.

Function

Modifies attributes of Huawei Cloud Workspace. Only one attribute type can be modified in a single request.

Debugging

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

URI

PUT /v2/{project_id}/workspaces

Table 4-33 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-34 Request header parameters

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

Table 4-35 Request body parameters

Parameter	Mandatory	Type	Description
ad_info	No	**AdDomainInfo** object	Domain information.
ad_domains	No	**AdDomain** object	Domain information.
access_mode	No	String	Access mode. • INTERNET: access through Internet • DEDICATED: access through Direct Connect • BOTH: access through Internet or Direct Connect
dedicated_subnets	No	String	List of Direct Connect access network segments. Multiple network segments are separated by semicolons (;). The list contains a maximum of five network segments.
subnet_ids	No	Array of strings	Subnet network IDs.
internet_access_port	No	String	Internet access port.
enterprise_id	No	String	Enterprise ID.

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Parameter	Mandatory	Type	Description
is_send_email	No	Boolean	Whether to send a notification email upon desktop unsubscription.
dc_vnc_ip	No	String	Specifies whether to enable the function of accessing VNC through a Direct Connect connection. If the value is **default**, the function is automatically created. If the value is user-defined **dc_vnc_ip**, the function is directly used. If the value is **close**, the function is disabled.

Table 4-36 AdDomainInfo

Parameter	Mandatory	Type	Description
domain_type	Yes	String	Domain type. • LITE_AS: LiteAS • LOCAL_AD: local AD When **domain_type** is set to **LOCAL_AD**, ensure that the selected VPC can be connected to the network to which the **LOCAL_AD** belongs.
domain_admin_account	Yes	String	Domain administrator account.
domain_password	Yes	String	Domain administrator account and password.

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Table 4-37 AdDomain

Parameter	Mandatory	Type	Description
domain_type	Yes	String	Domain type. • LITE_AS: local authentication • LOCAL_AD: local AD When **domain_type** is set to **LOCAL_AD**, ensure that the selected VPC can be connected to the network to which the AD belongs.
domain_name	No	String	Domain name. This parameter is mandatory when domain type is set to **LOCAL_AD**. The domain name must be an existing domain name on the Windows AD server and can contain a maximum of 55 characters.
domain_admin_account	No	String	Domain administrator account. This parameter is mandatory when domain type is set to **LOCAL_AD**. The account must be an existing domain administrator account on the Windows AD server.
domain_password	No	String	Domain administrator account and password. This parameter is mandatory when domain type is set to **LOCAL_AD**.
active_domain_ip	No	String	Primary domain controller IP address. This parameter is mandatory when domain type is set to **LOCAL_AD**.
active_domain_name	No	String	Primary domain controller name. This parameter is mandatory when domain type is set to **LOCAL_AD**.
standby_domain_ip	No	String	Backup domain controller IP address. This parameter is mandatory when domain type is set to **LOCAL_AD** and the standby node is configured.

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Parameter	Mandatory	Type	Description
standby_domain_name	No	String	Backup domain controller name. This parameter is mandatory when domain type is set to **LOCAL_AD** and the standby node is configured.
active_dns_ip	No	String	Primary DNS IP address. This parameter is mandatory when domain type is set to **LOCAL_AD**.
standby_dns_ip	No	String	Standby DNS IP address. This parameter is mandatory when domain type is set to **LOCAL_AD** and the standby node is configured.
delete_computer_object	No	Integer	Whether to delete the corresponding computer object from the AD when deleting the desktop. The value 0 indicates that the computer object is not deleted, and the value 1 indicates that the computer object is deleted.
use_ldaps	No	Boolean	Whether to enable LDAPS.
tls_config	No	**TlsConfig** object	TLS information.

Table 4-38 TlsConfig

Parameter	Mandatory	Type	Description
cert_pem	No	String	PEM content. If the content exists, update it. Otherwise, upload it. The query result is not returned.
cert_start_time	No	String	Time when the certificate starts to take effect, for example, 2022-01-25T09:24:27.
cert_end_time	No	String	Time when the certificate expires, for example, 2022-01-25T09:24:27.

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Response Parameters

Status code: 200

Table 4-39 Response body parameters

Parameter	Type	Description
job_id	String	ID of the task for modifying the service attributes of Huawei Cloud Workspace.
enterprise_id	String	Enterprise ID.
dc_vnc_ip	String	Specifies the IP address for accessing the Direct Connect VNC.

Status code: 400

Table 4-40 Response body parameters

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

Status code: 401

Table 4-41 Response body parameters

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

Status code: 403

Table 4-42 Response body parameters

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

Status code: 404

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Table 4-43 Response body parameters

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

Status code: 500

Table 4-44 Response body parameters

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

Example Requests

- PUT /v2/fb2e5ec048384c8f9469d22db0037908/workspaces

  ```
  {
    "access_mode" : "BOTH"
  }
  ```

- ```
  {
    "ad_domains" : {
      "domain_type" : "LOCAL_AD",
      "domain_admin_account" : "vdsadmin",
      "active_domain_ip" : "192.161.43.66",
      "standby_domain_ip" : "192.161.43.67",
      "domain_name" : "vdesktop.huawei.com",
      "domain_password" : "xxxxxxxxxx@",
      "active_domain_name" : "AD-xxx-0001.vdesktop.huawei.com",
      "active_dns_ip" : "192.161.43.66",
      "standby_domain_name" : "AD-xxx-0002.vdesktop.huawei.com",
      "standby_dns_ip" : "192.161.43.67",
      "use_ldaps" : true,
      "tls_config" : {
        "cert_pem" : "-----BEGIN CERTIFICATE-----\\nMIIDiTCCAnGgAwIBAgIQQdj2u+x1LJ9Dc34un\\n-----
  END CERTIFICATE"
      }
    }
  }
  ```

- ```
  {
    "access_mode" : "DEDICATED",
    "dedicated_subnets" : "192.168.0.0/24;10.0.0.0/16"
  }
  ```

- ```
  {
    "is_send_email" : false
  }
  ```

Example Responses

Status code: 200

Response to the request for modifying attributes of Huawei Cloud Workspace.

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  ```

```
{
  "job_id" : "0000000059071dbc01591661d3990019"
}
```

Status Codes

Status Code	Description
200	Response to the request for modifying attributes of Huawei Cloud Workspace.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.1.5 Queries whether Huawei Cloud Workspace is locked.

Function

Queries whether Huawei Cloud Workspace is locked.

Debugging

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

URI

GET /v2/{project_id}/workspaces/lock-status

Table 4-45 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-46 Request header parameters

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

Response Parameters

Status code: 200

Table 4-47 Response body parameters

Parameter	Type	Description
is_lock	Integer	Whether Huawei Cloud Workspace is locked. The value 0 indicates unlocked and the value 1 indicates locked.
lock_time	String	Time when Huawei Cloud Workspace is locked. The format is yyyy-MM-dd HH:mm:ss. The time zone is UTC.
lock_reason	String	Cause for locking Huawei Cloud Workspace.

Status code: 400

Table 4-48 Response body parameters

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

Status code: 401

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Table 4-49 Response body parameters

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

Status code: 403

Table 4-50 Response body parameters

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

Status code: 404

Table 4-51 Response body parameters

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

Status code: 500

Table 4-52 Response body parameters

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

Example Requests

```
GET /v2/8a2c3f8e71ed17c60171ed1fbf340000/workspaces/lock-status
```

Example Responses

Status code: 200

Response to the request for querying whether Huawei Cloud Workspace is locked.

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```
{
  "is_lock" : 1
}
```

Status Codes

Status Code	Description
200	Response to the request for querying whether Huawei Cloud Workspace is locked.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.1.6 Unlocks Huawei Cloud Workspace.

Function

Unlocks Huawei Cloud Workspace.

Debugging

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

URI

PUT /v2/{project_id}/workspaces/lock-status

Table 4-53 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-54 Request header parameters

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

Table 4-55 Request body parameters

Parameter	Mandatory	Type	Description
operate_type	No	String	Operation type of unlocking a project.

Response Parameters

Status code: 200

Table 4-56 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Status code: 400

Table 4-57 Response body parameters

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

Status code: 401

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Table 4-58 Response body parameters

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

Status code: 403

Table 4-59 Response body parameters

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

Status code: 404

Table 4-60 Response body parameters

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

Status code: 500

Table 4-61 Response body parameters

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

Example Requests

```
PUT /v2/fb2e5ec048384c8f9469d22db0037908/workspaces/lock-status

{
  "operate_type" : "unLock"
}
```

Example Responses

Status code: 200

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Response to the request for unlocking a project.

```
{
  "job_id" : "0000000059071dbc01591661d3990019"
}
```

Status Codes

Status Code	Description
200	Response to the request for unlocking a project.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.2 Desktop

4.2.1 Creates a desktop.

Function

Creates and assigns a desktop to a user. After the desktop is created, the user can log in to the desktop.

Debugging

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

URI

POST /v2/{project_id}/desktops

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Table 4-62 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-63 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	No	String	MIME type of the request body.

Table 4-64 Request body parameters

Parameter	Mandatory	Type	Description
desktop_type	Yes	String	Cloud desktop type. • **DEDICATED**: Dedicated desktops for a single user. • **SHARED**: Multiple users share the desktop.
availability_zone	No	String	AZ. Creates a desktop in the specified AZ. If this parameter is not specified, the default AZ is used.
product_id	Yes	String	Package ID.
image_type	Yes	String	Image type. The default value is **private**. • private: a private image • gold: a public image
image_id	Yes	String	Image ID. This parameter is used together with **product_id** for creating desktops using custom images.

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Parameter	Mandatory	Type	Description
root_volume	Yes	**Volume** object	System disk.
data_volumes	No	Array of **Volume** objects	Data disks.
nics	No	Array of **Nic** objects	Information about the NIC corresponding to the desktop. If this parameter is not specified, the default NIC is used.
security_groups	No	Array of **SecurityGroup** objects	Security group used by the desktop. If no security group is specified, the security group specified in the desktop agent is used by default.
desktops	Yes	Array of **Desktop** objects	Parameters used for creating a desktop. The value contains 1 to 50 characters. Currently, a batch of desktops cannot have different configurations. The configurations of all desktops must be the same as those of the first desktop. If no parameter is specified for the first desktop, the outer parameters with the same name are used.
desktop_name	No	String	This parameter is used together with **size**. If **size** is set to **1**, this parameter indicates the desktop name, which consists of 1 to 15 characters. If **size** is set to a value greater than **1**, this parameter indicates the desktop name prefix, which consists of 1 to 13 characters.
size	No	Integer	Number of desktops that are not assigned to users. This parameter cannot be used together with **desktops**. It is used together with **desktop_name**.

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Parameter	Mandatory	Type	Description
email_notification	No	Boolean	Whether to send an email to notify the desktop user after a desktop is created. The default value is **true**.
enterprise_project_id	No	String	Enterprise project ID. Its default value is **0**.
tags	No	Array of **Tag** objects	Tags.
eip	No	**Eip** object	Indicates the EIP information.

Table 4-65 Volume

Parameter	Mandatory	Type	Description
type	Yes	String	Desktop data disk type, which must be the same as the disk type provided by the system. • SAS: High I/O • SSD: Ultra-high I/O
size	Yes	Integer	Disk capacity in GB. The system disk size ranges from 80 to 32760, and the data disk size ranges from 10 to 32760. The value must be a multiple of 10.

Table 4-66 Nic

Parameter	Mandatory	Type	Description
subnet_id	Yes	String	ID of the subnet on which the NIC works.

Table 4-67 SecurityGroup

Parameter	Mandatory	Type	Description
id	Yes	String	Security group ID.

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Table 4-68 Desktop

Parameter	Mandatory	Type	Description
user_name	Yes	String	User to which a desktop belongs. After a desktop is created, the user can log in to the desktop. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed. When the domain type is **LITE_AD**, the value contains 1 to 20 characters starting with a lowercase or uppercase letter. When the domain type is **LOCAL_AD**, the value contains 1 to 20 characters starting with a lowercase or uppercase letter or digit.
user_email	No	String	Valid user email. After a desktop is created, the system informs users through emails.
user_phone	No	String	Mobile number of a valid user.
user_group	No	String	User group to which the desktop user belongs. • sudo: Linux administrator group. • default: Default Linux user group. • administrators: Windows administrator group. Administrators have full access to the desktop and can make any required changes except for forbidden operations. • users: standard Windows user group. Standard users can use most software programs and change system settings that do not affect other users.

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Parameter	Mandatory	Type	Description
computer_name	No	String	Desktop name, which must be unique. The desktop name can contain 1 to 15 characters, including uppercase letters, lowercase letters, digits, and hyphens (-). It must start with a letter or digit and cannot end with a hyphen (-).
desktop_name_prefix	No	String	Desktop name prefix. This parameter takes effect when **computer_name** is not specified.

Table 4-69 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the key of a tag that cannot be empty and can contain a maximum of 128 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.
value	No	String	Value of a tag, which can contain a maximum of 43 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.

Table 4-70 Eip

Parameter	Mandatory	Type	Description
id	No	String	ID of the EIP bound to the desktop. If this parameter is specified, the EIP is preferentially bound.

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Parameter	Mandatory	Type	Description
type	No	String	EIP type. The value can be **5_bgp** (dynamic BGP) or **5_sbgp** (static BGP).
charge_mode	No	String	EIP bandwidth billing mode. • **TRAFFIC**: billed by traffic. • **BANDWIDTH**: billed by bandwidth.
bandwidth_size	No	Integer	Bandwidth size.

Response Parameters

Status code: 200

Table 4-71 Response body parameters

Parameter	Type	Description
job_id	String	ID of the cloud desktop creation task.

Status code: 400

Table 4-72 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-73 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

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Table 4-74 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-75 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-76 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
{
  "desktop_type" : "DEDICATED",
  "image_type" : "gold",
  "image_id" : "a866298d-67db-44b0-a1f1-9d09bdddc20f",
  "root_volume" : {
    "type" : "SAS",
    "size" : 80
  },
  "availability_zone" : "az3.manage.x86",
  "desktops" : [ {
    "user_name" : "ljh-002",
    "user_group" : "administrators",
    "user_email" : "aaaaa@huawei.com"
  } ],
  "nics" : [ {
    "subnet_id" : "5dee0216-2260-47c2-9368-98a27d910e55"
  } ],
  "product_id" : "workspace.c2.large.windows.2",
  "email_notification" : true
}
```

Example Responses

Status code: 200

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Response to the request for creating a cloud desktop.

```
{
  "job_id" : "3979904c-7beb-4f34-835f-2fa989a5550a"
}
```

Status Codes

Status Code	Description
200	Response to the request for creating a cloud desktop.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.2.2 Queries desktops.

Function

Queries desktop VMs.

Debugging

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

URI

GET /v2/{project_id}/desktops

Table 4-77 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Table 4-78 Query Parameters

Parameter	Mandatory	Type	Description
user_name	No	String	User to whom the desktop belongs.
computer_name	No	String	Desktop name.
desktop_ip	No	String	Desktop IP address.
offset	No	Integer	Start position for pagination query. The value starts from 0.
limit	No	Integer	Pagination query. The value ranges from 0 to 1000 and defaults to 1000.
pool_id	No	String	Desktop pool ID. Use commas (,) to separate multiple desktop pool IDs.
enterprise_project_id	No	String	Enterprise project ID.
desktop_type	No	String	Desktop type. If this parameter is left empty, all desktops are queried. Use commas (,) to separate multiple types. • **DEDICATED**: general desktops, including exclusive desktops and dedicated desktops. • **SHARED**: Multiple users share the desktop.

Request Parameters

Table 4-79 Request header parameters

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

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Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.

Response Parameters

Status code: 200

Table 4-80 Response body parameters

Parameter	Type	Description
total_count	Integer	Total number of desktops.
desktops	Array of **SimpleDesktopInfo** objects	Desktop information.

Table 4-81 SimpleDesktopInfo

Parameter	Type	Description
desktop_id	String	Desktop ID.
computer_name	String	Computer name.
created	String	Creation time.
ip_address	String	Desktop IP address.
user_name	String	Username.
attach_user_infos	Array of **AttachInstancesUserInfo** objects	List of users to whom desktops have been assigned.
user_group	String	Permission group.
sid	String	SID of the desktop.
ou_name	String	OU name.
enterprise_project_id	String	Enterprise project ID.
in_maintenance_mode	Boolean	In administrator maintenance mode or not.

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Table 4-82 AttachInstancesUserInfo

Parameter	Type	Description
user_id	String	User ID.
user_name	String	User to which a desktop belongs. After a desktop is assigned, the user can log in to the desktop. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed. When the domain type is **LITE_AD**, the value contains 1 to 20 characters starting with a lowercase or uppercase letter. When the domain type is **LOCAL_AD**, the value contains 1 to 20 characters starting with a lowercase or uppercase letter or digit.
user_group	String	User group to which the desktop user belongs. • **sudo**: Linux administrator group. • **default**: Default Linux user group. • **administrators**: Windows administrator group. Administrators have full access to the desktop and can make any required changes except for forbidden operations. • **users**: Standard Windows user group. Standard users can use most software programs and change system settings that do not affect other users.

Status code: 400

Table 4-83 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-84 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

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Status code: 403

Table 4-85 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-86 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-87 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
/v2/bcae3e673fd04716a3b9dacdf58ca336/desktops
```

Example Responses

Status code: 200

Response to the request for querying cloud desktops.

```
{
  "total_count" : 2,
  "desktops" : [ {
    "desktop_id" : "a6f6e2d1-cc62-46f3-865b-9ae6ae0afde0",
    "computer_name" : "ZRYUAN107",
    "created" : "2022-02-23 04:02:07",
    "ip_address" : "10.0.9.25",
    "user_name" : "zryuan1",
    "user_group" : "administrators",
    "sid" : "3db90102-d11d-4d13-9a96-104696d3c6a3",
    "in_maintenance_mode" : false
  }, {
    "desktop_id" : "248077ea-bb64-4e58-b5e8-6b686600920e",
```

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```
    "computer_name" : "CHENYC01",
    "created" : "2022-02-22 12:14:59",
    "ip_address" : "10.0.9.103",
    "user_name" : "chenyc",
    "user_group" : "administrators",
    "sid" : "352cf09d-ee15-4ef1-aa49-8d673972b4e6",
    "in_maintenance_mode" : true
  } ]
}
```

Status Codes

Status Code	Description
200	Response to the request for querying cloud desktops.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.2.3 Deletes one desktop.

Function

Deletes one desktop. The deleted desktop cannot be restored.

Debugging

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

URI

DELETE /v2/{project_id}/desktops/{desktop_id}

Table 4-88 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Parameter	Mandatory	Type	Description
desktop_id	Yes	String	Desktop ID.

Table 4-89 Query Parameters

Parameter	Mandatory	Type	Description
delete_users	No	Boolean	After a desktop is deleted, if the current user does not have other desktops, the desktop user can be deleted. The options are true (yes) and false (no). The default value is **false**.
email_notification	No	Boolean	Whether to send an email notification to the desktop user after a desktop is deleted. The options are true (yes) and false (no). The default value is **true**.
is_force_delete	No	Boolean	Forcible deletion or not.

Request Parameters

Table 4-90 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	No	String	MIME type of the request body.

Response Parameters

Status code: 400

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Table 4-91 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-92 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-93 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-94 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 409

Table 4-95 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

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Status code: 500

Table 4-96 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
/v2/0bec5db98280d2d02fd6c00c2de791ce/desktops/a130ab3a-72bf-4b71-baa9-af4987c8e338
```

Example Responses

Status code: 204

Normal, no response body.

```
null
```

Status Codes

Status Code	Description
204	Normal, no response body.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
409	Operation conflict.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.2.4 Queries details about one desktop.

Function

Queries details about a specified desktop by ID.

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Debugging

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

URI

GET /v2/{project_id}/desktops/{desktop_id}

Table 4-97 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
desktop_id	Yes	String	Desktop ID.

Request Parameters

Table 4-98 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	No	String	MIME type of the request body.

Response Parameters

Status code: 200

Table 4-99 Response body parameters

Parameter	Type	Description
desktop	**DesktopDetailInfo** object	Desktop details.

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Table 4-100 DesktopDetailInfo

Parameter	Type	Description
desktop_id	String	Desktop ID.
computer_name	String	Desktop name.
addresses	Map<String,Array<**AddressInfo**>>	Desktop IP addresses.
ip_addresses	Array of strings	IP addresses.
user_list	Array of strings	User list.
user_group_list	Array of strings	User group list.
desktop_type	String	Desktop type. • DEDICATED: a dedicated desktop
metadata	Map<String,String>	Desktop metadata. • charging_mode: Billing type of the package. 1 indicates yearly/monthly billing, and 0 indicates pay-per-use billing. • image_name: Name of the image used to create a desktop. • metering.image_id: Image ID. • metering.resourcespeccode: Desktop resource code. • metering.resourcetype: Desktop resource type. • os_bit: Number of bits of the OS. The value can be **32** or **64**. • os_type: OS type. The value can be **Linux**, **Windows**, or **Others**. • desktop_os_version: OS version.
flavor	**FlavorInfo** object	Product information.
status	String	Desktop status.

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Parameter	Type	Description
task_status	String	Task status. • scheduling: The task is being created and scheduled. • block_device_mapping: The disk is being prepared. • networking: The network is being prepared. • spawning: The task is being created internally. • rebooting: The system is being restarted. • reboot_pending: The task of system restart is being delivered. • reboot_started: The system is being restarted internally. • rebooting_hard: The system is being forcibly restarted. • reboot_pending_hard: The task of forcible restart is being delivered. • reboot_started_hard: The system is being forcibly restarted internally. • rebuilding: The system is being rebuilt. • rebuild_block_device_mapping: The system is being rebuilt and disks are being prepared. • rebuild_spawning: The system is being rebuilt internally. • migrating: Live migration is being performed. • resize_prep: The flavor is being adjusted. • resize_migrating: The flavor is being adjusted and the migration is in progress. • resize_migrated: The flavor is being adjusted and the migration has been completed. • resize_finish: The flavor has been adjusted. • resize_reverting: The flavor is being rolled back. • powering-off: The system is being powered off. • powering-on: The system is being powered on. • deleting: Deletion is being performed. • deleteFailed: Deletion failed.
created	String	Time when a desktop is created.

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Parameter	Type	Description
security_groups	Array of **SecurityGroup** objects	Desktop security group.
login_status	String	Login status of a desktop. • UNREGISTER: The desktop is not registered. After the desktop is started, it is automatically registered. After the desktop is shut down, it is unregistered. • REGISTERED: The desktop has been registered and is waiting for user connections. • CONNECTED: A user has logged in to a desktop and is using it. • DISCONNECTED: The desktop is disconnected from the client because the client window is closed or the networking between the client and desktop is interrupted.
user_name	String	User to whom the desktop belongs.
attach_user_infos	Array of **AttachInstancesUserInfo** objects	List of users to whom desktops have been assigned.
product_id	String	Product ID.
root_volume	**VolumeDetail** object	System disk.
data_volumes	Array of **VolumeDetail** objects	Data disks.
user_group	String	User group to which the desktop user belongs. • sudo: Linux administrator group. • default: Default Linux user group. • administrators: Windows administrator group. Administrators have full access to the desktop and can make any required changes except for forbidden operations. • users: standard Windows user group. Standard users can use most software programs and change system settings that do not affect other users.
availability_zone	String	AZ.

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Parameter	Type	Description
site_type	String	Site type.
site_name	String	Site name.
product	**ProductInfo** object	Product information.
ou_name	String	Name of the OU to which the desktop is added during desktop creation.
os_version	String	OS version.
sid	String	SID
order_id	String	Order ID of a yearly/monthly product.
tags	Array of **Tag** objects	Desktop tags.
internet_mode	String	Network access mode. • NAT: indicates the NAT Internet access mode • EIP: indicates the EIP Internet access mode • BOTH: Both the Internet and EIP access modes are supported.
is_attaching_eip	Boolean	Specifies whether an EIP is being bound to the desktop.

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Parameter	Type	Description
attach_state	String	Indicates the assignment status. • **ATTACHED**: assigned. • **UNATTACH**: Unassigned. Association is not performed. • **DEATTACHED**: Unassigned. • **ATTACHING**: Assigning. • **DEATTACHING**: Unassigning. • **ATTACHFAIL**: Assignment failed. • **DEATTACHFAIL**: Unassignment failed. • **WAITING**: Waiting for assignment. It describes the intermediate state between batch assignment (unassignment) and transfers to assignment (unassignment). It facilitates the state independence of a single association process. • **ATTACH_FAIL_CAN_ATTACH_AGAIN**: Assignment failed and re-assignment is allowed. • **DEATTACH_FAIL_CAN_DEATTACH_AGAIN**: Unassignment failed and re-unassignment is allowed.
enterprise_project_id	String	Enterprise project ID.

Table 4-101 AddressInfo

Parameter	Type	Description
addr	String	IP address.
version	String	IP address type. The value can be **4** (IPv4) or **6** (IPv6).
OS-EXT-IPS-MAC:mac_addr	String	MAC address.
OS-EXT-IPS:type	String	IP address assignment method. -fixed: a private IP address -floating: a floating IP address

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Table 4-102 FlavorInfo

Parameter	Type	Description
id	String	Flavor ID of the desktop.
links	Array of **FlavorLinkInfo** objects	Shortcut link marker information of the corresponding desktop flavor.

Table 4-103 FlavorLinkInfo

Parameter	Type	Description
rel	String	Shortcut link marker name.
hrel	String	Corresponding shortcut link.

Table 4-104 SecurityGroup

Parameter	Type	Description
id	String	Security group ID.

Table 4-105 AttachInstancesUserInfo

Parameter	Type	Description
user_id	String	User ID.
user_name	String	User to which a desktop belongs. After a desktop is assigned, the user can log in to the desktop. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed. When the domain type is **LITE_AD**, the value contains 1 to 20 characters starting with a lowercase or uppercase letter. When the domain type is **LOCAL_AD**, the value contains 1 to 20 characters starting with a lowercase or uppercase letter or digit.

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Parameter	Type	Description
user_group	String	User group to which the desktop user belongs. • **sudo**: Linux administrator group. • **default**: Default Linux user group. • **administrators**: Windows administrator group. Administrators have full access to the desktop and can make any required changes except for forbidden operations. • **users**: Standard Windows user group. Standard users can use most software programs and change system settings that do not affect other users.

Table 4-106 VolumeDetail

Parameter	Type	Description
type	String	Desktop data disk type, which must be the same as the disk type provided by the system. • SAS: High I/O • SSD: Ultra-high I/O
size	Integer	Disk capacity in GB.
device	String	Directory to which the disk is mounted.
id	String	Unique ID of the disk table.
volume_id	String	Disk ID.
create_time	String	Time when the disk is created.
display_name	String	Disk name.

Table 4-107 ProductInfo

Parameter	Type	Description
product_id	String	Product ID.
flavor_id	String	Specifications ID.
type	String	Product type. • BASE: basic product package. OS is the only commercial software product in the package. Only this type of package can be used for private images.
cpu	String	CPU

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Parameter	Type	Description
memory	String	Memory.
descriptions	String	Product description.
charge_mode	String	Billing type of the package. 1 indicates yearly/monthly billing, and 0 indicates pay-per-use billing.

Table 4-108 Tag

Parameter	Type	Description
key	String	Specifies the key of a tag that cannot be empty and can contain a maximum of 128 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.
value	String	Value of a tag, which can contain a maximum of 43 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.

Status code: 400

Table 4-109 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-110 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

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Status code: 403

Table 4-111 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-112 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-113 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
/v2/0bec5db98280d2d02fd6c00c2de791ce/desktops/a130ab3a-72bf-4b71-baa9-af4987c8e338
```

Example Responses

Status code: 200

Normal.

```
{
  "desktop" : [ {
    "desktop_id" : "21616aa6-061d-4b2f-bd83-b230d7a9a14c",
    "computer_name" : "CHENMIN01",
    "addresses" : [ {
      "addr" : "172.16.253.204",
      "version" : "4",
      "OS-EXT-IPS-MAC:mac_addr" : "fa:16:3e:2e:41:55",
      "OS-EXT-IPS:type" : "fixed"
    }, {
      "addr" : "10.0.9.55",
      "version" : "4",
      "OS-EXT-IPS-MAC:mac_addr" : "fa:16:3e:d5:b3:02",
```

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```
    "OS-EXT-IPS:type" : "fixed"
  } ],
  "ip_addresses" : [ "172.16.253.204", "10.0.9.55" ],
  "desktop_type" : "DEDICATED",
  "metadata" : {
    "image_name" : "copy_uos-hjg1",
    "metering.resourcespeccode" : "rs3.large.2.linux",
    "charging_mode" : "0",
    "metering.image_id" : "39efed30-a0db-4520-8134-19a086e14c7e",
    "metering.resourcetype" : "1",
    "os_type" : "Linux",
    "os_bit" : "64",
    "desktop_os_version" : "20"
  },
  "flavor" : {
    "id" : "rs3.large.2",
    "links" : [ ]
  },
  "status" : "ACTIVE",
  "task_status" : "",
  "created" : "2022-01-21T06:57:47.459Z",
  "login_status" : "REGISTERED",
  "user_name" : "chenmin",
  "product_id" : "workspace.k.large2.uosv20pro",
  "root_volume" : {
    "type" : "SAS",
    "size" : 90,
    "device" : "/dev/vda",
    "id" : "e4406c227a8711ecaf56fa163ed8e03f",
    "volume_id" : "91b9457c-ef61-4058-9e82-c86b35f15934",
    "create_time" : "2022-03-28T00:00:00Z",
    "display_name" : "workspace002"
  },
  "data_volumes" : [ {
    "type" : "SATA",
    "size" : 10,
    "device" : "/dev/vdc",
    "id" : "fd4597cb80b311ecaf56fa163ed8e03f",
    "volume_id" : "230432f1-44a4-47a1-862e-cd0b65c04bd1",
    "create_time" : "2022-03-28T00:00:00Z",
    "display_name" : "workspace001"
  } ],
  "user_group" : "default",
  "availability_zone" : "cn-north-5a",
  "product" : {
    "product_id" : "workspace.k.large2.uosv20pro",
    "flavor_id" : "rs3.large.2",
    "type" : "BASE",
    "cpu" : "2",
    "memory" : "3072",
    "descriptions" : "CPU:2vCPUs,Memory:4GB",
    "charge_mode" : "0"
  },
  "os_version" : "20",
  "sid" : "1f60adc1-941c-48b8-b5c8-64948329b7cb",
  "order_id" : "CS2201211457G0PUY",
  "tags" : [ ]
 } ]
}
```


Status Codes

Status Code	Description
200	Normal.

Status Code	Description
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.2.5 Deletes desktops in batches.

Function

Deletes desktops in batches. The deleted desktops cannot be restored.

Debugging

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

URI

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

Table 4-114 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-115 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	No	String	MIME type of the request body.

Table 4-116 Request body parameters

Parameter	Mandatory	Type	Description
desktop_ids	Yes	Array of strings	IDs of the desktops to be deleted.
delete_users	No	Boolean	After a desktop is deleted, if the current user does not have other desktops, the desktop user can be deleted. The options are true (yes) and false (no). The default value is **false**.
email_notification	No	Boolean	Whether to send an email notification. The options are true (yes) and false (no). The default value is **true**.
is_force_delete	No	Boolean	Specifies whether to forcibly delete the VM. The options are as follows: **true**: forcibly delete the VM; **false**: not forcibly delete the VM.

Response Parameters

Status code: 202

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Table 4-117 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Status code: 400

Table 4-118 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-119 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-120 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-121 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

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Status code: 409

Table 4-122 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-123 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
{
  "desktop_ids" : [ "1d81c1dc-312b-4621-b778-bac3a1336442", "34e25501-fd50-42b5-97ca-f4c5bb7b09b0" ]
}
```

Example Responses

Status code: 202

Normal.

```
{
  "job_id" : "abc85365-0b2e-4b4f-a091-f7db72072d4b"
}
```

Status Codes

Status Code	Description
202	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
409	Operation conflict.

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Status Code	Description
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.2.6 Deregistering Desktops in Batches

Function

Deregister desktops in batches.

Debugging

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

URI

POST /v2/{project_id}/desktops/logoff

Table 4-124 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-125 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	No	String	MIME type of the request body.

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Table 4-126 Request body parameters

Parameter	Mandatory	Type	Description
desktop_ids	No	Array of strings	Computer IDs.
message	No	String	Message sent to a user when a desktop deregistration task is delivered.

Response Parameters

Status code: 400

Table 4-127 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-128 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-129 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

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Table 4-130 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 409

Table 4-131 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-132 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
{
  "desktop_ids" : [ "string" ],
  "image_type" : "string",
  "image_id" : "string",
  "os_type" : "string",
  "delay_time" : "integer",
  "message" : "string"
}
```

Example Responses

Status code: 200

Normal, no response body.

```
null
```

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Status Codes

Status Code	Description
200	Normal, no response body.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
409	Operation conflict.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.2.7 Queries the desktop details list.

Function

Queries the desktop details list.

Debugging

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

URI

GET /v2/{project_id}/desktops/detail

Table 4-133 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Table 4-134 Query Parameters

Parameter	Mandatory	Type	Description
status	No	String	Desktop status. • ACTIVE: The desktop is running. • SHUTOFF: The desktop is shut down. • ERROR: The desktop is abnormal.
user_name	No	String	Specifies the user to which the desktop belongs. This parameter is invalid when **user_names** is transferred.
user_names	No	Array	Specifies the user to which the desktop belongs. A maximum of 100 users can be filtered in batches.
sort_field	No	String	Sorting field name, which must be used together with the **sort_type** field. • **created**: indicates the creation time. • **computer_name**: indicates the desktop name.
sort_type	No	String	Sorting type. The default value is ascending. This parameter must be used together with **sort_field**. • **ASC**: ascending order. • **DESC**: descending order.
computer_name	No	String	Computer name.
desktop_ip	No	String	Desktop IP address.
offset	No	Integer	Start position for pagination query. The value starts from 0.
limit	No	Integer	Pagination query. The value ranges from 0 to 500 and defaults to 500.
desktop_id	No	Array	Desktop ID.

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Parameter	Mandatory	Type	Description
desktop_type	No	String	Desktop type. If this parameter is left empty, all desktops are queried. • **DEDICATED**: common desktops, including exclusive desktops and dedicated desktops. • **POOLED**: pooled desktop, that is, desktop in a desktop pool.
tag	No	String	Desktop tag. Examples are as follows: • key1=value1 • key1=value1,key2=value2
pool_id	No	String	Desktop pool ID. Use commas (,) to separate multiple desktop pool IDs.
user_attached	No	Boolean	Whether a desktop is assigned to a user.
enterprise_project_id	No	String	Enterprise project ID.
image_id	No	String	Image ID.
charge_mode	No	String	Billing mode. The value can be **0** (monthly) or **1** (pay-per-use).
in_maintenance_mode	No	Boolean	Filter by maintenance mode.

Request Parameters

Table 4-135 Request header parameters

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

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Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.

Response Parameters

Status code: 200

Table 4-136 Response body parameters

Parameter	Type	Description
desktops	Array of **DesktopDetailInfo** objects	Desktop details list.
total_count	Integer	Total number of desktops.

Table 4-137 DesktopDetailInfo

Parameter	Type	Description
desktop_id	String	Desktop ID.
computer_name	String	Desktop name.
addresses	Map<String,Array<**AddressInfo**>>	Desktop IP addresses.
ip_addresses	Array of strings	IP addresses.
user_list	Array of strings	User list.
user_group_list	Array of strings	User group list.
desktop_type	String	Desktop type. • DEDICATED: a dedicated desktop

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Parameter	Type	Description
metadata	Map<String,String>	Desktop metadata. • charging_mode: Billing type of the package. 1 indicates yearly/monthly billing, and 0 indicates pay-per-use billing. • image_name: Name of the image used to create a desktop. • metering.image_id: Image ID. • metering.resourcespeccode: Desktop resource code. • metering.resourcetype: Desktop resource type. • os_bit: Number of bits of the OS. The value can be **32** or **64**. • os_type: OS type. The value can be **Linux**, **Windows**, or **Others**. • desktop_os_version: OS version.
flavor	**FlavorInfo** object	Product information.
status	String	Desktop status.

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Parameter	Type	Description
task_status	String	Task status. • scheduling: The task is being created and scheduled. • block_device_mapping: The disk is being prepared. • networking: The network is being prepared. • spawning: The task is being created internally. • rebooting: The system is being restarted. • reboot_pending: The task of system restart is being delivered. • reboot_started: The system is being restarted internally. • rebooting_hard: The system is being forcibly restarted. • reboot_pending_hard: The task of forcible restart is being delivered. • reboot_started_hard: The system is being forcibly restarted internally. • rebuilding: The system is being rebuilt. • rebuild_block_device_mapping: The system is being rebuilt and disks are being prepared. • rebuild_spawning: The system is being rebuilt internally. • migrating: Live migration is being performed. • resize_prep: The flavor is being adjusted. • resize_migrating: The flavor is being adjusted and the migration is in progress. • resize_migrated: The flavor is being adjusted and the migration has been completed. • resize_finish: The flavor has been adjusted. • resize_reverting: The flavor is being rolled back. • powering-off: The system is being powered off. • powering-on: The system is being powered on. • deleting: Deletion is being performed. • deleteFailed: Deletion failed.
created	String	Time when a desktop is created.

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Parameter	Type	Description
security_groups	Array of **SecurityGroup** objects	Desktop security group.
login_status	String	Login status of a desktop. • UNREGISTER: The desktop is not registered. After the desktop is started, it is automatically registered. After the desktop is shut down, it is unregistered. • REGISTERED: The desktop has been registered and is waiting for user connections. • CONNECTED: A user has logged in to a desktop and is using it. • DISCONNECTED: The desktop is disconnected from the client because the client window is closed or the networking between the client and desktop is interrupted.
user_name	String	User to whom the desktop belongs.
attach_user_infos	Array of **AttachInstancesUserInfo** objects	List of users to whom desktops have been assigned.
product_id	String	Product ID.
root_volume	**VolumeDetail** object	System disk.
data_volumes	Array of **VolumeDetail** objects	Data disks.
user_group	String	User group to which the desktop user belongs. • sudo: Linux administrator group. • default: Default Linux user group. • administrators: Windows administrator group. Administrators have full access to the desktop and can make any required changes except for forbidden operations. • users: standard Windows user group. Standard users can use most software programs and change system settings that do not affect other users.
availability_zone	String	AZ.

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Parameter	Type	Description
site_type	String	Site type.
site_name	String	Site name.
product	**ProductInfo** object	Product information.
ou_name	String	Name of the OU to which the desktop is added during desktop creation.
os_version	String	OS version.
sid	String	SID
order_id	String	Order ID of a yearly/monthly product.
tags	Array of **Tag** objects	Desktop tags.
internet_mode	String	Network access mode. • NAT: indicates the NAT Internet access mode • EIP: indicates the EIP Internet access mode • BOTH: Both the Internet and EIP access modes are supported.
is_attaching_eip	Boolean	Specifies whether an EIP is being bound to the desktop.

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Parameter	Type	Description
attach_state	String	Indicates the assignment status. • **ATTACHED**: assigned. • **UNATTACH**: Unassigned. Association is not performed. • **DEATTACHED**: Unassigned. • **ATTACHING**: Assigning. • **DEATTACHING**: Unassigning. • **ATTACHFAIL**: Assignment failed. • **DEATTACHFAIL**: Unassignment failed. • **WAITING**: Waiting for assignment. It describes the intermediate state between batch assignment (unassignment) and transfers to assignment (unassignment). It facilitates the state independence of a single association process. • **ATTACH_FAIL_CAN_ATTACH_AGAIN**: Assignment failed and re-assignment is allowed. • **DEATTACH_FAIL_CAN_DEATTACH_AGAIN**: Unassignment failed and re-unassignment is allowed.
enterprise_project_id	String	Enterprise project ID.

Table 4-138 AddressInfo

Parameter	Type	Description
addr	String	IP address.
version	String	IP address type. The value can be **4** (IPv4) or **6** (IPv6).
OS-EXT-IPS-MAC:mac_addr	String	MAC address.
OS-EXT-IPS:type	String	IP address assignment method. -fixed: a private IP address -floating: a floating IP address

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Table 4-139 FlavorInfo

Parameter	Type	Description
id	String	Flavor ID of the desktop.
links	Array of **FlavorLinkInfo** objects	Shortcut link marker information of the corresponding desktop flavor.

Table 4-140 FlavorLinkInfo

Parameter	Type	Description
rel	String	Shortcut link marker name.
hrel	String	Corresponding shortcut link.

Table 4-141 SecurityGroup

Parameter	Type	Description
id	String	Security group ID.

Table 4-142 AttachInstancesUserInfo

Parameter	Type	Description
user_id	String	User ID.
user_name	String	User to which a desktop belongs. After a desktop is assigned, the user can log in to the desktop. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed. When the domain type is **LITE_AD**, the value contains 1 to 20 characters starting with a lowercase or uppercase letter. When the domain type is **LOCAL_AD**, the value contains 1 to 20 characters starting with a lowercase or uppercase letter or digit.

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Parameter	Type	Description
user_group	String	User group to which the desktop user belongs. • **sudo**: Linux administrator group. • **default**: Default Linux user group. • **administrators**: Windows administrator group. Administrators have full access to the desktop and can make any required changes except for forbidden operations. • **users**: Standard Windows user group. Standard users can use most software programs and change system settings that do not affect other users.

Table 4-143 VolumeDetail

Parameter	Type	Description
type	String	Desktop data disk type, which must be the same as the disk type provided by the system. • SAS: High I/O • SSD: Ultra-high I/O
size	Integer	Disk capacity in GB.
device	String	Directory to which the disk is mounted.
id	String	Unique ID of the disk table.
volume_id	String	Disk ID.
create_time	String	Time when the disk is created.
display_name	String	Disk name.

Table 4-144 ProductInfo

Parameter	Type	Description
product_id	String	Product ID.
flavor_id	String	Specifications ID.
type	String	Product type. • BASE: basic product package. OS is the only commercial software product in the package. Only this type of package can be used for private images.
cpu	String	CPU

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Parameter	Type	Description
memory	String	Memory.
descriptions	String	Product description.
charge_mode	String	Billing type of the package. 1 indicates yearly/monthly billing, and 0 indicates pay-per-use billing.

Table 4-145 Tag

Parameter	Type	Description
key	String	Specifies the key of a tag that cannot be empty and can contain a maximum of 128 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.
value	String	Value of a tag, which can contain a maximum of 43 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.

Status code: 400

Table 4-146 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-147 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

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Status code: 403

Table 4-148 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-149 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-150 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
/v2/0bec5db98280d2d02fd6c00c2de791ce/desktops/detail
```

Example Responses

Status code: 200

Response to the request for querying the cloud desktop details list.

```
{
  "desktops" : [ {
    "desktop_id" : "21616aa6-061d-4b2f-bd83-b230d7a9a14c",
    "computer_name" : "CHENMIN01",
    "addresses" : [ {
      "addr" : "172.16.253.204",
      "version" : "4",
      "OS-EXT-IPS-MAC:mac_addr" : "fa:16:3e:2e:41:55",
      "OS-EXT-IPS:type" : "fixed"
    }, {
      "addr" : "10.0.9.55",
      "version" : "4",
      "OS-EXT-IPS-MAC:mac_addr" : "fa:16:3e:d5:b3:02",
```

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```
    "OS-EXT-IPS:type" : "fixed"
  } ],
  "ip_addresses" : [ "172.16.253.204", "10.0.9.55" ],
  "desktop_type" : "DEDICATED",
  "metadata" : {
    "image_name" : "copy_uos-hjg1",
    "metering.resourcespeccode" : "rs3.large.2.linux",
    "charging_mode" : "0",
    "metering.image_id" : "39efed30-a0db-4520-8134-19a086e14c7e",
    "metering.resourcetype" : "1",
    "os_type" : "Linux",
    "os_bit" : "64",
    "desktop_os_version" : "20"
  },
  "flavor" : {
    "id" : "rs3.large.2",
    "links" : [ ]
  },
  "status" : "ACTIVE",
  "task_status" : "",
  "created" : "2022-01-21T06:57:47.459Z",
  "login_status" : "REGISTERED",
  "user_name" : "chenmin",
  "product_id" : "workspace.k.large2.uosv20pro",
  "root_volume" : {
    "type" : "SAS",
    "size" : 90,
    "device" : "/dev/vda",
    "id" : "e4406c227a8711ecaf56fa163ed8e03f",
    "volume_id" : "91b9457c-ef61-4058-9e82-c86b35f15934",
    "create_time" : "2022-03-28T00:00:00Z",
    "display_name" : "workspace002"
  },
  "data_volumes" : [ {
    "type" : "SATA",
    "size" : 10,
    "device" : "/dev/vdc",
    "id" : "fd4597cb80b311ecaf56fa163ed8e03f",
    "volume_id" : "230432f1-44a4-47a1-862e-cd0b65c04bd1",
    "create_time" : "2022-03-28T00:00:00Z",
    "display_name" : "workspace001"
  } ],
  "user_group" : "default",
  "availability_zone" : "cn-north-5a",
  "site_type" : "IES",
  "site_name" : "Edge station.",
  "product" : {
    "product_id" : "workspace.k.large2.uosv20pro",
    "flavor_id" : "rs3.large.2",
    "type" : "BASE",
    "cpu" : "2",
    "memory" : "3072",
    "descriptions" : "CPU:2vCPUs,Memory:4GB",
    "charge_mode" : "0"
  },
  "os_version" : "20",
  "sid" : "1f60adc1-941c-48b8-b5c8-64948329b7cb",
  "order_id" : "CS2201211457G0PUY",
  "tags" : [ ],
  "in_maintenance_mode" : false
}, {
  "desktop_id" : "e7a27bad-323f-4ec8-9afe-e53d00171ba9",
  "computer_name" : "HJG01",
  "addresses" : [ {
    "addr" : "172.16.242.253",
    "version" : "4",
    "OS-EXT-IPS-MAC:mac_addr" : "fa:16:3e:20:14:00",
    "OS-EXT-IPS:type" : "fixed"
  }, {
```

```
    "addr" : "10.0.5.247",
    "version" : "4",
    "OS-EXT-IPS-MAC:mac_addr" : "fa:16:3e:29:c4:3f",
    "OS-EXT-IPS:type" : "fixed"
   } ],
   "ip_addresses" : [ "172.16.242.253", "10.0.5.247" ],
   "desktop_type" : "DEDICATED",
   "metadata" : {
    "image_name" : "UOS_20_PRO_chenmin",
    "metering.resourcespeccode" : "rs3.xlarge.2.linux",
    "charging_mode" : "0",
    "metering.image_id" : "6fe1cd9e-e997-4c02-8257-395c28de49b3",
    "metering.resourcetype" : "1",
    "os_type" : "Linux",
    "os_bit" : "64",
    "desktop_os_version" : "20"
   },
   "flavor" : {
    "id" : "rs3.xlarge.2",
    "links" : [ ]
   },
   "status" : "ACTIVE",
   "task_status" : "",
   "created" : "2022-01-18T07:53:25.815Z",
   "login_status" : "REGISTERED",
   "user_name" : "hjg",
   "product_id" : "workspace.k.large4.uosv20pro",
   "root_volume" : {
    "type" : "SAS",
    "size" : 80,
    "device" : "/dev/vda",
    "id" : "1791c183783411ecaf56fa163ed8e03f",
    "volume_id" : "703b49d6-794e-4474-a256-fb695fb46466"
   },
   "user_group" : "sudo",
   "availability_zone" : "cn-north-5a",
   "site_type" : "CENTER",
   "site_name" : "Central site of CN North-Beijing4",
   "product" : {
    "product_id" : "workspace.k.large4.uosv20pro",
    "flavor_id" : "rs3.xlarge.2",
    "type" : "BASE",
    "cpu" : "4",
    "memory" : "7168",
    "descriptions" : "CPU:4vCPUs,Memory:7GB",
    "charge_mode" : "0"
   },
   "os_version" : "20",
   "sid" : "3f5cdbd5-9652-4339-9aab-70d0644f8abc",
   "order_id" : "CS220118155365RYV",
   "tags" : [ ],
   "in_maintenance_mode" : true
  } ],
  "total_count" : 2
}
```


Status Codes

Status Code	Description
200	Response to the request for querying the cloud desktop details list.
400	The request cannot be understood by the server due to malformed syntax.

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Status Code	Description
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.2.8 Performs operations on the desktop.

Function

Starts, stops, and restarts desktops in batches.

Debugging

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

URI

POST /v2/{project_id}/desktops/action

Table 4-151 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-152 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	No	String	MIME type of the request body.

Table 4-153 Request body parameters

Parameter	Mandatory	Type	Description
desktop_ids	Yes	Array of strings	Desktop IDs.
op_type	Yes	String	Operation type. -os-start: starting the computer -reboot: restarting the computer -os-stop: shutting down the computer
type	No	String	SOFT: common operation; HARD: forcible operation. For example, if **type** is set to **HARD** and **op_type** is set to **os-stop**, the computer is forcibly stopped.

Response Parameters

Status code: 200

Table 4-154 Response body parameters

Parameter	Type	Description
failed_operation_list	Array of **VmOperateResult** objects	Desktops on which operations failed.

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Parameter	Type	Description
job_id	String	Specifies the task ID. This parameter is returned when the cold migration starts.

Table 4-155 VmOperateResult

Parameter	Type	Description
desktop_id	String	Desktop ID.
desktop_name	String	Desktop name.
error_code	String	Error code.
error_msg	String	Cause of the operation failure.

Status code: 400

Table 4-156 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-157 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-158 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

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Status code: 404

Table 4-159 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 409

Table 4-160 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-161 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
{
  "desktop_ids" : [ "f77db5cd-c020-47d4-bbbe-9b979a38d18c", "f77db5cd-c020-47d4-
bbbe-9b979a38d18b" ],
  "op_type" : "os-stop",
  "type" : "SOFT"
}
```

Example Responses

Status code: 200

Normal.

```
{
  "job_id" : "abc85365-0b2e-4b4f-a091-f7db72072d4b"
}
```

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Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
409	Operation conflict.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.2.9 Modifies specifications.

Function

Only the CPU and memory can be modified. The disks cannot be changed, and the specifications can only be changed to different ones.

Debugging

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

URI

POST /v2/{project_id}/desktops/resize

Table 4-162 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-163 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	No	String	MIME type of the request body.

Table 4-164 Request body parameters

Parameter	Mandatory	Type	Description
desktops	Yes	Array of **ResizeDesktopData** objects	Desktop data. The on-demand desktops can be changed to the same specifications in batches.
product_id	Yes	String	Package ID. For a batch operation, VMs of the same specifications are used.
mode	Yes	String	Whether specifications can be modified when the desktop is started. The value is fixed to **STOP_DESKTOP**. If the desktop has been started, the desktop will be stopped before the specifications are modified.

Table 4-165 ResizeDesktopData

Parameter	Mandatory	Type	Description
desktop_id	No	String	Desktop ID.

Response Parameters

Status code: 200

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Table 4-166 Response body parameters

Parameter	Type	Description
jobs	Array of **ResizeDesktopJobResponse** objects	Specifies the task information returned when the specifications of a pay-per-use desktop are changed. (The **jobs** field will be brought offline later. Use the **job_id** field.)
job_id	String	Specifies the ID of the specification modification task.

Table 4-167 ResizeDesktopJobResponse

Parameter	Type	Description
desktop_id	String	Desktop ID.
job_id	String	Task ID.

Status code: 202

Table 4-168 Response body parameters

Parameter	Type	Description
jobs	Array of **ResizeDesktopJobResponse** objects	Specifies the task information returned when the specifications of a pay-per-use desktop are changed. (The **jobs** field will be brought offline later. Use the **job_id** field.)
job_id	String	Specifies the ID of the specification modification task.

Table 4-169 ResizeDesktopJobResponse

Parameter	Type	Description
desktop_id	String	Desktop ID.
job_id	String	Task ID.

Status code: 400

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Table 4-170 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-171 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-172 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-173 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 409

Table 4-174 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

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Status code: 500

Table 4-175 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
POST /v2/0bec5db98280d2d02fd6c00c2de791ce/desktops/resize

{
  "desktops" : [ {
    "desktop_id" : "538946c2-7ff8-4444-b1bd-e9a1f8137b81"
  } ],
  "product_id" : "workspace.k.xlarge.2.linux",
  "mode" : "STOP_DESKTOP"
}
```

Example Responses

Status code: 200

Response to the request for modifying specifications.

```
{
  "job_id" : "c566b960-69d1-44ec-9397-2172fdd01xxx",
  "jobs" : [ {
    "desktop_id" : "c566b960-69d1-44ec-9397-2172fdd015d9",
    "job_id" : "41162624-ba52-42f3-bdda-15c6d345ff60"
  } ]
}
```

Status code: 202

Response to the request for modifying specifications.

```
{
  "job_id" : "c566b960-69d1-44ec-9397-2172fdd01xxx",
  "jobs" : [ {
    "desktop_id" : "c566b960-69d1-44ec-9397-2172fdd015d9",
    "job_id" : "41162624-ba52-42f3-bdda-15c6d345ff60"
  } ]
}
```

Status Codes

Status Code	Description
200	Response to the request for modifying specifications.
202	Response to the request for modifying specifications.
400	The request cannot be understood by the server due to malformed syntax.

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Status Code	Description
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
409	Operation conflict.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.2.10 Rebuild a Desktop

Function

Recomposes desktop system disks in batches.

Debugging

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

URI

POST /v2/{project_id}/desktops/rebuild

Table 4-176 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-177 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	No	String	MIME type of the request body.

Table 4-178 Request body parameters

Parameter	Mandatory	Type	Description
desktop_ids	Yes	Array of strings	Computer IDs.
image_type	Yes	String	Image type.
image_id	Yes	String	Template ID.
os_type	No	String	OS type.
delay_time	No	Integer	Time reserved for users to save data during immediate recomposing (unit: minute).
message	No	String	Message sent to a user when a system disk recomposing task is delivered.
order_id	No	String	Specifies the order ID, which is used to recompose the system disk of a yearly/monthly desktop. This parameter is mandatory when billed images are involved.
enterprise_project_id	No	String	Enterprise project ID. Its default value is **0**.

Response Parameters

Status code: 200

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Table 4-179 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.
job_id	String	Specifies the ID of the general task for recomposing the system disk.

Status code: 400

Table 4-180 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-181 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-182 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

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Table 4-183 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 409

Table 4-184 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-185 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
{
  "desktop_ids" : [ "string" ],
  "image_type" : "string",
  "image_id" : "string",
  "os_type" : "string",
  "delay_time" : "integer",
  "message" : "string"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.

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Status Code	Description
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
409	Operation conflict.
500	An internal service error occurred. For details, see the error code description.

Error Codes

See **Error Codes**.

4.2.11 Query the Desktop Network

Function

Queries desktop VPCs, subnets, private IP addresses, EIPs, and security groups.

Debugging

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

URI

GET /v2/{project_id}/desktops/{desktop_id}/networks

Table 4-186 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
desktop_id	Yes	String	Desktop ID.

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Request Parameters

Table 4-187 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	No	String	MIME type of the request body.

Response Parameters

Status code: 200

Table 4-188 Response body parameters

Parameter	Type	Description
computer_name	String	Desktop name.
computer_id	String	Desktop ID.
network_infos	Array of **NetworkInfo** objects	Desktop network information.

Table 4-189 NetworkInfo

Parameter	Type	Description
vpc_info	**Vpc** object	VPC information.
subnet_info	**Subnet** object	Subnet information.
port_info	**Port** object	Private IP Information.
public_ip_info	**PublicIp** object	Unique EIP Information.
security_groups	Array of **SecurityGroup** objects	Specifies the list of security groups bound to the desktop.

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Table 4-190 Vpc

Parameter	Type	Description
id	String	Specifies the ID of the VPC to which the desktop belongs.
name	String	Specifies the name of the VPC to which the desktop belongs.
cidr	String	Specifies the VPC network segment where the desktop is located.

Table 4-191 Subnet

Parameter	Type	Description
id	String	ID of the subnet where the desktop is located.
name	String	Specifies the name of the subnet where the desktop is located.
cidr	String	Subnet segment where the desktop is located.

Table 4-192 Port

Parameter	Type	Description
id	String	Specifies the ID of the private IP address, which uniquely identifies the private IP address.
ip_address	String	Private IP address.

Table 4-193 PublicIp

Parameter	Type	Description
id	String	Unique EIP ID.
public_ip_address	String	EIP.

Table 4-194 SecurityGroup

Parameter	Type	Description
id	String	Security group ID.

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Status code: 400

Table 4-195 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-196 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-197 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-198 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 409

Table 4-199 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.

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Parameter	Type	Description
error_msg	String	Error description.

Status code: 500

Table 4-200 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
409	Operation conflict.
500	An internal service error occurred. For details, see the error code description.

Error Codes

See **Error Codes**.

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4.2.12 Switching a Desktop Network

Function

The desktop VPC, subnet, IP address, and security group are switched.

Debugging

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

URI

PUT /v2/{project_id}/desktops/{desktop_id}/networks

Table 4-201 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
desktop_id	Yes	String	Desktop ID.

Request Parameters

Table 4-202 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	No	String	MIME type of the request body.

Table 4-203 Request body parameters

Parameter	Mandatory	Type	Description
vpc_id	Yes	String	ID of the VPC to be switched.
subnet_id	Yes	String	ID of the subnet to be switched.

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Parameter	Mandatory	Type	Description
private_ip	No	String	Private IP address.
security_group_ids	Yes	Array of strings	Security group ID list.

Response Parameters

Status code: 200

Table 4-204 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Status code: 400

Table 4-205 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-206 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-207 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

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Status code: 404

Table 4-208 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 409

Table 4-209 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-210 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.

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Status Code	Description
403	You do not have required permissions.
404	No resource found.
409	Operation conflict.
500	An internal service error occurred. For details, see the error code description.

Error Codes

See **Error Codes**.

4.3 Desktop Statistics

4.3.1 Querying Desktops That Are Not Used in a Specified Period

Function

Query desktops that are not used in a specified period.

Debugging

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

URI

GET /v2/{project_id}/desktops/statistics/unused

Table 4-211 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Table 4-212 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Start position of the data record to be returned. This parameter is used for pagination query. The value ranges from 0 to 2000. The default value is **0**.
limit	No	Integer	Number of information items to be returned in the query result. This parameter is used for pagination query. The value ranges from 0 to 2000. The default value is **1000**.
start_time	No	String	Start time: The value consists of a date and time in UTC format. The format is yyyy-MM-ddTHH:mm:ss.SSSZ. If this parameter is not specified, unused desktops from the current day to the previous day are queried.
end_time	No	String	End time: The value consists of a date and time in UTC format. The format is yyyy-MM-ddTHH:mm:ss.SSSZ. If this parameter is not specified, unused desktops from the current day to the previous day are queried.

Request Parameters

Table 4-213 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.

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Response Parameters

Status code: 200

Table 4-214 Response body parameters

Parameter	Type	Description
unused_desktops	Array of **UnusedDesktopInfo** objects	Desktops that are not used in a specified period.
total_count	Integer	Total number.

Table 4-215 UnusedDesktopInfo

Parameter	Type	Description
desktop_id	String	Desktop ID.
compute_name	String	Desktop name.
create_time	String	Time when a desktop is created.
disconnect_time	String	Last disconnection time.

Status code: default

Table 4-216 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
/v2/13d4944fcfc7448893f50d81a6a2edd3/desktops/statistics/unused
```

Example Responses

Status code: 200

Response to the request for querying desktops that are not used in a specified period.

```
{
  "unused_desktops" : [ {
```

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```
    "desktop_id" : "e0367f84-1d64-498e-9b92-093002ac3ce8",
    "compute_name" : "ZYZ08",
    "create_time" : "2022-08-08T02:34:05.202Z",
    "disconnect_time" : "2022-08-08T02:39:00.000Z"
  }, {
    "desktop_id" : "b8eb2ac0-4540-4409-857f-df5e2de07546",
    "compute_name" : "wangyan8301",
    "create_time" : "2022-08-08T02:34:05.202Z",
    "disconnect_time" : "2022-08-08T02:39:00.000Z"
  } ],
  "total_count" : 2
}
```


Status Codes

Status Code	Description
200	Response to the request for querying desktops that are not used in a specified period.
default	Error response.

Error Codes

See **Error Codes**.

4.3.2 Querying the Desktop Usage Duration

Function

Query the desktop usage duration.

Debugging

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

URI

POST /v2/{project_id}/desktops/statistics/used

Table 4-217 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-218 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.

Table 4-219 Request body parameters

Parameter	Mandatory	Type	Description
desktop_ids	No	Array of strings	Desktop ID set.
start_time	No	String	Start time. The format is yyyy-MM-dd (UTC time). If this parameter is not specified, data of the latest 15 days is queried by default. Data of a maximum of 31 days can be queried.
end_time	No	String	End time. The format is yyyy-MM-dd (UTC time). If this parameter is not specified, data of the latest 15 days is queried by default. Data of a maximum of 31 days can be queried.
desktop_username	No	String	If the username of the desktop is specified, only the usage time of the user is queried.
offset	No	Integer	Start position of the data record to be returned. This parameter is used for pagination query. The value ranges from 0 to 2000. The default value is **0**.

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Parameter	Mandatory	Type	Description
limit	No	Integer	Number of information items to be returned in the query result. This parameter is used for pagination query. The value ranges from 0 to 100. The default value is **100**.

Response Parameters

Status code: 200

Table 4-220 Response body parameters

Parameter	Type	Description
desktop_used_info_list	Array of **DesktopUsedHoursInfo** objects	Desktop usage information (divided by desktop ID).
total_count	Integer	Total number.

Table 4-221 DesktopUsedHoursInfo

Parameter	Type	Description
desktop_id	String	Desktop ID.
desktop_username	String	User.
used_info_list	Array of **DesktopUsedInfo** objects	List of desktop usage time.

Table 4-222 DesktopUsedInfo

Parameter	Type	Description
date	String	Date. The format is yyyy-MM-dd (UTC time).
use_time	String	Total online duration, in hours. The value is accurate to two decimal places, for example, 1.32.

Status code: default

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Table 4-223 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

None

Example Responses

Status code: 200

Response to the request for querying the desktop usage duration.


```
{
  "desktop_used_info_list" : [ {
    "desktop_id" : "c6e6dbd7-c950-471d-a6a7-01d0fb62f450",
    "used_info_list" : [ {
      "date" : "2022-12-09",
      "use_time" : 12.62
    }, {
      "date" : "2022-12-10",
      "use_time" : 2.62
    }, {
      "date" : "2022-12-11",
      "use_time" : 1.02
    }, {
      "date" : "2022-12-12",
      "use_time" : 0
    }, {
      "date" : "2022-12-13",
      "use_time" : 0
    }, {
      "date" : "2022-12-14",
      "use_time" : 3.87
    }, {
      "date" : "2022-12-15",
      "use_time" : 3.56
    } ]
  }, {
    "desktop_id" : "d5367f84-1d64-498e-9b92-093002ac6ce9",
    "used_info_list" : [ {
      "date" : "2022-12-09",
      "use_time" : 10.56
    }, {
      "date" : "2022-12-10",
      "use_time" : 1.38
    }, {
      "date" : "2022-12-11",
      "use_time" : 0
    }, {
      "date" : "2022-12-12",
      "use_time" : 0
    }, {
      "date" : "2022-12-13",
      "use_time" : 0
    }, {
      "date" : "2022-12-14",
      "use_time" : 3.87
    }, {
```

```
    "date" : "2022-12-15",
    "use_time" : 3.56
   } ]
  } ],
  "total_count" : 2
}
```

Status Codes

Status Code	Description
200	Response to the request for querying the desktop usage duration.
default	Error response.

Error Codes

See **Error Codes**.

4.4 User

4.4.1 Querying Users

Function

Query the desktop user list.

Debugging

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

URI

GET /v2/{project_id}/users

Table 4-224 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Table 4-225 Query Parameters

Parameter	Mandatory	Type	Description
user_name	No	String	Specifies the desktop username. The value contains 1 to 20 characters and cannot contain special characters or start with a digit.
limit	No	String	Limits the quantity of returned users in pagination query. If this parameter is not specified, all users that meet the query criteria are returned.
offset	No	String	Start number of records in pagination query.
description	No	String	User description query (fuzzy match).
active_type	No	String	Activation type. The default value is **USER_ACTIVATE**. • USER_ACTIVATE: activated by the user • ADMIN_ACTIVATE: activated by the administrator
group_name	No	String	Desktop user group name (exact matching).

Request Parameters

Table 4-226 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

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Response Parameters

Status code: 200

Table 4-227 Response body parameters

Parameter	Type	Description
total_count	Integer	Total number of users.
users	Array of **User** objects	User list.

Table 4-228 User

Parameter	Type	Description
id	String	User ID.
user_name	String	Desktop username.
user_email	String	User mailbox.
total_desktops	Integer	Total number of cloud desktops bound to a user.
user_phone	String	Mobile number.
active_type	String	Activation type. The default value is **USER_ACTIVATE**. • USER_ACTIVATE: activated by the user • ADMIN_ACTIVATE: activated by the administrator
is_pre_user	Boolean	Indicates whether the user is a pre-created user.
account_expires	String	Account expiration time. **0** indicates that the account never expires.
password_never_expired	Boolean	Indicates whether the password never expires. **true** indicates that the password never expires, and **false** indicates that the password will expire.
account_expired	Boolean	Indicates whether the account has expired. **true** indicates that the account has expired, and **false** indicates that the account has not expired.
enable_change_password	Boolean	Indicates whether the password can be changed. **true** indicates that the password can be changed, and **false** indicates that the password cannot be changed.

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Parameter	Type	Description
next_login_change_password	Boolean	Indicates whether the password needs to be reset upon the next login. **true** indicates that the password needs to be reset, and **false** indicates that the password does not need to be reset.
description	String	User description.
locked	Boolean	Indicates whether the account is locked. **true** indicates that the account is locked, and **false** indicates that the account is not locked.
disabled	Boolean	Indicates whether the account is disabled. **true** indicates that the account is disabled, and **false** indicates that the account is not disabled.

Status code: 400

Table 4-229 Response body parameters

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

Status code: 401

Table 4-230 Response body parameters

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

Status code: 403

Table 4-231 Response body parameters

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

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Status code: 404

Table 4-232 Response body parameters

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

Status code: 405

Table 4-233 Response body parameters

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

Status code: 500

Table 4-234 Response body parameters

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

Status code: 503

Table 4-235 Response body parameters

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

Example Requests

```
GET /v2/0bec5db98280d2d02fd6c00c2de791ce/users?limit=10
```

Example Responses

Status code: 200

Response to the request for querying the Workspace user list.

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```
{
  "total_count" : 2,
  "users" : [ {
    "id" : "8a2c3f9579d240820179d51e6caf0001",
    "user_name" : "api-test",
    "user_email" : "test@huawei.com",
    "total_desktops" : 0,
    "account_expires" : "0",
    "enable_change_password" : true,
    "next_login_change_password" : true,
    "locked" : false,
    "disabled" : false
  }, {
    "id" : "8a2c3f9579d240820179d51e6caf0002",
    "user_name" : "api-test2",
    "user_email" : "test@huawei.com",
    "total_desktops" : 0,
    "account_expires" : "0",
    "enable_change_password" : true,
    "next_login_change_password" : true,
    "locked" : false,
    "disabled" : false
  } ]
}
```


Status Codes

Status Code	Description
200	Response to the request for querying the Workspace user list.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.4.2 Creating Users

Function

Create a desktop user.

Debugging

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

URI

POST /v2/{project_id}/users

Table 4-236 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-237 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Table 4-238 Request body parameters

Parameter	Mandatory	Type	Description
user_name	Yes	String	Username.
user_email	No	String	User mailbox.
account_expires	No	String	Account expiration time. **0** indicates that the account never expires. The time format is yyyy-MM-ddTHH:mm:ssZ or yyyy-MM-ddTHH:mm:ss.SSSZ.

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Parameter	Mandatory	Type	Description
active_type	No	String	Activation type. The default value is **USER_ACTIVATE**. • USER_ACTIVATE: activated by the user • ADMIN_ACTIVATE: activated by the administrator
user_phone	No	String	Mobile number of the user.
password	No	String	Initial user password. This parameter is required for the administrator activation mode.
enable_change_password	No	Boolean	Indicates whether a user can change the password. The default value is **true**. This field will be invalid later on and will be set to **true** during creation.
next_login_change_password	No	Boolean	Whether the password must be changed upon the next login. The default value is **true**. This field will be invalid later on and will be set to **true** during creation.
group_ids	No	Array of strings	Dedicated IDs of the user group.
description	No	String	User description. The value contains a maximum of 255 characters.
alias_name	No	String	Alias.

Response Parameters

Status code: 201

Table 4-239 Response body parameters

Parameter	Type	Description
id	String	User ID.

Status code: 400

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Table 4-240 Response body parameters

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

Status code: 401

Table 4-241 Response body parameters

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

Status code: 403

Table 4-242 Response body parameters

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

Status code: 404

Table 4-243 Response body parameters

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

Status code: 405

Table 4-244 Response body parameters

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

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Status code: 500

Table 4-245 Response body parameters

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

Status code: 503

Table 4-246 Response body parameters

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

Example Requests

```
POST /v2/0bec5db98280d2d02fd6c00c2de791ce/users

{
  "user_name" : "api-test",
  "user_email" : "test@huawei.com"
}
```

Example Responses

Status code: 201

Response to the request for creating a Workspace user.

```
{
  "id" : "8a2c3f9579d240820179d51e6caf0001"
}
```

Status Codes

Status Code	Description
201	Response to the request for creating a Workspace user.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.

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Status Code	Description
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.4.3 Deleting a Specified User

Function

Delete a specified desktop user.

Debugging

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

URI

DELETE /v2/{project_id}/users/{user_id}

Table 4-247 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
user_id	Yes	String	User ID.

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Request Parameters

Table 4-248 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 400

Table 4-249 Response body parameters

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

Status code: 401

Table 4-250 Response body parameters

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

Status code: 403

Table 4-251 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

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Parameter	Type	Description
error_msg	String	Error description.

Status code: 404

Table 4-252 Response body parameters

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

Status code: 405

Table 4-253 Response body parameters

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

Status code: 500

Table 4-254 Response body parameters

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

Status code: 503

Table 4-255 Response body parameters

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

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Example Requests

```
DELETE /v2/0bec5db98280d2d02fd6c00c2de791ce/users/8a2c3f9579d240820179d51e6caf0001
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.
204	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.4.4 Querying User Details

Function

Query details about a specified desktop user.

Debugging

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

URI

GET /v2/{project_id}/users/{user_id}

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Table 4-256 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
user_id	Yes	String	User ID.

Request Parameters

Table 4-257 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

Table 4-258 Response body parameters

Parameter	Type	Description
user_detail	**UserDetail** object	User details.

Table 4-259 UserDetail

Parameter	Type	Description
description	String	User description.
id	String	User ID.
user_name	String	Desktop username.
user_email	String	User mailbox.

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Parameter	Type	Description
user_phone	String	Mobile number.
active_type	String	Activation type. The default value is **USER_ACTIVATE**. • USER_ACTIVATE: activated by the user • ADMIN_ACTIVATE: activated by the administrator
object_sid	String	SID of a user.
sam_account_name	String	Login name (earlier Windows versions).
user_principal_name	String	User login name.
full_name	String	Full name.
distinguished_name	String	Unique location of a user in the domain tree.
account_type	Integer	Account type (0: user; 1: user group).
when_created	String	Character corresponding to the millisecond in UTC time. The format is yyyy-MM-ddTHH:mm:ss.SSSZ.
account_expires	Long	UTC time corresponding to the last day of the account validity period, in milliseconds.
is_pre_user	Boolean	Indicates whether the user is a pre-created user. **true** indicates that the user is a pre-created user, and **false** indicates that the user is not a pre-created user.
user_expired	Boolean	Indicates whether the account has expired. **true** indicates that the account has expired, and **false** indicates that the account has not expired.
locked	Boolean	Indicates whether the account is locked. **true** indicates that the account is locked, and **false** indicates that the account is not locked.
enabled_change_password	Boolean	Indicates whether the password can be changed. **true** indicates that the password can be changed, and **false** indicates that the password cannot be changed.
password_never_expired	Boolean	Indicates whether the password never expires. **true** indicates that the password never expires, and **false** indicates that the password will expire.

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Parameter	Type	Description
next_login_change_password	Boolean	Indicates whether the password needs to be reset upon the next login. **true** indicates that the password needs to be reset, and **false** indicates that the password does not need to be reset.
disabled	Boolean	Indicates whether the account is disabled. **true** indicates that the account is disabled, and **false** indicates that the account is not disabled.
group_names	Array of strings	Groups that a user joins.
total_desktops	Integer	Total number of cloud desktops bound to a user.

Status code: 400

Table 4-260 Response body parameters

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

Status code: 401

Table 4-261 Response body parameters

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

Status code: 403

Table 4-262 Response body parameters

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

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Status code: 404

Table 4-263 Response body parameters

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

Status code: 405

Table 4-264 Response body parameters

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

Status code: 500

Table 4-265 Response body parameters

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

Status code: 503

Table 4-266 Response body parameters

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

Example Requests

```
GET /v2/0bec5db98280d2d02fd6c00c2de791ce/users/8a2c3f9579d240820179d51e6caf0001

null
```

Example Responses

Status code: 200

Response to the request for querying desktop user details.


```
{
  "user_detail" : {
    "description" : "API test user.",
    "id" : "8a2c3f9579d240820179d51e6caf0001",
    "user_name" : "api-test",
    "user_email" : "test@huawei.com",
    "object_sid" : "8a2c3f9579d240820179d51e6caf0001",
    "sam_account_name" : "api-test",
    "full_name" : "api-test",
    "distinguished_name" : "api-test",
    "account_type" : 0,
    "when_created" : "2021-06-03T19:43:31.000Z",
    "account_expires" : 0,
    "user_expired" : false,
    "locked" : false,
    "enabled_change_password" : true,
    "password_never_expired" : false,
    "next_login_change_password" : true,
    "disabled" : false,
    "group_names" : [ "DomainUsers" ],
    "total_desktops" : 0
  }
}
```


Status Codes

Status Code	Description
200	Response to the request for querying desktop user details.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.4.5 Modifying User Information

Function

Modify desktop user information.

Debugging

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

URI

PUT /v2/{project_id}/users/{user_id}

Table 4-267 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
user_id	Yes	String	User ID.

Request Parameters

Table 4-268 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Table 4-269 Request body parameters

Parameter	Mandatory	Type	Description
description	No	String	User description.
user_email	No	String	User mailbox.
user_phone	No	String	Mobile number.

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Parameter	Mandatory	Type	Description
active_type	No	String	Activation type. The default value is **USER_ACTIVATE**. • USER_ACTIVATE: activated by the user • ADMIN_ACTIVATE: activated by the administrator
account_expires	No	String	Account expiration time. **0** indicates that the account never expires.
enable_change_password	No	Boolean	Indicates whether the password can be changed. **true** indicates that the password can be changed, and **false** indicates that the password cannot be changed.
next_login_change_password	No	Boolean	Indicates whether the password needs to be reset upon the next login. **true** indicates that the password needs to be reset, and **false** indicates that the password does not need to be reset.
password_never_expired	No	Boolean	Indicates whether the password never expires. **true** indicates that the password never expires, and **false** indicates that the password will expire.
disabled	No	Boolean	Indicates whether the account is disabled. **true** indicates that the account is disabled, and **false** indicates that the account is not disabled.

Response Parameters

Status code: 200

Table 4-270 Response body parameters

Parameter	Type	Description
id	String	User ID.

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Status code: 400

Table 4-271 Response body parameters

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

Status code: 401

Table 4-272 Response body parameters

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

Status code: 403

Table 4-273 Response body parameters

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

Status code: 404

Table 4-274 Response body parameters

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

Status code: 405

Table 4-275 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

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Parameter	Type	Description
error_msg	String	Error description.

Status code: 500

Table 4-276 Response body parameters

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

Status code: 503

Table 4-277 Response body parameters

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

Example Requests

```
PUT /v2/0bec5db98280d2d02fd6c00c2de791ce/users/8a2c3f9579d240820179d51e6caf0001

{
  "user_email" : "test@huawei.com",
  "description" : "API test user."
}
```

Example Responses

Status code: 200

Response to the request for modifying user information.

```
{
  "id" : "8a2c3f9579d240820179d51e6caf0001"
}
```

Status Codes

Status Code	Description
200	Response to the request for modifying user information.

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Status Code	Description
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.4.6 Operation user.

Function

Perform operations on a user, including locking and unlocking a user, and resetting a password. You are advised to use the **v2/{project_id}/users/{user_id}/random-password** API to reset a password. If no notification mode is available, the **/v2/{project_id}/users/{user_id}/random-password** API must be used.

Debugging

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

URI

POST /v2/{project_id}/users/{user_id}/actions

Table 4-278 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
user_id	Yes	String	User ID.

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Request Parameters

Table 4-279 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Table 4-280 Request body parameters

Parameter	Mandatory	Type	Description
op_type	Yes	String	Operation type. The options are as follows: • LOCK: locks the user • UNLOCK: unlocks the user • RESET_PWD: resets the user password

Response Parameters

Status code: 400

Table 4-281 Response body parameters

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

Status code: 401

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Table 4-282 Response body parameters

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

Status code: 403

Table 4-283 Response body parameters

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

Status code: 404

Table 4-284 Response body parameters

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

Status code: 405

Table 4-285 Response body parameters

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

Status code: 500

Table 4-286 Response body parameters

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

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Status code: 503

Table 4-287 Response body parameters

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

Example Requests

- POST /v2/0bec5db98280d2d02fd6c00c2de791ce/users/8a2c3f9479d5cf360179d622364f0008/actions

```
{
  "op_type" : "LOCK"
}
```

- ```
  {
    "op_type" : "UNLOCK"
  }
  ```
- ```
  {
    "op_type" : "RESET_PWD"
  }
  ```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

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4.4.7 Queries MFA devices.

Function

Queries MFA devices of a user.

Debugging

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

URI

GET /v2/{project_id}/users/{user_id}/otp-devices

Table 4-288 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
user_id	Yes	String	User ID.

Request Parameters

Table 4-289 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

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Table 4-290 Response body parameters

Parameter	Type	Description
otp_devices	Array of **OtpDevice** objects	OTP device.

Table 4-291 OtpDevice

Parameter	Type	Description
id	String	User OTP information ID.
user_id	String	User ID.
user_name	String	Username.
status	String	User OTP device status. UNREGISTER: unbound REGISTERED: bound
create_time	String	Time when a user's OTP device is bound.

Status code: 400

Table 4-292 Response body parameters

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

Status code: 401

Table 4-293 Response body parameters

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

Status code: 403

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Table 4-294 Response body parameters

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

Status code: 404

Table 4-295 Response body parameters

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

Status code: 405

Table 4-296 Response body parameters

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

Status code: 500

Table 4-297 Response body parameters

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

Status code: 503

Table 4-298 Response body parameters

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

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Example Requests

```
GET /v2/0bec5db98280d2d02fd6c00c2de791ce/users/8a2c3f9579d240820179d51e6caf0001/otp-devices
```

Example Responses

Status code: 200

Normal.

```
{
  "otp_devices" : [ {
    "id" : "5311a768c22f4d30914fe50ffdfd1ba5",
    "user_id" : "8a2c3f9579d240820179d51e6caf0001",
    "user_name" : "zhangsan",
    "status" : "UNREGISTER",
    "create_time" : "2020-04-10 06:45:14"
  } ]
}
```

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.4.8 Unbinds an OTP device.

Function

Unbinds an OTP device from a user.

Debugging

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

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URI

DELETE /v2/{project_id}/users/{user_id}/otp-devices

Table 4-299 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
user_id	Yes	String	User ID.

Request Parameters

Table 4-300 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Table 4-301 Request body parameters

Parameter	Mandatory	Type	Description
otp_ids	No	Array of strings	ID array of the OTP to be unbound.

Response Parameters

Status code: 400

Table 4-302 Response body parameters

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

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Status code: 401

Table 4-303 Response body parameters

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

Status code: 403

Table 4-304 Response body parameters

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

Status code: 404

Table 4-305 Response body parameters

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

Status code: 405

Table 4-306 Response body parameters

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

Status code: 500

Table 4-307 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

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Parameter	Type	Description
error_msg	String	Error description.

Status code: 503

Table 4-308 Response body parameters

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

Example Requests

```
DELETE /v2/0bec5db98280d2d02fd6c00c2de791ce/users/8a2c3f9579d240820179d51e6caf0001/otp-devices

{
  "otp_ids" : [ "5311a768c22f4d30914fe50ffdfd1ba5", "5311a768c22f4d30914fe50ffdfd1ba6" ]
}
```

Example Responses

None

Status Codes

Status Code	Description
204	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

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4.4.9 Creating Users in Batches

Function

Create users in batches.

Debugging

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

URI

POST /v2/{project_id}/users/batch-create

Table 4-309 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-310 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Table 4-311 Request body parameters

Parameter	Mandatory	Type	Description
users	Yes	Array of **CreateUserRequest** objects	Request for creating a single user.

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Table 4-312 CreateUserRequest

Parameter	Mandatory	Type	Description
user_name	Yes	String	Username.
user_email	No	String	User mailbox.
account_expires	No	String	Account expiration time. **0** indicates that the account never expires. The time format is yyyy-MM-ddTHH:mm:ssZ or yyyy-MM-ddTHH:mm:ss.SSSZ.
active_type	No	String	Activation type. The default value is **USER_ACTIVATE**. • USER_ACTIVATE: activated by the user • ADMIN_ACTIVATE: activated by the administrator
user_phone	No	String	Mobile number of the user.
password	No	String	Initial user password. This parameter is required for the administrator activation mode.
enable_change_password	No	Boolean	Indicates whether a user can change the password. The default value is **true**. This field will be invalid later on and will be set to **true** during creation.
next_login_change_password	No	Boolean	Whether the password must be changed upon the next login. The default value is **true**. This field will be invalid later on and will be set to **true** during creation.
group_ids	No	Array of strings	Dedicated IDs of the user group.
description	No	String	User description. The value contains a maximum of 255 characters.
alias_name	No	String	Alias.

Response Parameters

Status code: 400

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Table 4-313 Response body parameters

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

Status code: 401

Table 4-314 Response body parameters

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

Status code: 403

Table 4-315 Response body parameters

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

Status code: 404

Table 4-316 Response body parameters

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

Status code: 405

Table 4-317 Response body parameters

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

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Status code: 500

Table 4-318 Response body parameters

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

Status code: 503

Table 4-319 Response body parameters

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

Example Requests

```
POST /v2/0bec5db98280d2d02fd6c00c2de791ce/users/batch-create

{
  "users" : [ {
    "user_name" : "abc",
    "user_email" : "xxx@mail.com"
  } ]
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Response to the request for creating a Workspace user.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.

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Status Code	Description
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.4.10 Resetting a Random Password for a User

Function

Reset the password for a user.

Debugging

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

URI

GET /v2/{project_id}/users/{user_id}/random-password

Table 4-320 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
user_id	Yes	String	User ID.

Table 4-321 Query Parameters

Parameter	Mandatory	Type	Description
notification_type	No	String	User notification mode. The options are **email** and **phone**, which are separated by commas (,). When activation by users is used, the notification mode must be contained so that the user can receive the password notification.

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Request Parameters

Table 4-322 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

Table 4-323 Response body parameters

Parameter	Type	Description
password	String	Password.

Status code: 400

Table 4-324 Response body parameters

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

Status code: 401

Table 4-325 Response body parameters

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

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Status code: 403

Table 4-326 Response body parameters

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

Status code: 404

Table 4-327 Response body parameters

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

Status code: 405

Table 4-328 Response body parameters

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

Status code: 500

Table 4-329 Response body parameters

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

Status code: 503

Table 4-330 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

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Parameter	Type	Description
error_msg	String	Error description.

Example Requests

```
GET /v2/0bec5db98280d2d02fd6c00c2de791ce/users/8a2c3f9579d240820179d51e6caf0001/random-password
```

Example Responses

Status code: 200

Normal.

```
{
  "password" : "xxcsafxxA%"
}
```

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.5 User Group

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4.5.1 Querying User Groups

Function

Query user groups. Pagination is supported.

Debugging

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

URI

GET /v2/{project_id}/groups

Table 4-331 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Table 4-332 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	String	Limits the quantity of returned user groups in pagination query. If this parameter is not specified or is set to 0, the default value **100** is used. The value starts from 1 and the maximum value is 100.
offset	No	String	Specifies the start position of pagination query. The value starts from 0. The default value is **0**. This parameter must be used together with **limit**.
keyword	No	String	Specifies the search keyword of a user group. For example, fuzzy query by group name.

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Request Parameters

Table 4-333 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

Table 4-334 Response body parameters

Parameter	Type	Description
total_count	Integer	Total number of user groups that meet the search criteria.
user_groups	Array of **UserGroupInfo** objects	User groups.

Table 4-335 UserGroupInfo

Parameter	Type	Description
name	String	User group name.
id	String	User group ID.
create_time	String	Time when a user group is created. The value is a UTC time in the format of yyyy-MM-ddTHH:mm:ss.SSSZ.
description	String	User group description.
user_quantity	Integer	Number of users in the user list.
parent	**UserGroupInfo** object	Upper-level user group of a user group.

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Parameter	Type	Description
realm_id	String	User group domain ID.
platform_type	String	Type of a user group. • AD: AD domain user group • LOCAL: local LiteAS user group
group_dn	String	Name of a user group.
domain	String	Domain name of a user group.
sid	String	SID of a user group.

Status code: 400

Table 4-336 Response body parameters

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

Status code: 401

Table 4-337 Response body parameters

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

Status code: 403

Table 4-338 Response body parameters

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

Status code: 404

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Table 4-339 Response body parameters

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

Status code: 405

Table 4-340 Response body parameters

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

Status code: 500

Table 4-341 Response body parameters

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

Status code: 503

Table 4-342 Response body parameters

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

Example Requests

```
GET /v2/92c84e5bce3d48d7ab5714a44901eb08/groups?limit=10&offset=20
```

Example Responses

Status code: 200

Response to the request for querying a user group.

```
{
  "total_count" : 2,
```

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```
 "user_groups" : [ {
   "id" : "99558194716db7d601719f9b61850042",
   "sid" : "99558194716db7d601719f9b61850042",
   "name" : "group1",
   "realm_id" : "695581943266db7a601719f9e61850058",
   "domian" : "local.com",
   "description" : "for test",
   "platform_type" : "LOCAL",
   "create_time" : "2023-02-15T02:27:05.000Z",
   "user_quantity" : 10
 }, {
   "id" : "99558194716db7d601719f9b61850000",
   "sid" : "99558194716db7d601719f9b61850000",
   "name" : "group2",
   "realm_id" : "453381943266db7a601719f9e61850044",
   "domian" : "local.com",
   "description" : "for test2",
   "platform_type" : "LOCAL",
   "create_time" : "2023-01-16T02:27:05.000Z",
   "user_quantity" : 20
 } ]
}
```


Status Codes

Status Code	Description
200	Response to the request for querying a user group.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.5.2 Creating a User Group

Function

Create a user group.

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Debugging

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

URI

POST /v2/{project_id}/groups

Table 4-343 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-344 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Table 4-345 Request body parameters

Parameter	Mandatory	Type	Description
group_name	Yes	String	User group name.
platform_type	Yes	String	User group type. • AD: AD domain user group • LOCAL: local LiteAS user group
description	No	String	User group description.

Response Parameters

Status code: 201

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Table 4-346 Response body parameters

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

Status code: 400

Table 4-347 Response body parameters

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

Status code: 401

Table 4-348 Response body parameters

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

Status code: 403

Table 4-349 Response body parameters

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

Status code: 404

Table 4-350 Response body parameters

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

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Status code: 405

Table 4-351 Response body parameters

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

Status code: 500

Table 4-352 Response body parameters

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

Status code: 503

Table 4-353 Response body parameters

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

Example Requests

```
POST /v2/92c84e5bce3d48d7ab5714a44901eb08/groups

{
  "group_name" : "Domain Users",
  "description" : "describe",
  "platform_type" : "AD"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.

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Status Code	Description
201	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.5.3 Deleting User Groups in Batches

Function

Delete user groups in batches.

Debugging

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

URI

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

Table 4-354 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-355 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Table 4-356 Request body parameters

Parameter	Mandatory	Type	Description
group_ids	Yes	Array of strings	User group IDs.

Response Parameters

Status code: 400

Table 4-357 Response body parameters

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

Status code: 401

Table 4-358 Response body parameters

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

Status code: 403

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Table 4-359 Response body parameters

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

Status code: 404

Table 4-360 Response body parameters

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

Status code: 405

Table 4-361 Response body parameters

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

Status code: 500

Table 4-362 Response body parameters

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

Status code: 503

Table 4-363 Response body parameters

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

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Example Requests

```
POST /v2/0bec5db98280d2d02fd6c00c2de791ce/groups/batch-delete

{
  "group_ids" : [ "8a2c3f9479d5cf360179d61b07070000", "8a2c3f9479d5cf360179d61b18860004" ]
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.
204	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.5.4 Deleting a User Group

Function

Deletes a user group.

Debugging

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

URI

DELETE /v2/{project_id}/groups/{group_id}

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Table 4-364 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
group_id	Yes	String	Desktop user group ID.

Request Parameters

Table 4-365 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 400

Table 4-366 Response body parameters

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

Status code: 401

Table 4-367 Response body parameters

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

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Status code: 403

Table 4-368 Response body parameters

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

Status code: 404

Table 4-369 Response body parameters

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

Status code: 405

Table 4-370 Response body parameters

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

Status code: 500

Table 4-371 Response body parameters

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

Status code: 503

Table 4-372 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

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Parameter	Type	Description
error_msg	String	Error description.

Example Requests

```
DELETE /v2/92c84e5bce3d48d7ab5714a44901eb08/groups/daf154d328823028
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.
204	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.5.5 Modifying User Group Information

Function

Modify user group information.

Debugging

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

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URI

PUT /v2/{project_id}/groups/{group_id}

Table 4-373 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
group_id	Yes	String	Desktop user group ID.

Request Parameters

Table 4-374 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Table 4-375 Request body parameters

Parameter	Mandatory	Type	Description
description	No	String	User group description.
group_name	No	String	User group name. Note that AD user groups cannot be renamed.

Response Parameters

Status code: 400

Table 4-376 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

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Parameter	Type	Description
error_msg	String	Error description.

Status code: 401

Table 4-377 Response body parameters

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

Status code: 403

Table 4-378 Response body parameters

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

Status code: 404

Table 4-379 Response body parameters

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

Status code: 405

Table 4-380 Response body parameters

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

Status code: 500

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Table 4-381 Response body parameters

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

Status code: 503

Table 4-382 Response body parameters

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

Example Requests

```
PUT /v2/92c84e5bce3d48d7ab5714a44901eb08/groups/e6b0804f90ee11ed99bcfa163e5a5e29

{
  "group_name" : "aabbcc",
  "description" : "describe"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

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Error Codes

See **Error Codes**.

4.5.6 Performing Operations on a User Group

Function

Perform operations on user groups, such as adding and deleting users.

Debugging

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

URI

POST /v2/{project_id}/groups/{group_id}/actions

Table 4-383 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
group_id	Yes	String	Desktop user group ID.

Request Parameters

Table 4-384 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

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Table 4-385 Request body parameters

Parameter	Mandatory	Type	Description
user_ids	Yes	Array of strings	IDs of users to be added or removed.
op_type	Yes	String	Operation type. • ADD: adding • DELETE: deleting

Response Parameters

Status code: 400

Table 4-386 Response body parameters

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

Status code: 401

Table 4-387 Response body parameters

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

Status code: 403

Table 4-388 Response body parameters

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

Status code: 404

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Table 4-389 Response body parameters

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

Status code: 405

Table 4-390 Response body parameters

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

Status code: 500

Table 4-391 Response body parameters

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

Status code: 503

Table 4-392 Response body parameters

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

Example Requests

```
POST /v2/92c84e5bce3d48d7ab5714a44901eb08/groups/c3cf7492-a696-453e-bafc-e14f52d9f4c8/actions

{
  "user_ids" : [ "995581bc716db75d01719cb0bfe6xxxx" ],
  "op_type" : "ADD"
}
```

Example Responses

None

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Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.5.7 Querying Users in a User Group

Function

Query users in a user group.

Debugging

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

URI

GET /v2/{project_id}/groups/{group_id}/users

Table 4-393 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
group_id	Yes	String	User group ID.

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Table 4-394 Query Parameters

Parameter	Mandatory	Type	Description
user_name	No	String	The username supports fuzzy search.
description	No	String	The user description supports fuzzy search.
active_type	No	String	Activation type. • **USER_ACTIVATE**: activated by the user. • **ADMIN_ACTIVATE**: activated by the administrator.
limit	No	String	Maximum number of desktops that can be returned in a pagination query. If this parameter is not specified or is set to **0**, the default value **2000** is used. The maximum value is **2000**.
offset	No	String	Start position for pagination query. The value starts from 0.

Request Parameters

Table 4-395 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

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Table 4-396 Response body parameters

Parameter	Type	Description
users	Array of **UserInGroup** objects	Users associated with the group.
total_count	Integer	Total number of users in the user list.

Table 4-397 UserInGroup

Parameter	Type	Description
id	String	User ID.
user_name	String	Desktop username.
user_email	String	User mailbox.
user_phone	String	Mobile number of the user.
description	String	User description.

Example Requests

None

Example Responses

Status code: 200

Response to the list of users associated with the group.

```
{
  "total_count" : 2,
  "users" : [ {
    "user_name" : "user1",
    "user_email" : "xx1@mail.com",
    "user_phone" : "18818008887",
    "id" : "8357fd328c62447d94e452bf49xxxx"
  }, {
    "user_name" : "user2",
    "user_email" : "xx2@mail.com",
    "user_phone" : "18818008888",
    "id" : "8357fd328c62447d94e452bf495xxxx"
  } ]
}
```

Status Codes

Status Code	Description
200	Response to the list of users associated with the group.

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Error Codes

See **Error Codes**.

4.6 Disk

4.6.1 Deletes a data disk from the desktop.

Function

Deletes a data disk from the desktop. The deleted data disk cannot be restored.

Debugging

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

URI

POST /v2/{project_id}/desktops/{desktop_id}/volumes/batch-delete

Table 4-398 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
desktop_id	Yes	String	Desktop ID.

Request Parameters

Table 4-399 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.

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Table 4-400 Request body parameters

Parameter	Mandatory	Type	Description
volume_ids	No	Array of strings	List of the IDs of data disks to be deleted from the desktop.

Response Parameters

Status code: 200

Table 4-401 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Status code: 400

Table 4-402 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-403 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-404 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

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Status code: 404

Table 4-405 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 409

Table 4-406 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-407 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
{
  "volume_ids" : [ "8a6c7a76-5476-4e13-827d-c331b829e245", "2e49af66-7e7d-4c04-a6a6-0cc094b67009" ]
}
```

Example Responses

Status code: 200

Normal.

```
{
  "job_id" : "abc85365-0b2e-4b4f-a091-f7db72072d4b"
}
```

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Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
409	Operation conflict.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.6.2 Adds a disk to the desktop.

Function

Adds a disk to the desktop.

Debugging

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

URI

POST /v2/{project_id}/volumes

Table 4-408 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-409 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.

Table 4-410 Request body parameters

Parameter	Mandatory	Type	Description
desktop_volumes	No	Array of **AddDesktopVolumesReq** objects	Adds disk parameters.

Table 4-411 AddDesktopVolumesReq

Parameter	Mandatory	Type	Description
desktop_id	No	String	Desktop ID.
volumes	No	Array of **Volume** objects	Information about the disks to be added. One desktop can contain a maximum of 10 data disks.

Table 4-412 Volume

Parameter	Mandatory	Type	Description
type	Yes	String	Desktop data disk type, which must be the same as the disk type provided by the system. • SAS: High I/O • SSD: Ultra-high I/O

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Parameter	Mandatory	Type	Description
size	Yes	Integer	Disk capacity in GB. The system disk size ranges from 80 to 32760, and the data disk size ranges from 10 to 32760. The value must be a multiple of 10.

Response Parameters

Status code: 200

Table 4-413 Response body parameters

Parameter	Type	Description
job_id	String	ID of the task for adding a disk.

Status code: 400

Table 4-414 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-415 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-416 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.

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Parameter	Type	Description
error_msg	String	Error description.

Status code: 404

Table 4-417 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 409

Table 4-418 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-419 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
{
  "desktop_volumes" : [ {
    "desktop_id" : "string",
    "volumes" : [ {
      "type" : "string",
      "size" : "integer"
    } ]
  } ]
}
```

Example Responses

Status code: 200

Normal.

```
{
  "job_id" : "1792d3eb-35c6-4e99-8381-abfc8e02126b"
}
```

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
409	Operation conflict.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.6.3 Expands the disk capacity of a desktop.

Function

Expands the disk capacity of a desktop.

Debugging

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

URI

POST /v2/{project_id}/volumes/expand

Table 4-420 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-421 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.

Table 4-422 Request body parameters

Parameter	Mandatory	Type	Description
desktop_volumes_expansion	No	Array of **ExpandVolumesReq** objects	Parameters for expanding the disk capacity.

Table 4-423 ExpandVolumesReq

Parameter	Mandatory	Type	Description
desktop_id	No	String	Desktop ID.
volume_id	No	String	Disk ID.
new_size	No	Integer	Disk size (GB) after capacity expansion.

Response Parameters

Status code: 200

Table 4-424 Response body parameters

Parameter	Type	Description
job_id	String	ID of the disk capacity expansion task.

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Status code: 400

Table 4-425 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-426 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-427 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-428 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 409

Table 4-429 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.

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Parameter	Type	Description
error_msg	String	Error description.

Status code: 500

Table 4-430 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
{
  "desktop_volumes_expansion" : [ {
    "desktop_id" : "string",
    "volume_id" : "string",
    "new_size" : "integer"
  } ]
}
```

Example Responses

Status code: 200

Normal.

```
{
  "job_id" : "41162624-ba52-42f3-bdda-15c6d345ff60"
}
```

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
409	Operation conflict.
500	An internal service error occurred. For details about the error code, see the error code description.

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Error Codes

See **Error Codes**.

4.7 Connection information

4.7.1 Queries login information.

Function

Queries login information.

Debugging

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

URI

GET /v2/{project_id}/connections/desktops

Table 4-431 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Table 4-432 Query Parameters

Parameter	Mandatory	Type	Description
start_time	No	String	Start time of the query. If this parameter is specified, all login records after the specified time are returned. The format is 2016-08-20T21:11Z. If the end time is specified, the start time is mandatory.
end_time	No	String	End time of the query. If this parameter is specified, all login records before the specified time are returned. The format is 2016-08-20T21:11Z. If the start time is specified, the end time is mandatory.

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Parameter	Mandatory	Type	Description
user_name	No	String	Username for logging in to the desktop.
computer_name	No	String	Computer name, which is displayed in the OS information.
terminal_type	No	String	System type of the terminal used to log in to the desktop. Currently, the value can be WI (Workspace client).
limit	No	String	Pagination query. The value ranges from 0 to 100 and defaults to **20**.
offset	No	String	Start position for pagination query. The value starts from 0.

Request Parameters

Table 4-433 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

Table 4-434 Response body parameters

Parameter	Type	Description
total_count	Integer	Total number of user login records.

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Parameter	Type	Description
records	Array of **Record** objects	User login record.

Table 4-435 Record

Parameter	Type	Description
computer_name	String	Computer name.
user_name	String	Username.
terminal_mac	String	Terminal MAC address.
terminal_name	String	Terminal name.
terminal_ip	String	Terminal IP address.
client_version	String	AccessClient version.
terminal_type	String	Terminal OS type.
agent_version	String	AccessAgent version.
desktop_ip	String	Desktop IP address.
connection_start_time	String	Time when a connection starts.
connection_setup_time	String	Time when a connection is set up.
connection_end_time	String	Time when a connection ends.
is_reconnect	Boolean	Whether to reconnect.
connection_failure_reason	String	Connection failure cause.

Status code: 400

Table 4-436 Response body parameters

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

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Status code: 401

Table 4-437 Response body parameters

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

Status code: 403

Table 4-438 Response body parameters

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

Status code: 404

Table 4-439 Response body parameters

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

Status code: 405

Table 4-440 Response body parameters

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

Status code: 500

Table 4-441 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

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Parameter	Type	Description
error_msg	String	Error description.

Status code: 503

Table 4-442 Response body parameters

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

Example Requests

```
GET /v2/0e69423d4400f4a82f67c0059a1e4cc8/connections/desktops?offset=258
```

Example Responses

Status code: 200

Login information query response.

```
{
  "total_count" : 4,
  "records" : [ {
    "computer_name" : "JY011",
    "user_name" : "jy01@local.com",
    "terminal_mac" : "00-ac-9c-c7-9a-df",
    "terminal_name" : "DESKTOP-EG0P3TR",
    "terminal_ip" : "8.5.60.58",
    "client_version" : "1.8.00005",
    "terminal_type" : "Windows 10",
    "agent_version" : "1.8.00005.10546",
    "desktop_ip" : "172.16.148.250",
    "connection_start_time" : "2020-04-24T03:02:47Z",
    "connection_setup_time" : "2020-04-24T03:02:49Z",
    "connection_end_time" : "2020-04-24T03:36:43Z",
    "is_reconnect" : false
  }, {
    "computer_name" : "JY011",
    "user_name" : "jy01@local.com",
    "terminal_mac" : "00-ac-9c-c7-9a-df",
    "terminal_name" : "DESKTOP-EG0P3TR",
    "terminal_ip" : "8.5.60.58",
    "client_version" : "1.8.00005",
    "terminal_type" : "Windows 10",
    "agent_version" : "1.8.00005.10546",
    "desktop_ip" : "172.16.148.250",
    "connection_start_time" : "2020-04-23T08:58:02Z",
    "connection_setup_time" : "2020-04-23T08:58:05Z",
    "connection_end_time" : "2020-04-23T22:45:00Z",
    "is_reconnect" : false
  } ]
}
```

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Status Codes

Status Code	Description
200	Login information query response.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.7.2 Exports connection records.

Function

Exports connection records.

Debugging

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

URI

GET /v2/{project_id}/connections/desktops/export

Table 4-443 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Table 4-444 Query Parameters

Parameter	Mandatory	Type	Description
start_time	No	String	Start time of the query. If this parameter is specified, all login records after the specified time are returned. The format is 2016-08-20T21:11Z. If the end time is specified, the start time is mandatory.
end_time	No	String	End time of the query. If this parameter is specified, all login records before the specified time are returned. The format is 2016-08-20T21:11Z. If the start time is specified, the end time is mandatory.
user_name	No	String	Username for logging in to the desktop.
computer_name	No	String	Computer name, which is displayed in the OS information.
terminal_type	No	String	OS type of the terminal for logging in to a desktop.
language	No	String	Language of the exported records, which is English by default. • zh_CN: Chinese • en_US: English

Request Parameters

Table 4-445 Request header parameters

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

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Parameter	Mandatory	Type	Description
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

Table 4-446 Response body parameters

Parameter	Type	Description
-	File	Exports the user login information file.

Status code: 400

Table 4-447 Response body parameters

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

Status code: 401

Table 4-448 Response body parameters

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

Status code: 403

Table 4-449 Response body parameters

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

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Status code: 404

Table 4-450 Response body parameters

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

Status code: 405

Table 4-451 Response body parameters

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

Status code: 500

Table 4-452 Response body parameters

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

Status code: 503

Table 4-453 Response body parameters

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

Example Requests

```
GET /v2/8dc9c40a06574a598941b254d4b63b43/connections/desktops/export?
start_time=2020-04-13T01:59Z&end_time=2020-04-30T02:20Z&user_name=jy01@local.com&computer_nam
e=JY011
```

Example Responses

None

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Status Codes

Status Code	Description
200	Exports the user login information file.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.7.3 Queries the number of login users.

Function

Queries the number of login users. All query parameters cannot be left empty.

Debugging

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

URI

GET /v2/{project_id}/connections/online-users

Table 4-454 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Table 4-455 Query Parameters

Parameter	Mandatory	Type	Description
start_time	No	String	Start time of the query. If this parameter is specified, all login records after the specified time are returned. The format is 2016-08-20T21:11Z. If the end time is specified, the start time is mandatory. The type query takes precedence over the time query. Either type query or time query must exist.
end_time	No	String	End time of the query. If this parameter is specified, all login records before the specified time are returned. The format is 2016-08-20T21:11Z. If the start time is specified, the end time is mandatory. The type query takes precedence over the time query. Either type query or time query must exist.
query_type	No	String	Query type. The type query takes precedence over the time query. Either type query or time query must exist. - MONTH: query by month - WEEK: query by week -DAY: query by day

Request Parameters

Table 4-456 Request header parameters

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

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Parameter	Mandatory	Type	Description
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

Table 4-457 Response body parameters

Parameter	Type	Description
time_counts	Array of strings	Returns information about previous logins. The query time and count are separated by a colon (:). If the query is performed by day or the time segment is within the same day, the query time is counted by hour. Otherwise, the query time is counted by day.

Status code: 400

Table 4-458 Response body parameters

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

Status code: 401

Table 4-459 Response body parameters

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

Status code: 403

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Table 4-460 Response body parameters

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

Status code: 404

Table 4-461 Response body parameters

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

Status code: 405

Table 4-462 Response body parameters

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

Status code: 500

Table 4-463 Response body parameters

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

Status code: 503

Table 4-464 Response body parameters

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

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Example Requests

```
GET v2/8dc9c40a06574a598941b254d4b63b43/connections/online-users?
start_time=2020-04-20T03:01Z&end_time=2020-04-20T10:01Z

null
```

Example Responses

Status code: 200

Response body for querying the number of login users.

```
{
  "time_counts" : [ "00:00 : 0", "01:00 : 0", "02:00 : 0", "03:00 : 0", "04:00 : 0", "05:00 : 0", "06:00 : 0", "07:00 : 0", "08:00 : 0", "09:00 : 0", "10:00 : 0" ]
}
```

Status Codes

Status Code	Description
200	Response body for querying the number of login users.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.8 Access policy

4.8.1 Creates an access policy.

Function

Creates an access policy.

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Debugging

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

URI

POST /v2/{project_id}/access-policy

Table 4-465 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-466 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Table 4-467 Request body parameters

Parameter	Mandatory	Type	Description
policy	Yes	**AccessPolicyInfo** object	Access policy information.
policy_objects_list	No	Array of **AccessPolicyObjectInfo** objects	Objects to which the policy is applied.

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Table 4-468 AccessPolicyInfo

Parameter	Mandatory	Type	Description
policy_name	Yes	String	Policy name. This parameter is valid only for access through Direct Connect. • PRIVATE_ACCESS: access through Direct Connect
blacklist_type	Yes	String	Blacklist type. The value can only be Internet. • INTERNET: Internet

Table 4-469 AccessPolicyObjectInfo

Parameter	Mandatory	Type	Description
object_id	Yes	String	ID of an object in the blacklist. The object can only be a user object.
object_type	Yes	String	Object type. • USER: user • USERGROUP: user group
object_name	No	String	Object name. This parameter will not be verified later.

Response Parameters

Status code: 400

Table 4-470 Response body parameters

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

Status code: 401

Table 4-471 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

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Parameter	Type	Description
error_msg	String	Error description.

Status code: 403

Table 4-472 Response body parameters

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

Status code: 404

Table 4-473 Response body parameters

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

Status code: 405

Table 4-474 Response body parameters

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

Status code: 500

Table 4-475 Response body parameters

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

Status code: 503

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Table 4-476 Response body parameters

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

Example Requests

```
post /v2/{project_id}/access-policy

{
  "policy" : {
    "policy_name" : "PRIVATE_ACCESS",
    "blacklist_type" : "INTERNET"
  }
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.8.2 Queries an access policy.

Function

Queries an access policy.

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Debugging

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

URI

GET /v2/{project_id}/access-policy

Table 4-477 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Table 4-478 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. The value ranges from 0 to 100 and defaults to 100.
offset	No	Integer	Offset. The value ranges from 0 to 99 and defaults to 0.

Request Parameters

Table 4-479 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

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Table 4-480 Response body parameters

Parameter	Type	Description
policies	Array of **AccessPolicyDetailInfo** objects	Response for querying an access policy.
total	Integer	Total number of policies.

Table 4-481 AccessPolicyDetailInfo

Parameter	Type	Description
policy_name	String	Policy name. This parameter is valid only for access through Direct Connect. • PRIVATE_ACCESS: access through Direct Connect
blacklist_type	String	Blacklist type. The value can only be Internet. • INTERNET: Internet
policy_id	String	Policy ID.
create_time	String	Time when a user's OTP device is bound.

Status code: 400

Table 4-482 Response body parameters

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

Status code: 401

Table 4-483 Response body parameters

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

Status code: 403

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Table 4-484 Response body parameters

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

Status code: 404

Table 4-485 Response body parameters

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

Status code: 405

Table 4-486 Response body parameters

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

Status code: 500

Table 4-487 Response body parameters

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

Status code: 503

Table 4-488 Response body parameters

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

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Example Requests

```
get /v2/{project_id}/access-policy
```

Example Responses

Status code: 200

Normal.

```
{
  "policies" : [ {
    "policy_id" : "8ac225c2781edb0d01781edde3f4xxxx",
    "create_time" : "2022-10-24T17:24:56.000+00:00",
    "policy_name" : "PRIVATE_ACCESS",
    "blacklist_type" : "INTERNET"
  } ],
  "total" : 1
}
```

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.8.3 Deletes an access policy.

Function

Deletes a specified access policy.

Debugging

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

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URI

DELETE /v2/{project_id}/access-policy

Table 4-489 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-490 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Table 4-491 Request body parameters

Parameter	Mandatory	Type	Description
policy_id_list	No	Array of strings	Policy ID list.

Response Parameters

Status code: 400

Table 4-492 Response body parameters

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

Status code: 401

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Table 4-493 Response body parameters

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

Status code: 403

Table 4-494 Response body parameters

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

Status code: 404

Table 4-495 Response body parameters

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

Status code: 405

Table 4-496 Response body parameters

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

Status code: 500

Table 4-497 Response body parameters

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

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Status code: 503

Table 4-498 Response body parameters

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

Example Requests

```
delete /v2/0e973a948e8091232f25c00673f168b7/access-policy

{
  "policy_id_list" : [ "f77db5cd-c0-47d4-bbbe-9b979a38d18c", "f77db5cd-c0-47d4-bbbe-9b979a38d18b" ]
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

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4.8.4 Queries the object to which a specified access policy is applied.

Function

Queries the object to which a specified access policy is applied.

Debugging

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

URI

GET /v2/{project_id}/access-policy/{access_policy_id}/objects

Table 4-499 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
access_policy_id	Yes	String	Access policy ID.

Table 4-500 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. The value ranges from 0 to 2000 and defaults to 10.
offset	No	Integer	Offset. The value ranges from 0 to 1999 and defaults to 0.

Request Parameters

Table 4-501 Request header parameters

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

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Parameter	Mandatory	Type	Description
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

Table 4-502 Response body parameters

Parameter	Type	Description
policy_objects_list	Array of **AccessPolicyObject** objects	Response for querying the object to which an access policy is applied.
total	Integer	Number of objects.

Table 4-503 AccessPolicyObject

Parameter	Type	Description
object_id	String	ID of an object in the blacklist.
object_name	String	Object name.
object_type	String	Object type. • USER: user • USERGROUP: user group

Status code: 400

Table 4-504 Response body parameters

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

Status code: 401

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Table 4-505 Response body parameters

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

Status code: 403

Table 4-506 Response body parameters

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

Status code: 404

Table 4-507 Response body parameters

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

Status code: 405

Table 4-508 Response body parameters

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

Status code: 500

Table 4-509 Response body parameters

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

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Status code: 503

Table 4-510 Response body parameters

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

Example Requests

```
get /v2/0e973a948e8091232f25c00673f168b7/access-policy/20b726affecc4411bcdc49a66e3e8f63/objects
```

Example Responses

Status code: 200

Objects to which a policy is applied.

```
{
  "policy_objects_list" : [ {
    "object_id" : "8ac225c2781edb0d01781edde3f4xxxx",
    "object_name" : "test1",
    "object_type" : "USER"
  }, {
    "object_id" : "8ac225c2781edb0d01781edde3f4xxxx",
    "object_name" : "test2",
    "object_type" : "USER"
  } ],
  "total" : 2
}
```

Status Codes

Status Code	Description
200	Objects to which a policy is applied.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

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Error Codes

See **Error Codes**.

4.8.5 Updates the object to which a specified access policy is applied.

Function

Updates the object to which a specified access policy is applied.

Debugging

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

URI

PUT /v2/{project_id}/access-policy/{access_policy_id}/objects

Table 4-511 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
access_policy_id	Yes	String	Access policy ID.

Request Parameters

Table 4-512 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

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Table 4-513 Request body parameters

Parameter	Mandatory	Type	Description
policy_objects_list	No	Array of **AccessPolicyObjectInfo** objects	Request for updating the list of objects to which a policy is applied.

Table 4-514 AccessPolicyObjectInfo

Parameter	Mandatory	Type	Description
object_id	Yes	String	ID of an object in the blacklist. The object can only be a user object.
object_type	Yes	String	Object type. • USER: user • USERGROUP: user group
object_name	No	String	Object name. This parameter will not be verified later.

Response Parameters

Status code: 400

Table 4-515 Response body parameters

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

Status code: 401

Table 4-516 Response body parameters

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

Status code: 403

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Table 4-517 Response body parameters

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

Status code: 404

Table 4-518 Response body parameters

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

Status code: 405

Table 4-519 Response body parameters

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

Status code: 500

Table 4-520 Response body parameters

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

Status code: 503

Table 4-521 Response body parameters

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

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Example Requests

```
put /v2/0e973a948e8091232f25c00673f168b7/access-policy/20b726affecc4411bcdc49a66e3e8f63/objects

{
  "policy_objects_list" : [ {
    "object_id" : "8ac225c2781edb0d01781edde3f4xxxx",
    "object_type" : "USER"
  }, {
    "object_id" : "8ac225c2781edb0d01781edde3f4xxxx",
    "object_type" : "USER"
  } ]
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.9 Product Packages

4.9.1 Querying the Product Package List

Function

Query the product packages supported by Huawei Cloud Workspace.

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Debugging

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

URI

GET /v2/{project_id}/products

Table 4-522 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Table 4-523 Query Parameters

Parameter	Mandatory	Type	Description
product_id	No	String	Product ID.
availability_zone	No	String	AZ.
os_type	No	String	OS of a product package, for example, Windows or Linux.
charge_mode	No	String	ID of a periodic package. **0** indicates the yearly/monthly billing mode, and **1** indicates the pay-per-use billing mode.
architecture	No	String	Architecture type. Arm and x86 are supported.
package_type	No	String	Package series.
limit	No	Integer	Number of records on each page. The value ranges from 0 to 100 and defaults to **100**.
offset	No	Integer	Offset. The default value is **0**.

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Request Parameters

Table 4-524 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, **application/json**.

Response Parameters

Status code: 200

Table 4-525 Response body parameters

Parameter	Type	Description
os_type	String	OS types supported by a package. This parameter is available only when **os_type** is contained in the request.
architecture	String	Product architecture. This parameter is available only when **package_type** is set to **agile** in the request.
availability_zone	String	AZ. This parameter is available only when **availability_zone** is contained in the request.
products	Array of **ProductInfo** objects	Product list.
total_count	Integer	Number of objects.

Table 4-526 ProductInfo

Parameter	Type	Description
product_id	String	Product ID.
flavor_id	String	Flavor ID.

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Parameter	Type	Description
type	String	Product type. The value can be: **BASE**: indicates the basic product package. The package image does not contain other commercial software products except the OS. Only this type of package can be used in private image scenarios.
architecture	String	Product architecture. Currently, Arm and x86 are supported.
cpu	String	CPU.
cpu_desc	String	CPU description.
memory	String	Memory.
is_gpu	Boolean	Whether the specifications are of the GPU type.
system_disk_type	String	System disk type.
system_disk_size	String	System disk size, in GB.
data_disk_size	String	Data disk size, in GB.
gpu_desc	String	GPU description.
bill_switch	String	Whether to enable the CDR function. The value can be **on** (enable CDR) or **off** (disable CDR). Only deserialization is supported. Serialization is not supported and is not displayed in the API.
descriptions	String	Product description.
charge_mode	String	ID of a periodic package. **0** indicates the yearly/monthly billing mode, and **1** indicates the pay-per-use billing mode.
contain_data_disk	Boolean	Whether data disks are included in the package billing. **off** indicates no.
resource_type	String	Resource specifications.
cloud_service_type	String	Cloud service code.
volume_product_type	String	Disk type.
domain_ids	Array of strings	ID of the dedicated domain ID (**domainId**) supported by the product package.

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Parameter	Type	Description
status	String	Product status. The options are **normal**, **sellout**, and **abandon**.
sub_product_list	Array of strings	Subproduct of a dedicated host.
default_desktop_num	Integer	Default number of desktops in an exclusive host package.
max_apply_desktop_num	Integer	Maximum number of desktops that can be created on an exclusive host.

Status code: 400

Table 4-527 Response body parameters

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

Status code: 401

Table 4-528 Response body parameters

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

Status code: 403

Table 4-529 Response body parameters

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

Status code: 404

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Table 4-530 Response body parameters

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

Status code: 405

Table 4-531 Response body parameters

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

Status code: 500

Table 4-532 Response body parameters

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

Status code: 503

Table 4-533 Response body parameters

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

Example Requests

None

Example Responses

Status code: 200

Response to the request for querying products.

```
{
  "os_type" : "Linux",
```

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```
 "availability_zone" : "cn-north-4c",
 "total_count" : 1,
 "products" : {
  "product_id" : "workspace.k.xlarge.2.linux",
  "flavor_id" : "kc1.xlarge.2",
  "type" : "BASE",
  "cpu" : "4",
  "memory" : "8192",
  "system_disk_type" : "SAS",
  "system_disk_size" : "80",
  "descriptions" : "CPU:4vCPUs,Memory:8GB",
  "architecture" : "arm",
  "is_gpu" : false,
  "charge_mode" : "0",
  "contain_data_disk" : false,
  "resource_type" : "hws.resource.type.vdi.vm",
  "cloud_service_type" : "hws.service.type.vdi",
  "volume_product_type" : "workspace",
  "status" : "normal",
  "package_type" : "enterprise"
 }
}
```


Status Codes

Status Code	Description
200	Response to the request for querying products.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The method specified in the request is not allowed.
500	An internal service error occurred. For details, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.10 Authentication configuration

4.10.1 Queries the configuration of auxiliary authentication.

Function

Queries the configuration of auxiliary authentication.

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Debugging

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

URI

GET /v2/{project_id}/assist-auth-config/method-config

Table 4-534 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-535 Request header parameters

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

Response Parameters

Status code: 200

Table 4-536 Response body parameters

Parameter	Type	Description
otp_config_info	**OtpConfigInfo** object	Configures OTP-assisted authentication.

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Table 4-537 OtpConfigInfo

Parameter	Type	Description
enable	Boolean	Whether to enable.
receive_mode	String	Verification code receiving mode. VMFA: virtual MFA device HMFA: hardware MFA device
auth_url	String	Auxiliary authentication server address.
app_id	String	Account for accessing the authentication service.
app_secret	String	Password for accessing the authentication service.
auth_server_access_mode	String	Access mode of the auxiliary authentication service. INTERNET: access through Internet DEDICATED: access through Direct Connect SYSTEM_DEFAULT: default access mode
cert_content	String	Certificate in PEM format.
apply_rule	**ApplyRuleInfo** object	Information about the object to which authentication applies. If the value is **null**, authentication applies to all objects.

Table 4-538 ApplyRuleInfo

Parameter	Type	Description
rule_type	String	Type of the object to which authentication applies. • ACCESS_MODE: access type
rule	String	Object to which authentication applies. • INTERNET: Internet access. This value can be selected when **rule_type** is set to **ACCESS_MODE**. • PRIVATE: private line access. This value can be selected when **rule_type** is set to **ACCESS_MODE**.

Status code: 400

Table 4-539 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

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Parameter	Type	Description
error_msg	String	Error description.

Status code: 401

Table 4-540 Response body parameters

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

Status code: 403

Table 4-541 Response body parameters

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

Status code: 404

Table 4-542 Response body parameters

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

Status code: 500

Table 4-543 Response body parameters

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

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Example Requests

```
GET /v2/29dfe82ada564ac2b927e1ff036d9a9b/assist-auth-config/method-config
```

Example Responses

Status code: 200

Response to the request for querying the login with auxiliary authentication.

```
{
  "otp_config_info" : {
    "enable" : true,
    "receive_mode" : "VMFA"
  }
}
```

Status Codes

Status Code	Description
200	Response to the request for querying the login with auxiliary authentication.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.10.2 Updates the auxiliary authentication policy configuration.

Function

Updates the auxiliary authentication policy configuration.

Debugging

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

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URI

PUT /v2/{project_id}/assist-auth-config/method-config

Table 4-544 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-545 Request header parameters

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

Table 4-546 Request body parameters

Parameter	Mandatory	Type	Description
auth_type	No	String	Authentication type. OTP: OTP-assisted authentication
otp_config_info	No	**OtpConfigInfo** object	Configures OTP-assisted authentication.

Table 4-547 OtpConfigInfo

Parameter	Mandatory	Type	Description
enable	No	Boolean	Whether to enable.
receive_mode	No	String	Verification code receiving mode. VMFA: virtual MFA device HMFA: hardware MFA device

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Parameter	Mandatory	Type	Description
auth_url	No	String	Auxiliary authentication server address.
app_id	No	String	Account for accessing the authentication service.
app_secret	No	String	Password for accessing the authentication service.
auth_server_access_mode	No	String	Access mode of the auxiliary authentication service. INTERNET: access through Internet DEDICATED: access through Direct Connect SYSTEM_DEFAULT: default access mode
cert_content	No	String	Certificate in PEM format.
apply_rule	No	ApplyRuleInfo object	Information about the object to which authentication applies. If the value is **null**, authentication applies to all objects.

Table 4-548 ApplyRuleInfo

Parameter	Mandatory	Type	Description
rule_type	No	String	Type of the object to which authentication applies. • ACCESS_MODE: access type
rule	No	String	Object to which authentication applies. • INTERNET: Internet access. This value can be selected when **rule_type** is set to **ACCESS_MODE**. • PRIVATE: private line access. This value can be selected when **rule_type** is set to **ACCESS_MODE**.

Response Parameters

Status code: 400

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Table 4-549 Response body parameters

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

Status code: 401

Table 4-550 Response body parameters

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

Status code: 403

Table 4-551 Response body parameters

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

Status code: 404

Table 4-552 Response body parameters

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

Status code: 500

Table 4-553 Response body parameters

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

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Example Requests

- PUT /v2/fb2e5ec048384c8f9469d22db0037908/assist-auth-config/method-config

```
{
  "auth_type" : "OTP",
  "otp_config_info" : {
    "enable" : true,
    "receive_mode" : "VMFA",
    "apply_rule" : {
      "rule_type" : "ACCESS_MODE",
      "rule" : "INTERNET"
    }
  }
}
```

- PUT /v2/fb2e5ec048384c8f9469d22db0037908/assist-auth-config/method-config

```
{
  "auth_type" : "OTP",
  "otp_config_info" : {
    "enable" : true,
    "receive_mode" : "HMFA",
    "auth_url" : "https://10.0.0.128:8443/api/um/login",
    "app_id" : 123,
    "app_secret" : 123,
    "auth_server_access_mode" : "DEDICATED",
    "cert_content" : "cert_content",
    "apply_rule" : {
      "rule_type" : "ACCESS_MODE",
      "rule" : "INTERNET"
    }
  }
}
```

Example Responses

None

Status Codes

Status Code	Description
204	Normal.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

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4.11 Quota

4.11.1 Querying Resource Quotas

Function

Console Framework and WKSDesktopManager call this API to query tenant quotas.

Debugging

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

URI

GET /v2/{project_id}/quotas

Table 4-554 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-555 Request header parameters

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

Response Parameters

Status code: 200

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Table 4-556 Response body parameters

Parameter	Type	Description
quotas	**QuotaNoLimit** object	Quota information
site_quotas	Array of **SiteQuotaNoLimit** objects	Site quota information, excluding the central site

Table 4-557 QuotaNoLimit

Parameter	Type	Description
resources	Array of **ResourceNoLimit** objects	Quota resource list

Table 4-558 SiteQuotaNoLimit

Parameter	Type	Description
resources	Array of **ResourceNoLimit** objects	Quota resource list
site_id	String	Site ID

Table 4-559 ResourceNoLimit

Parameter	Type	Description
type	String	Resource type. general_instances: common desktop Memory: memory cores: CPU volumes: number of disks volume_gigabytes: disk capacity gpu_instances: GPU desktop deh: cloud office host users: user policy_groups: policy group Cores: CPU (used by the quota tool)
quota	Integer	Quotas
used	Integer	Used quota
unit	String	Quota unit

Status code: 400

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Table 4-560 Response body parameters

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

Status code: 401

Table 4-561 Response body parameters

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

Status code: 403

Table 4-562 Response body parameters

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

Status code: 404

Table 4-563 Response body parameters

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

Status code: 500

Table 4-564 Response body parameters

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

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Example Requests

```
GET /v2/29dfe82ada564ac2b927e1ff036d9a9b/quotas
```

Example Responses

Status code: 200

Response to the request for querying tenant quotas


```
{
  "quotas" : {
    "resources" : [ {
      "type" : "general_instances",
      "quota" : 10,
      "used" : 3
    }, {
      "type" : "volumes",
      "quota" : 500,
      "used" : 33
    }, {
      "type" : "volume_gigabytes",
      "quota" : 21500,
      "unit" : "GB",
      "used" : 2090
    }, {
      "type" : "cores",
      "quota" : 80,
      "used" : 10
    }, {
      "type" : "Memory",
      "quota" : 100,
      "unit" : "GB",
      "used" : 19
    }, {
      "type" : "gpu_instances",
      "quota" : 10,
      "used" : 0
    }, {
      "type" : "users",
      "quota" : 3000,
      "used" : 29
    }, {
      "type" : "policy_groups",
      "quota" : 10,
      "used" : 0
    }, {
      "type" : "Cores",
      "quota" : 80,
      "used" : 0
    } ]
  },
  "site_quotas" : [ {
    "site_id" : 147258369,
    "resources" : [ {
      "type" : "gpu_instances",
      "quota" : 50,
      "used" : 0
    }, {
      "type" : "ies_instances",
      "quota" : 500,
      "used" : 0
    } ]
  } ]
}
```


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Status Codes

Status Code	Description
200	Response to the request for querying tenant quotas
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.12 Image

4.12.1 Queries product images.

Function

Queries the product images supported by Huawei Cloud Workspace.

Debugging

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

URI

GET /v2/{project_id}/images

Table 4-565 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Table 4-566 Query Parameters

Parameter	Mandatory	Type	Description
os_type	No	String	OS of a product image, for example, Windows.
image_type	No	String	Image type. -gold: a public image -private: a private image
platform	No	String	Image OS, for example, Windows.
architecture	No	String	Image architecture: x86.
package_type	No	String	Package series.
limit	No	Integer	Number of records on each page. The value ranges from 0 to 100 and defaults to 100.
offset	No	Integer	Offset. The default value is 0.

Request Parameters

Table 4-567 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

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Table 4-568 Response body parameters

Parameter	Type	Description
images	Array of **ImageInfo** objects	Product images supported by Huawei Cloud Workspace.
total_count	Integer	Number of objects.

Table 4-569 ImageInfo

Parameter	Type	Description
id	String	Image ID.
image_type	String	Image type. The value can be **gold** (public image) or **private** (private image).
os_type	String	OS type: **Linux**, **Windows**, or **Other**.
os_version	String	OS version.
disk_format	String	Image format: **vhd**, **raw**, **qcow2**, or **zvhd2**.
name	String	Image name.
min_ram	Integer	Minimum memory size (MB) required for running the image. The parameter value depends on the ECS flavor. The value is generally set to 0.
min_disk	Integer	Minimum disk space (GB) required for running the image. The value ranges from 40 to 1024.
product_code	String	Product code of the image.

Status code: 400

Table 4-570 Response body parameters

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

Status code: 401

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Table 4-571 Response body parameters

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

Status code: 403

Table 4-572 Response body parameters

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

Status code: 404

Table 4-573 Response body parameters

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

Status code: 405

Table 4-574 Response body parameters

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

Status code: 500

Table 4-575 Response body parameters

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

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Status code: 503

Table 4-576 Response body parameters

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

Example Requests

- GET /v2/29dfe82ada564ac2b927e1ff036d9a9b/images?image_type=gold&os_type=Linux
- /v2/0e69423d4400f4a82f67c0059a1e4cc8/images?architecture=x86&image_type=private

Example Responses

Status code: 200

Response to the request for querying images in the OpenStack environment.

```
{
  "total_count" : 1,
  "images" : [ {
    "id" : "d6b368bc-a24d-4fb5-a8fb-727356a53f33",
    "image_type" : "gold",
    "os_type" : "Linux",
    "os_version" : "EulerOS 2.2 64bit",
    "disk_format" : "qcow2",
    "name" : "Euler_Online_Tenant_vAG",
    "min_ram" : 0,
    "min_disk" : 50
  }, {
    "id" : "bef99a44-2b6a-4ef9-b1a2-204a4910e374",
    "image_type" : "gold",
    "os_type" : "Linux",
    "os_version" : "EulerOS 2.5 64bit",
    "disk_format" : "qcow2",
    "name" : "FA-LZ-x86vAG-801temp",
    "min_ram" : 0,
    "min_disk" : 60
  } ]
}
```

Status Codes

Status Code	Description
200	Response to the request for querying images in the OpenStack environment.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.

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Status Code	Description
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.13 AZ

4.13.1 Queries the AZ list.

Function

Queries the AZ list supported by Huawei Cloud Workspace.

Debugging

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

URI

GET /v2/{project_id}/availability-zones

Table 4-577 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-578 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

Table 4-579 Response body parameters

Parameter	Type	Description
availability_zones	Array of **AvailabilityZone** objects	AZs supported by Huawei Cloud Workspace.
total_count	Integer	Total number of AZ lists supported by Workspace.

Table 4-580 AvailabilityZone

Parameter	Type	Description
availability_zone	String	AZ ID.
display_name	String	AZ name.
i18n	Map<String,String>	AZ internationalization information.
sold_out	**SoldOutInfo** object	Information about sold-out resources in the current AZ.
product_ids	Array of strings	Product IDs supported by the current AZ. If this parameter is not specified, all packages are supported.

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Parameter	Type	Description
visible	Boolean	Whether it is visible.
default_availability_zone	Boolean	Whether to set the AZ as a default AZ.

Table 4-581 SoldOutInfo

Parameter	Type	Description
products	Array of strings	IDs of sold-out products.

Status code: 400

Table 4-582 Response body parameters

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

Status code: 401

Table 4-583 Response body parameters

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

Status code: 403

Table 4-584 Response body parameters

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

Status code: 404

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Table 4-585 Response body parameters

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

Status code: 405

Table 4-586 Response body parameters

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

Status code: 500

Table 4-587 Response body parameters

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

Status code: 503

Table 4-588 Response body parameters

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

Example Requests

```
GET /v2/92c84e5bce3d48d7ab5714a44901eb08/availability-zones
```

Example Responses

Status code: 200

Response to the request for querying the AZ list.

```
{
  "total_count" : 2,
```

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```
 "availability_zones" : [ {
   "availability_zone" : "cn-north-4a",
   "display_name" : "cn-north-4a",
   "i18n" : {
     "zh_cn" : "AZ 1.",
     "en_us" : "AZ1"
   },
   "sold_out" : {
     "products" : [ "workspace.k.2xlarge.2.linux" ]
   },
   "product_ids" : [ "workspace.k.xlarge.2.linux" ],
   "visible" : "true,",
   "default_availability_zone" : false
 }, {
   "availability_zone" : "cn-north-4b",
   "display_name" : "cn-north-4b",
   "i18n" : {
     "zh_cn" : "AZ 2.",
     "en_us" : "AZ2"
   },
   "sold_out" : {
     "products" : [ "workspace.k.large.2.linux" ]
   },
   "product_ids" : [ "workspace.k.large.2.linux" ],
   "visible" : true,
   "default_availability_zone" : false
 } ]
}
```


Status Codes

Status Code	Description
200	Response to the request for querying the AZ list.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.14 Desktop Tag

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4.14.1 Query Desktop Tags

Function

Query the tag information of a specified desktop.

Debugging

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

URI

GET /v2/{project_id}/desktops/{desktop_id}/tags

Table 4-589 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
desktop_id	Yes	String	Desktop ID.

Request Parameters

Table 4-590 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API, which is the value of **X-Subject-Token** in the response header.
Content-Type	No	String	MIME type of the request body.

Response Parameters

Status code: 200

Table 4-591 Response body parameters

Parameter	Type	Description
tags	Array of **Tag** objects	Tag.

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Table 4-592 Tag

Parameter	Type	Description
key	String	Specifies the key of a tag that cannot be empty and can contain a maximum of 128 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.
value	String	Value of a tag, which can contain a maximum of 43 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.

Status code: default

Table 4-593 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
/v2/{project_id}/desktops/{desktop_id}/tags

{
  "tags" : [ {
    "key" : "string",
    "values" : [ "string" ]
  } ]
}
```

Example Responses

Status code: 200

Query desktop tags.

```
""
```

Status Codes

Status Code	Description
200	Query desktop tags.
default	Abnormal response.

Error Codes

See **Error Codes**.

4.14.2 Create Desktop Tags

Function

Creates tags for desktops. A desktop can have a maximum of 10 tags. If a to-be-created tag has the same key as an existing tag, the tag will be created and overwrite the existing one.

Debugging

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

URI

POST /v2/{project_id}/desktops/{desktop_id}/tags

Table 4-594 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
desktop_id	Yes	String	Desktop ID.

Request Parameters

Table 4-595 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API, which is the value of **X-Subject-Token** in the response header.

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Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.

Table 4-596 Request body parameters

Parameter	Mandatory	Type	Description
tag	Yes	**Tag** object	Tag.

Table 4-597 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the key of a tag that cannot be empty and can contain a maximum of 128 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.
value	No	String	Value of a tag, which can contain a maximum of 43 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.

Response Parameters

Status code: 400

Table 4-598 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

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Status code: 401

Table 4-599 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-600 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-601 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-602 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
/v2/9c53a566cb3443ab910cf0daebca90c4/desktops/8e07d3e9-454e-4fc9-ba56-c631d05c4712/tags

{
  "tag" : {
    "key" : "ENV",
    "value" : "DEV"
  }
}
```

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Example Responses

Status code: 204

Response to the request for creating a desktop tag.

```
""
```

Status Codes

Status Code	Description
204	Response to the request for creating a desktop tag.
400	Invalid parameter.
401	Authentication failed.
403	You do not have required permissions.
404	Resource not found.
500	Internal error.

Error Codes

See **Error Codes**.

4.14.3 Delete Desktop Tags

Function

Deletes a desktop tag. If the tag to be deleted does not exist, the deletion is successful by default.

Debugging

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

URI

DELETE /v2/{project_id}/desktops/{desktop_id}/tags/{key}

Table 4-603 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
desktop_id	Yes	String	Desktop ID.
key	Yes	String	Tag key.

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Request Parameters

Table 4-604 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API, which is the value of **X-Subject-Token** in the response header.
Content-Type	No	String	MIME type of the request body.

Response Parameters

Status code: 400

Table 4-605 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-606 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-607 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.

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Parameter	Type	Description
error_msg	String	Error description.

Status code: 404

Table 4-608 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-609 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

None

Example Responses

Status code: 204

Response to the request for deleting a desktop tag.

```
""
```

Status Codes

Status Code	Description
204	Response to the request for deleting a desktop tag.
400	Invalid parameter.
401	Authentication failed.
403	You do not have required permissions.

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Status Code	Description
404	Resource not found.
500	Internal error.

Error Codes

See **Error Codes**.

4.14.4 Query Tags of a Specified Project

Function

Query all tags of a tenant.

Debugging

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

URI

GET /v2/{project_id}/desktops/tags

Table 4-610 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-611 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API, which is the value of **X-Subject-Token** in the response header.
Content-Type	No	String	MIME type of the request body.

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Response Parameters

Status code: 200

Table 4-612 Response body parameters

Parameter	Type	Description
tags	Array of **Tags** objects	Tag object.

Table 4-613 Tags

Parameter	Type	Description
key	String	Tag key.
values	Array of strings	Tag value.

Status code: 400

Table 4-614 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-615 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-616 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.

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Parameter	Type	Description
error_msg	String	Error description.

Status code: 404

Table 4-617 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-618 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
/v2/{project_id}/desktops/tags
```

Example Responses

Status code: 200

Normal.

```
{
  "tags" : [ {
    "key" : "string",
    "values" : [ "string" ]
  } ]
}
```

Status Codes

Status Code	Description
200	Normal.
400	Invalid parameter.
401	Authentication failed.

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Status Code	Description
403	You do not have required permissions.
404	Resource not found.
500	Internal error.

Error Codes

See **Error Codes**.

4.14.5 Add or Delete Tags in Batches

Function

Add or delete tags in batches for a specified desktop. If a to-be-created tag has the same key as an existing tag, the tag will be created and overwrite the existing one. If the tag to be deleted does not exist, the deletion is successful by default.

Debugging

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

URI

POST /v2/{project_id}/desktops/{desktop_id}/tags/action

Table 4-619 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
desktop_id	Yes	String	Desktop ID.

Request Parameters

Table 4-620 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API, which is the value of **X-Subject-Token** in the response header.

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Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.

Table 4-621 Request body parameters

Parameter	Mandatory	Type	Description
action	No	String	Operation string **create** or **delete**.
tags	No	Array of **Tag** objects	Tag object.
sys_tags	No	Array of **Tag** objects	Tag object.

Table 4-622 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the key of a tag that cannot be empty and can contain a maximum of 128 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.
value	No	String	Value of a tag, which can contain a maximum of 43 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.

Response Parameters

Status code: 400

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Table 4-623 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-624 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-625 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-626 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-627 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

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Example Requests

```
{
  "action" : "create",
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  }, {
    "key" : "key2",
    "value" : "value3"
  } ]
}
```

Example Responses

Status code: 204

Normal.

```
""
```

Status Codes

Status Code	Description
204	Normal.
400	Invalid parameter.
401	Authentication failed.
403	You do not have required permissions.
404	Resource not found.
500	Internal error.

Error Codes

See **Error Codes**.

4.14.6 Filter Out Desktops by Tag

Function

Filter out desktops by tag.

Debugging

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

URI

POST /v2/{project_id}/desktops/resource_instances/action

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Table 4-628 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-629 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API, which is the value of **X-Subject-Token** in the response header.
Content-Type	No	String	MIME type of the request body.

Table 4-630 Request body parameters

Parameter	Mandatory	Type	Description
offset	No	String	Default value: **0**.
limit	No	String	Default value: **1000**.
action	No	String	The value **filter** indicates pagination query. The value **count** indicates that the total number of query results meeting the search criteria will be returned.
without_any_tag	No	Boolean	Specifies any tag that is contained. If this parameter is set to **true**, all resources without tags are queried.
matches	No	Array of **Match** objects	Match object.
tags	No	Array of **Tags** objects	Tag object. If one tag object is not contained, this requirement is not met. One key corresponds to multiple values.

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Parameter	Mandatory	Type	Description
tags_any	No	Array of **Tags** objects	Contains any tag. If none of the tags is contained, this requirement is not met. One key corresponds to multiple values.
not_tags	No	Array of **Tags** objects	The tag is not included. If one tag is not included, this requirement is met. One key corresponds to multiple values.
not_tags_any	No	Array of **Tags** objects	The tag does not contain any tag. If one tag is contained, this requirement is not met. One key corresponds to multiple values.

Table 4-631 Match

Parameter	Mandatory	Type	Description
key	Yes	String	Field to be matched during search.
value	Yes	String	Specifies the value to be matched during the search. If **key** is set to **resource_name**, fuzzy match is used.

Table 4-632 Tags

Parameter	Mandatory	Type	Description
key	No	String	Tag key.
values	No	Array of strings	Tag value.

Response Parameters

Status code: 200

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Table 4-633 Response body parameters

Parameter	Type	Description
offset	Integer	Specifies the offset of the specified information list query and the default value is **0**.
resources	Array of **TagResource** objects	Resource object.
total_count	Integer	Quantity.

Table 4-634 TagResource

Parameter	Type	Description
resource_detail	String	Computer information.
resource_id	String	Computer ID.
resource_name	String	Computer name.
tags	Array of **Tag** objects	Tag object.

Table 4-635 Tag

Parameter	Type	Description
key	String	Specifies the key of a tag that cannot be empty and can contain a maximum of 128 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.
value	String	Value of a tag, which can contain a maximum of 43 Unicode characters. The value can contain uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_). The value cannot contain the following characters: =*<>,|/.

Status code: 400

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Table 4-636 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 401

Table 4-637 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 403

Table 4-638 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-639 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-640 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

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Example Requests

```
/v2/{project_id}/desktops/resource_instances/action

{
  "offset" : "100",
  "limit" : "100",
  "action" : "filter",
  "matchs" : [ {
    "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

None

Status Codes

Status Code	Description
200	Normal.
400	Invalid parameter.
401	Authentication failed.
403	You do not have required permissions.
404	Resource not found.
500	Internal error.

Error Codes

See **Error Codes**.

4.15 Task.

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4.15.1 Queries a subtask.

Function

Queries the execution status of an asynchronous job, for example, querying the execution status of desktop creation.

Debugging

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

URI

GET /v2/{project_id}/workspace-sub-jobs

Table 4-641 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Table 4-642 Query Parameters

Parameter	Mandatory	Type	Description
status	No	String	Task status. • SUCCESS: The task has been executed. • RUNNING: The task is being executed. • FAILED: The task failed. • WAITING: The task is waiting for execution.
job_id	No	String	Task ID.

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Parameter	Mandatory	Type	Description
job_type	No	String	Task type. • createDesktops: creates a desktop task • createDesktops: subscribes to Huawei Cloud Workspace • cancelWorkspace: deregisters Huawei Cloud Workspace • expandVolumes: expands the disk capacity • addVolumes: adds a disk
desktop_pool_id	No	String	Desktop pool ID.
limit	No	Integer	Pagination query. The value ranges from 0 to 1000 and defaults to 1000.
offset	No	Integer	Start position for pagination query. The value starts from 0.

Request Parameters

Table 4-643 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.
Content-Type	Yes	String	MIME type of the request body, for example, application/json.

Response Parameters

Status code: 200

Table 4-644 Response body parameters

Parameter	Type	Description
total_count	Integer	Total number of tasks in the task list.
jobs	Array of **JobDetailInfo** objects	Task list.

Table 4-645 JobDetailInfo

Parameter	Type	Description
id	String	Task ID.
job_type	String	Task type.
entities	**JobEntities** object	Job object information, for example, desktop ID, product ID, and username.
begin_time	String	Task creation time.
end_time	String	Task end time.
status	String	Task status.
error_code	String	Error code of a failed task.
fail_reason	String	Task failure cause.
message	String	Task failure cause.
job_id	String	Task ID.
desktop_name	String	Desktop name.
ip_address	String	Indicates the IP address.
mac_address	String	Indicates the MAC address.

Table 4-646 JobEntities

Parameter	Type	Description
desktop_id	String	Desktop ID.
product_id	String	Package ID.
user_name	String	Username.

Status code: 400

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Table 4-647 Response body parameters

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

Status code: 401

Table 4-648 Response body parameters

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

Status code: 403

Table 4-649 Response body parameters

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

Status code: 404

Table 4-650 Response body parameters

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

Status code: 405

Table 4-651 Response body parameters

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

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Status code: 500

Table 4-652 Response body parameters

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

Status code: 503

Table 4-653 Response body parameters

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

Example Requests

```
GET /v2/ac234de25c6741d2b1273da49eea1b9e/workspace-sub-jobs?
status=FAILED&status=RUNNING&job_type=createDesktops

null
```

Example Responses

Status code: 200

Response to task details.

```
{
  "total_count" : 2,
  "jobs" : [ {
    "status" : "RUNNING",
    "entities" : {
      "user_name" : "user-test-01",
      "product_id" : "workspace.c2.large.windows",
      "desktop_id" : "9d30c8ac-77b5-4453-80da-8f027223ee99"
    },
    "job_id" : "0e2dae94-23ff-449a-bb9c-1b808cf2106d",
    "job_type" : "createDesktops",
    "begin_time" : "2020-04-10 06:45:14",
    "end_time" : "2020-04-10 07:06:10",
    "id" : "e43caef5-e478-4624-9e8c-b0b636331cbc"
  }, {
    "status" : "RUNNING",
    "entities" : {
      "user_name" : "user-test-01",
      "product_id" : "workspace.c2.large.windows",
      "desktop_id" : "14cccba0-12a6-4b66-9fd9-57290328f8da"
    },
    "job_id" : "0e2dae94-23ff-449a-bb9c-1b808cf2106d",
    "job_type" : "createDesktops",
    "begin_time" : "2020-04-10 06:45:14",
    "end_time" : "2020-04-10 07:05:49",
```

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```
    "id" : "cf5043e9-dd94-43be-9c07-6dba5d43c4d2"
  } ]
}
```

Status Codes

Status Code	Description
200	Response to task details.
400	The request cannot be understood by the server due to malformed syntax.
401	Authentication failed.
403	You do not have required permissions.
404	No resource found.
405	The request method is not allowed.
500	An internal service error occurred. For details about the error code, see the error code description.
503	The service is unavailable.

Error Codes

See **Error Codes**.

4.16 Network

4.16.1 Querying Bound Desktops and Unbound EIPs

Function

Query bound desktops and unbound EIPs.

Debugging

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

URI

GET /v2/{project_id}/eips

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Table 4-654 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Table 4-655 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	Enterprise project ID.
desktop_id	No	String	Desktop ID.
desktop_name	No	String	Desktop name.
user_name	No	String	User to whom the desktop belongs.
address	No	String	EIP.
offset	No	Integer	Start position for pagination query. The value starts from 0.
limit	No	Integer	Maximum number of desktops that can be returned in a pagination query. If this parameter is not specified, all records that meet the search criteria are returned.
state	No	String	Specifies the EIP binding status. • bind: indicates a bound EIP. • unbind: indicates an unbound EIP.

Request Parameters

Table 4-656 Request header parameters

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

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Parameter	Mandatory	Type	Description
Content-Type	Yes	String	MIME type of the request body.

Response Parameters

Status code: 200

Table 4-657 Response body parameters

Parameter	Type	Description
eips	Array of **Eips** objects	Specifies the desktop EIP.
total_count	Integer	Total number.

Table 4-658 Eips

Parameter	Type	Description
id	String	EIP ID.
address	String	Indicates the EIP address.
bandwidth_size	Integer	Bandwidth range.
eip_charge_mode	String	**traffic** (billed by traffic) and **bandwidth** (billed by bandwidth).
create_time	String	Creation time in the yyyy-MM-ddTHH:mm:ssZ format.
attached_desktop_id	String	Specifies the ID of the bound desktop.
attached_desktop_name	String	Specifies the name of the bound desktop.
enterprise_project_id	String	Enterprise project ID.

Status code: default

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Table 4-659 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
200	Response to the request for querying the Internet access function.
default	Default response.

Error Codes

See **Error Codes**.

4.16.2 Enabling the Desktop Internet Access Function

Function

Enable the desktop Internet access function.

Debugging

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

URI

POST /v2/{project_id}/eips

Table 4-660 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-661 Request header parameters

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

Table 4-662 Request body parameters

Parameter	Mandatory	Type	Description
desktop_ids	No	Array of strings	IDs of desktops for which the Internet access function is to be enabled.
eip_type	Yes	String	For details about the supported types, see types supported by the eip service. You can call the API (https://support.huaweicloud.com/api-eip/ShowPublicIpType.html) for query.
eip_charge_mode	Yes	String	EIP bandwidth billing mode • TRAFFIC: billed by traffic • BANDWIDTH: billed by bandwidth
bandwidth_size	Yes	Integer	Specifies the bandwidth size in Mbit/s. The value ranges from 1 Mbit/s to 2000 Mbit/s by default. (The specific range may vary by region. You can see the available bandwidth range on the management console.)
enterprise_project_id	No	String	Enterprise project ID. Its default value is **0**.

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Parameter	Mandatory	Type	Description
count	No	Integer	Number of EIPs to be purchased. This parameter is mandatory when **desktop_ids** is empty. This parameter is valid when EIPs are purchased separately.

Response Parameters

Status code: 200

Table 4-663 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.

Status code: default

Table 4-664 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
/v2/0e69423d4400f4a82f67c0059a1e4cc8/eips

{
  "desktop_ids" : [ "90f05916-bc71-4e26-a534-d036188d96e3" ],
  "eip_charge_mode" : "string",
  "bandwidth_size" : 1,
  "eip_type" : "5_sbgp"
}
```

Example Responses

None

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Status Codes

Status Code	Description
200	Response to the request for enabling the Internet access function.
default	Default response.

Error Codes

See **Error Codes**.

4.16.3 Binding an EIP to a Desktop

Function

Bind an EIP to the desktop.

Debugging

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

URI

POST /v2/{project_id}/eips/binding

Table 4-665 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-666 Request header parameters

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

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Table 4-667 Request body parameters

Parameter	Mandatory	Type	Description
eip_id	Yes	String	Specifies the ID of the EIP bound to the desktop.
desktop_id	Yes	String	Desktop ID.

Response Parameters

Status code: default

Table 4-668 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
/v2/0e69423d4400f4a82f67c0059a1e4cc8/eips/binding

{
  "eip_id" : "450ca7d4-9603-48d0-a9bc-fb85cdaf3031",
  "desktop_id" : "90f05916-bc71-4e26-a534-d036188d96e3"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Response to the request for binding an EIP to a desktop.
default	Default response.

Error Codes

See **Error Codes**.

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4.16.4 Unbinding EIPs from Desktops in Batches

Function

Unbind EIPs from desktops in batches.

Debugging

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

URI

POST /v2/{project_id}/eips/unbinding

Table 4-669 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-670 Request header parameters

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

Table 4-671 Request body parameters

Parameter	Mandatory	Type	Description
desktop_ids	No	Array of strings	Specifies the ID of the desktop from which the EIP is to be unbound.

Response Parameters

Status code: default

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Table 4-672 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
/v2/0e69423d4400f4a82f67c0059a1e4cc8/eips/unbinding

{
  "desktop_ids" : [ "90f05916-bc71-4e26-a534-d036188d96e3" ]
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Response to the request for unbinding an EIP from a desktop.
default	Default response.

Error Codes

See **Error Codes**.

4.17 Binds a terminal to a desktop.

4.17.1 Queries the configuration of the switch for binding a terminal to a desktop.

Function

Queries the configuration of the switch for binding a terminal to a desktop.

Debugging

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

URI

GET /v2/{project_id}/terminals/binding-desktops/config

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Table 4-673 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-674 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.

Response Parameters

Status code: 200

Table 4-675 Response body parameters

Parameter	Type	Description
tc_bind_switch	String	Binding switch. The value can only be **on** or **off**.

Status code: 400

Table 4-676 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

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Table 4-677 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-678 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
get /v2/fb2e5ec048384c8f9469d22db0037908/terminals/binding-desktops/config
```

Example Responses

Status code: 200

Normal.

```
{
  "tc_bind_switch" : "ON"
}
```

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

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4.17.2 Configures the switch for binding a terminal to a desktop.

Function

Configures the switch for binding a terminal to a desktop.

Debugging

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

URI

POST /v2/{project_id}/terminals/binding-desktops/config

Table 4-679 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-680 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.

Table 4-681 Request body parameters

Parameter	Mandatory	Type	Description
tc_bind_switch	Yes	String	Binding switch. The value can only be **on** or **off**.

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Response Parameters

Status code: 400

Table 4-682 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-683 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-684 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
post /v2/fb2e5ec048384c8f9469d22db0037908/terminals/binding-desktops/config

{
  "tc_bind_switch" : "ON"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.

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Status Code	Description
400	The request cannot be understood by the server due to malformed syntax.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.17.3 Queries terminal-desktop binding configurations.

Function

Queries the configuration list of terminal-desktop binding.

Debugging

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

URI

GET /v2/{project_id}/terminals/binding-desktops

Table 4-685 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Table 4-686 Query Parameters

Parameter	Mandatory	Type	Description
computer_name	No	String	Desktop name.
mac	No	String	MAC address.
offset	Yes	Integer	Start number.
limit	Yes	Integer	Quantity.

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Parameter	Mandatory	Type	Description
count_only	No	Boolean	Whether to query only the total number of results.

Request Parameters

Table 4-687 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.

Response Parameters

Status code: 200

Table 4-688 Response body parameters

Parameter	Type	Description
bind_list	Array of **TerminalsBindingDesktopsInfo** objects	VMs bound to MAC addresses.
total_num	Integer	Total number of returned results.

Table 4-689 TerminalsBindingDesktopsInfo

Parameter	Type	Description
id	String	ID of the MAC address binding policy.
mac	String	Terminal's MAC address.
desktop_name	String	VM name.

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Parameter	Type	Description
description	String	Description.

Status code: 400

Table 4-690 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-691 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-692 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
get /v2/fb2e5ec048384c8f9469d22db0037908/terminals/binding-desktops
```

Example Responses

Status code: 200

Normal.

```
{
  "bind_list" : [ {
    "id" : "8ac225c2781edb0d01781edde3f4xxxx",
    "mac" : "AA-BB-CC-DD-EE-FF",
    "desktop_name" : "test01",
```

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```
    "description" : "test"
  } ],
  "total_num" : 1
}
```

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.17.4 Adds a terminal-desktop binding configuration.

Function

Adds a terminal-desktop binding configuration.

Debugging

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

URI

POST /v2/{project_id}/terminals/binding-desktops

Table 4-693 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

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Request Parameters

Table 4-694 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.

Table 4-695 Request body parameters

Parameter	Mandatory	Type	Description
bind_list	No	Array of **CreateTerminalsBindingDesktopsInfo** objects	List of policies to be added for binding MAC addresses to VMs.

Table 4-696 CreateTerminalsBindingDesktopsInfo

Parameter	Mandatory	Type	Description
line	No	Integer	Line number, which is used for batch import.
mac	No	String	MAC address of a terminal.
desktop_name	No	String	Desktop name, which is used for batch import.
description	No	String	Description.

Response Parameters

Status code: 400

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Table 4-697 Response body parameters

Parameter	Type	Description
bind_result_list	Array of **CreateTerminalsBindingDesktopsResult** objects	Binding policy creation result.
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Table 4-698 CreateTerminalsBindingDesktopsResult

Parameter	Type	Description
line	Integer	Line number, which is used for batch import.
mac	String	Terminal's MAC address.
sid	String	VM ID.
desktop_name	String	Desktop name, which is used for batch import.
validation_result_code	String	Result code of binding policy verification.
validation_result_msg	String	Binding policy verification result, which is used to identify the binding policy verification result during batch import.
description	String	Description.

Status code: 404

Table 4-699 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

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Table 4-700 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
post /v2/fb2e5ec048384c8f9469d22db0037908/terminals/binding-desktops

{
  "bind_list" : [ {
    "line" : 0,
    "mac" : "AA-BB-CC-DD-EE-FF",
    "desktop_name" : "test01",
    "description" : "test"
  } ]
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.17.5 Modifies a terminal-desktop binding configuration.

Function

Modifies a terminal-desktop binding configuration.

Debugging

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

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URI

PUT /v2/{project_id}/terminals/binding-desktops

Table 4-701 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-702 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API that is used to obtain a user token. The value of **X-Subject-Token** in the response header is the user token.

Table 4-703 Request body parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Policy ID.
mac	Yes	String	Terminal's MAC address.
desktop_name	Yes	String	VM name.
description	No	String	Description.

Response Parameters

Status code: 400

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Table 4-704 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-705 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-706 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
put /v2/fb2e5ec048384c8f9469d22db0037908/terminals/binding-desktops

{
  "id" : "abcdfxxxxxfghjxxxxxxjkl",
  "mac" : "AA-BB-CC-DD-EE-FF",
  "desktop_name" : "test01",
  "description" : "test"
}
```

Example Responses

None

Status Codes

Status Code	Description
200	Normal.

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Status Code	Description
400	The request cannot be understood by the server due to malformed syntax.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

4.17.6 Deletes a terminal-desktop binding configuration.

Function

Deletes a terminal-desktop binding configuration.

Debugging

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

URI

POST /v2/{project_id}/terminals/binding-desktops/batch-delete

Table 4-707 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-708 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	No	String	MIME type of the request body.

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

Table 4-709 Request body parameters

Parameter	Mandatory	Type	Description
id_list	No	Array of strings	Binding policy IDs.

Response Parameters

Status code: 200

Table 4-710 Response body parameters

Parameter	Type	Description
result_list	Array of **DeleteTerminalsBindingDesktopsResult** objects	IDs of policies to be deleted.

Table 4-711 DeleteTerminalsBindingDesktopsResult

Parameter	Type	Description
id	String	ID of the policy to be deleted.
delete_result_code	String	Result code of the deletion operation.
delete_result_msg	String	Result of the deletion operation.

Status code: 400

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Table 4-712 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 404

Table 4-713 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Status code: 500

Table 4-714 Response body parameters

Parameter	Type	Description
error_code	String	Error code, which is returned upon failure.
error_msg	String	Error description.

Example Requests

```
post /v2/fb2e5ec048384c8f9469d22db0037908/terminals/binding-desktops/batch-delete

{
  "id_list" : [ "abcdfxxxxxfghjxxxxxxjkl" ]
}
```

Example Responses

Status code: 200

Normal.

```
{
  "result_list" : [ {
    "id" : "abcdfxxxxxfghjxxxxxxjkl",
    "delete_result_code" : "WKS.00000000",
    "delete_result_msg" : "success"
  } ]
}
```

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Status Codes

Status Code	Description
200	Normal.
400	The request cannot be understood by the server due to malformed syntax.
404	No resource found.
500	An internal service error occurred. For details about the error code, see the error code description.

Error Codes

See **Error Codes**.

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A Appendix

A.1 Status Code

Table A-1 describes the status codes.

Table A-1 Status codes

Status Code	Status	Description
200	OK	Successful
201	Created	The request has been fulfilled and resulted in a new resource being created.
202	Accepted	The request has been accepted for processing, but the processing has not been completed.
203	Non-Authoritative Information	The request has been fulfilled.
204	NoContent	The server has successfully processed the request, but does not return any response. The status code is returned in response to an HTTP OPTIONS request.
205	Reset Content	The server successfully processed the request, but is not returning any content.
206	Partial Content	The server has successfully processed a part of the GET request.
300	Multiple Choices	There are multiple choices for a requested resource. For example, this code could be used to present a list of resource characteristics and addresses from which the client such as a browser may choose.

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Status Code	Status	Description
301	Moved Permanently	This and all future requests have been permanently moved to the given URI indicated in this response.
302	Found	The requested resource has been temporarily moved.
303	See Other	Retrieve another URL. Use GET and POST requests to view the information.
304	Not Modified	The requested resource has not been modified. When the server returns this status code, no resource is returned.
305	Use Proxy	The requested resource is available only through a proxy.
306	Unused	This HTTP status code is no longer used.
400	BadRequest	Invalid request. The client should modify the request instead of re-initiating it.
401	Unauthorized	The status code is returned after the client provides the authentication information, indicating that the authentication information is incorrect or invalid.
402	Payment Required	Reserved request.
403	Forbidden	Request rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
404	NotFound	The requested resource cannot be found. The client should modify the request instead of re-initiating it.
405	MethodNotAllowed	The request contains one or more methods not supported for the resource. The client should modify the request instead of re-initiating it.
406	Not Acceptable	The server cannot implement the request based on the content characteristics of the request.

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Status Code	Status	Description
407	Proxy Authentication Required	This code is similar to 401, but indicates that the client must first authenticate itself with the proxy.
408	Request Time-out	The client does not produce a request within the time that the server was prepared to wait. The client may re-initiate the request without modifications at any time later.
409	Conflict	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exits, or the request fails to be processed because of the update of the conflict request.
410	Gone	The requested resource has been deleted permanently and will not be available again. This status code indicates that the requested resource has been deleted permanently.
411	Length Required	The server refused to process the request because the request does not specify the length of its content.
412	Precondition Failed	The server does not meet one of the preconditions that the requester puts on the request.
413	Request Entity Too Large	The server refuses to process a request because the request is too large. The server may disable the connection to prevent the client from sending requests consecutively. If the server temporarily cannot process the request, the response will contain a **Retry-After** request header field.
414	Request-URI Too Large	The request URI is too long for the server to process.
415	Unsupported Media Type	The server cannot process the media format in the request.
416	Requested range not satisfiable	The requested range is invalid.
417	Expectation Failed	The server fails to meet the requirements of the **Expect** request header field.
422	UnprocessableEntity	The request is well-formed but is unable to respond due to semantic errors.

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Status Code	Status	Description
429	TooManyRequests	The client sends too many requests to the server within a given time, exceeding the client's access frequency limit or beyond the server's processing capability. In this case, the client should re-initiate requests after the time specified in the **Retry-After** response header field expires.
500	InternalServerError	The server is able to receive the request but unable to understand it.
501	Not Implemented	The server does not support the requested function, and therefore cannot implement the request.
502	Bad Gateway	The server acting as a gateway or proxy receives an invalid response from a remote server.
503	ServiceUnavailable	The requested service is invalid. The client should modify the request instead of re-initiating it.
504	ServerTimeout	The request cannot be fulfilled within a given amount of time. The response will reach the client only if the request carries a timeout parameter.
505	HTTP Version not supported	The server does not support the HTTP protocol version used in the request.

A.2 Error Codes

If an error code starting with APIGW is returned after you call an API, rectify the fault by referring to the instructions provided in **API Gateway Error Codes**.

Status Code	Error Codes	Error Message	Description	Solution
400	WKS.0001	The request message input by the interface is empty.	The request message from the interface is empty.	The request message from the interface is empty.

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Status Code	Error Codes	Error Message	Description	Solution
200	WKS.00010109	The custom name of desktop is empty.	The user-defined computer name is empty. Please configure the computer name and try again.	Please contact the administrator.
200	WKS.00010110	Desktops cannot obtain valid IP addresses.	The computer cannot obtain a valid IP address. Please check whether the DHCP component and network environment are normal.	The computer cannot obtain a valid IP address. Please check whether the DHCP component and network environment are normal.
200	WKS.00010306	Only the desktop from the OpenStack platform support setting whether to enable user self-service backup management function.	Only FusionSphere OpenStack desktops support self-service backup management.	Check whether the OpenStack scenario is used.
200	WKS.00010315	The desktop does not support setting whether to enable user self-service backup management function.		

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Status Code	Error Codes	Error Message	Description	Solution
200	WKS.00010321	Failed to set user self-service backup management function identification in the WKSDesktops manager database. Please try again later.		
200	WKS.0106	Insufficient quota.	Insufficient quota	Contact the administrator to increase the quota.
200	WKS.0402	The desktop is being deleted and cannot be modified.	Deleting a computer: At least one computer in the computer sequence to be deleted is invalid (cannot be deleted).	Check whether the status of the computer that fails to be deleted is valid.
200	WKS.0404	Failed to modify desktop attributes.	Failed to modify desktop attributes.	Please contact the administrator.
200	WKS.0405	Failed to restart the desktop that is not running. Please ensure that the desktop is running, and try again.	The desktop must be powered on.	Ensure that the desktop is powered on and try again.
200	WKS.0417	The desktop name is duplicated.	The desktop name already exists.	Change the name

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Status Code	Error Codes	Error Message	Description	Solution
400	WKS.0000	The format of the parameters entered through the interface is invalid.	Change the name	Check whether the parameter format is valid.
400	WKS.0001	The format of the parameters entered through the interface is invalid. {0} is invalid.	The format of the parameter entered by the interface is invalid.	Check whether the parameter format is valid.
400	WKS.00010000	The platform type of the image is not supported.	The platform type of the image is not supported.	The image type must be Windows or Linux.
400	WKS.00010013	Failed to query vm in openStack. Please check whether the openStack environment or openStack configuration is correct.	Failed to query the computers on OpenStack. Check whether the OpenStack environment or OpenStack configuration is correct.	Please contact the administrator.
400	WKS.00010037	The tenant not open service.	The tenant has not enabled the service.	Enable the service and try again.
400	WKS.00010040	The token role does not have IMS Administrator permission.		
400	WKS.00010041	The token role does not have BSS Administrator permission.		

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Status Code	Error Codes	Error Message	Description	Solution
400	WKS.00010139	The desktop name already exists in the domain.	Enable the service and try again.	Change the desktop name and try again.
400	WKS.0006	Failed to invoke VPC interface.	Change the desktop name and try again.	Retry or cancel the registration again. If the problem persists, contact the administrator.
400	WKS.0418	The desktop does not exist.	The desktop does not exist.	Check whether the desktop ID is correct.
400	WKS.0426	The computer name suffix has reached the maximum value[{0}].Please check windows AD and specify computer name.	Check whether the desktop ID is correct.	Please specify a desktop name
400	WKS.0505	Invalid parameter action.		
400	WKS.0508	The value of offset cannot be smaller than 0.	The value of offset is less than 0.	The value of offset cannot be less than 0.
400	WKS.0509	The value of limit must be greater than 0 and smaller than 1000.	The limit must be greater than 0 and less than 1000.	The limit must be greater than 0 and less than 1000.
400	WKS.0560	The value of matches cannot be left empty.		
400	WKS.0563	The number of tag keys cannot be 0 or greater than 10.		

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Status Code	Error Codes	Error Message	Description	Solution
400	WKS.0564	Invalid tag.		
400	WKS.0565	Duplicate tag keys.		
400	WKS.0566	A maximum of 10 tags can be added to each desktop.		
400	WKS.0568	The resource does not exist or is a resource of another project.	The resource_id does not exist or is the resource_id of another tenant.	Check whether resource_id is correct.
400	WKS.0569	The tag key does not exist.	The tag key does not exist.	Check whether the tag key parameter is correct.
400	WKS.0631	The entered email address is different from the registered email address. Please enter the correct one.	The entered email address is different from the email address of the corresponding user. Please check whether the email address is correct.	Check whether the email address is correct.
401	WKS.00010025	The project id in the request URL does not match the token.	The project_id and IAM token do not match.	Check whether the token matches the project ID and obtain the token again.
401	WKS.5100	X-Auth-Token is invalid in the request header.	Invalid IAM token.	Obtain the IAM token again and try again.
403	WKS.00010024	No authority.	No API access permission	Please contact the administrator.

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Status Code	Error Codes	Error Message	Description	Solution
403	WKS.00010033	Project in xx is failed to call this interface.	The interface cannot be invoked when the project is in the xx state.	Please contact the administrator.
403	WKS.00010036	The interface current not support xx.		
403	WKS.0570	The token role does not have the permission to perform this operation.	The role of the token is not authorized to perform this operation.	Check whether the token is correct or contact the administrator.
404	WKS.00010031	The resource does not found. The resource type is {0} and resource id [{1}].	The resource cannot be found.	Please try again or contact the administrator
404	WKS.0010	No resources found in the system.	The system has no resources.	Check whether the resource ID is correct.
409	WKS.00010032	Operation conflict. The desktop current instance status is [{0}] and deny operation [{1}], resource id [{2}].	Operation conflict	Check whether the conflict is caused by other operations on the current desktop. After other operations are complete, try again.
409	WKS.00010100	Failed to start the desktop.	Failed to start the computer	Please try again or contact the administrator
409	WKS.00010101	Failed to start some desktops.	Failed to start/wake up some computers	Please try again or contact the administrator

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Status Code	Error Codes	Error Message	Description	Solution
409	WKS.00010102	Failed to stop the desktop.	Failed to shut down the computer	Please try again or contact the administrator
409	WKS.00010103	Failed to stop some desktops.	An exception occurs when some computers are stopped.	Please try again or contact the administrator
409	WKS.00010104	Failed to reboot the desktop.	Failed to restart the computer.	Please try again or contact the administrator
409	WKS.00010105	Failed to reboot some desktops.	An exception occurs when some computers are restarted.	Please try again or contact the administrator
409	WKS.00010107	Failed to start the desktop that is running. Please ensure that the desktop is stopped, and try again.	The computer cannot be started due to its current running status. Please ensure that the computer is stopped and try again.	Ensure that the desktop status is Stopped.
409	WKS.00010108	Failed to stop the desktop that is not running. Please ensure that the desktop is running, and try again.	Failed to stop the computer because the computer status is abnormal.	Ensure that the desktop is running.
409	WKS.0016	Cannot operate the desktop in maintenance mode or the desktop id is invalid.	The desktop is in maintenance mode or the desktop information is incorrect.	Check whether the desktop is in maintenance mode.

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Status Code	Error Codes	Error Message	Description	Solution
412	WKS.00010115	Only the desktop has been join windows AD can use rejoin domain function.	Only computers that have been added to a Windows AD domain can be added to the domain again.	Check whether the desktop has been added to a domain.
412	WKS.00010116	Only Windows desktop now support to rejoin domain.	Only Windows computers support domain re-adding.	Check whether the desktop runs the Windows operating system.
500	WKS.00010001	Failed to invoke WKSManager interface.		
500	WKS.00010003	Failed to invoke WKSDesktops Controller interface.		
500	WKS.00010010	Failed to call WKS ITA interface.		
500	WKS.00010011	Failed to query vm attach info.	Failed to query the computer association information.	Please contact the administrator.
500	WKS.00010020	Failed to apply for Workspace service when creating desktops, please contact on-call.	Failed to enable the WKSManager service.	Failed to enable the WKSManager service.

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.00010028	Failed to invoke LiteAS interface, please check whether the AD server is normal.	Failed to access the LiteAs service. Check whether the AD server is normal.	Please contact the administrator.
500	WKS.00010029	Failed to invoke NAT interface.	Failed to invoke the NAT service.	Please try again or contact the administrator
500	WKS.00010030	Failed to invoke WKSCEngine interface.		
500	WKS.00010039	Failed to invoke VagController interface.		
500	WKS.00010043	This migration is not complete.	This migration is not complete.	Waiting for the migration to complete
500	WKS.00010119	Failed to query domain information based on the FQDN. Please check whether the AD service is normal, and try again.	Failed to query the NetBIOS domain name based on the FQDN.	Please contact the administrator.
500	WKS.00010137	agentStepCodeInfo is null or empty.	The sysprepstepcode information is empty.	Please contact the administrator.
500	WKS.00010200	A disk mounting task exists on the desktop. Please try again later.	The desktop has a disk mounting task. Please try again later.	Retry after the disk mounting task is complete.

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.00010201	Failed to query the list of disks mounted to the desktop. Please try again later.	Failed to query the list of disks attached to the desktop. Please try again later.	Please try again later or contact the administrator
500	WKS.00010202	Failed to query disk details. Please try again later.	Failed to query disk details. Please try again later.	Please try again later or contact the administrator
500	WKS.00010302	The desktop not set support snapshot.	The self-service backup management function is not enabled for the desktop. Contact the administrator for confirmation.	Please contact the administrator.
500	WKS.00010320	Failed to query desktop group info.Please check the status of WKSDesktops Controller and try again.	Failed to query desktop group information. Please check whether the HDC component is normal in the alarm monitoring module, and try again.	Contact the administrator.
500	WKS.00011055	The agency has not been created. Create an agency or re-authorize it.		

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.0002	Internal error. Please contact your system administrator.	Internal error. Please contact the administrator.	Contact the administrator.
500	WKS.0003	Database error or parameter configuration error.	The database is abnormal or parameter settings are incorrect.	Please contact the administrator.
500	WKS.0004	The internal request message is empty.	The internal request message is empty.	Check whether mandatory parameters are left blank.
500	WKS.0005	Failed to invoke ECS interface.		
500	WKS.0009	Failed to invoke the IAM interface.	Failed to authenticate the user information. Please try again or cancel the registration again.	Click Retry or Cancel Registration.
500	WKS.0014	Failed to invoke EVS interface.		
500	WKS.0018	Failed to invoke EIP interface, error message: {0}.		
500	WKS.0126	Failed to operate database.	Failed to operate the database.	Contact the administrator.
500	WKS.0221	Failed to invoke CBC interface.		

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.0224	Unpaid orders already exist, so this operation is not allowed.	This operation is not allowed because an unpaid order already exists.	Check whether the order is not paid. If yes, pay or cancel the order.
500	WKS.0923	The image does not exist.	The image does not exist.	Check whether the image exists on HUAWEI CLOUD Console IMS.
400	WKS.0001	Invalid request parameter.	Invalid request parameter.	Please check parameter
400	WKS.0005	Failed to invoke the ECS interface.	Failed to invoke the ECS interface.	Please contact the administrator
400	WKS.0006	Failed to create the VPC network. Click Retry or Cancel Service, and then Apply Now again.	Failed to create the VPC network. Click Retry or Cancel Service, and then Apply Now again.	Please contact the administrator
400	WKS.0008	Failed to invoke the SMN interface.	Failed to invoke the SMN interface.	Please contact the administrator
400	WKS.0009	Failed to invoke the IAM interface.	Failed to invoke the IAM interface.	Please contact the administrator
400	WKS.00170101	The password complexity is insufficient.	The password complexity is insufficient.	Change the password again to improve the password complexity.
400	WKS.00170102	The password is the same as the historical password.	The password is the same as the historical password.	Please redefine the password to ensure that the password is different from the history.

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Status Code	Error Codes	Error Message	Description	Solution
400	WKS.00170103	The password contains the user name.	The password contains the user name.	Modify the password so that the password does not contain the user name.
400	WKS.0020	Failed to invoke query subnets interface.	Failed to invoke query subnets interface.	Please contact the administrator
400	WKS.0106	Insufficient quota.	Insufficient quota.	Please check quota
400	WKS.0163	Failed to export the XML file.	Failed to export the XML file.	Check the error and contact the administrator.
400	WKS.0164	Failed to import the XML file.	Failed to import the XML file.	Check the file for specific errors and contact the administrator.
400	WKS.0165	Multiple policy groups with the same name exist in the file	Multiple policy groups with the same name exist in the file	Change the policy group name in the file.
400	WKS.0300	Get customer product info fail.	Get customer product info fail.	Please contact the administrator
400	WKS.0301	Product package info error.	Product package info error.	Please check product package info
400	WKS.0401	The desktop cannot be modified because it is not started.	The desktop cannot be modified because it is not started.	Please check desktop status
400	WKS.0404	Failed to modify desktop attributes.	Failed to modify desktop attributes.	Please contact the administrator

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Status Code	Error Codes	Error Message	Description	Solution
400	WKS.0406	The desktop cannot be modified because it is being started, stopped, or restarted.	The desktop cannot be modified because it is being started, stopped, or restarted.	Please check desktop status
400	WKS.0503	Rest project id invalid.	Rest project id invalid.	Please check parameter
400	WKS.0505	Invalid parameter action.	Invalid parameter action.	Please contact the administrator
400	WKS.0506	Request parameters cannot contain offset or limit.	Request parameters cannot contain offset or limit.	Please check parameter
400	WKS.0508	The value of offset cannot be smaller than 0.	The value of offset cannot be smaller than 0.	Please check parameter
400	WKS.0509	The value of limit must be greater than 0 and smaller than 1000.	The value of limit must be greater than 0 and smaller than 1000.	Please check parameter
400	WKS.0560	The value of matches cannot be left empty.	The value of matches cannot be left empty.	Please check parameter
400	WKS.0563	The number of tag keys cannot be 0 or greater than 10.	The number of tag keys cannot be 0 or greater than 10.	Please check parameter
400	WKS.0564	Invalid tag.	Invalid tag.	Please check parameter
400	WKS.0565	Duplicate tag keys.	Duplicate tag keys.	Please check parameter

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Status Code	Error Codes	Error Message	Description	Solution
400	WKS.0566	A maximum of 10 tags can be added to each desktop.	A maximum of 10 tags can be added to each desktop.	Please check parameter
400	WKS.0568	The resource does not exist or is a resource of another project.	The resource does not exist or is a resource of another project.	Please check parameter
401	WKS.0570	The token role does not have the permission to perform this operation.	The token role does not have the permission to perform this operation.	Please relogin
403	WKS.0011	This operation is not allowed because the service has not been enabled for the tenant.	This operation is not allowed because the service has not been enabled for the tenant.	Please check service status
403	WKS.0402	The desktop is being deleted and cannot be modified.	The desktop is being deleted and cannot be modified.	Please check desktop status
403	WKS.0403	The desktop failed to be deleted and cannot be modified.	The desktop failed to be deleted and cannot be modified.	Please check desktop status
403	WKS.0405	The desktop cannot be modified because it is not started.	The desktop cannot be modified because it is not started.	Please check desktop status
403	WKS.0407	This operation cannot be performed because disks are being added.	This operation cannot be performed because disks are being added.	Please check desktop status

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Status Code	Error Codes	Error Message	Description	Solution
404	WKS.0010	No resources in the system.	No resources in the system.	Please check uri
404	WKS.00170107	The enterprise ID is not exists.	The enterprise ID is not exists.	Check whether the enterprise ID is correct.
404	WKS.0569	The tag key does not exist.	The tag key does not exist.	Please check parameter
500	WKS.0002	Internal error.	Internal error.	Please contact the administrator
500	WKS.0003	Operation database error.	Operation database error.	Please contact the administrator
500	WKS.00170108	Reset user's password failed.	Reset user's password failed.	Please contact the administrator
500	WKS.00170112	This migration is not complete.	This migration is not complete.	Wait until the migration is complete.
500	WKS.0208	Failed to apply the service environment preparation status. Click Retry or Cancel to re-register the user.	Failed to apply the service environment preparation status. Click Retry or Cancel to re-register the user.	Please contact the administrator
400	WKS.00000091	Application servers exist	Application servers exist	After deleting the application service, run the following command:
400	WKS.0035	The enterprise ID has been used. Enter another ID.	The enterprise ID has been used.	Please change company ID
401	WKS.00000038	The REST service port to be accessed is invalid.	The REST service port to be accessed is invalid.	Please replace the service port with the correct one.

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Status Code	Error Codes	Error Message	Description	Solution
401	WKS.00000039	Failed to authenticate the IAM user, please contact your system administrator.	Failed to authenticate the IAM user.	Please contact your system administrator.
401	WKS.0570	The token role does not have the permission to perform this operation.	The token role does not have the permission to perform this operation.	Please contact your system administrator.
403	WKS.00000040	File is not exist.	File is not exist.	Check whether the file path or file name is correct.
403	WKS.0012	The user is not authorized.	The user is not authorized.	Please contact your system administrator.
500	WKS.00000001	Common query internal info failed.	Common query internal info failed.	Please contact your system administrator.
500	WKS.00000002	The tenant is not allowed to apply for services in the current state.	The tenant is not allowed to apply for services in the current state.	The tenant is not allowed to apply for services in the current state.
500	WKS.00000003	Failed to obtain database information. Click Cancel Service and Apply Now again.	Failed to obtain database information.	Click Cancel Service and Apply Now again.
500	WKS.00000004	Failed to obtain the management node IP address. Click Cancel Service and Apply Now again.	Failed to obtain the management node IP address.	Click Cancel Service and Apply Now again.

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.00000005	Failed to obtain the system disk type. Click Cancel Service and Apply Now again.	Failed to obtain the system disk type.	Click Cancel Service and Apply Now again.
500	WKS.00000006	Failed to apply for service due to abnormal resources. Click Cancel Service and Apply Now again.	Failed to apply for service due to abnormal resources.	Click Cancel Service and Apply Now again.
500	WKS.00000007	Failed to obtain the network segment information about the management node. Click Cancel Service, change the subnet network segment, and re-apply.	Failed to obtain the network segment information about the management node.	Click Cancel Service, change the subnet network segment, and re-apply.
500	WKS.00000008	Task query timed out. Click Retry or Cancel Service, and then Apply Now again.	Task query timed out.	Click Retry or Cancel Service, and then Apply Now again.

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.00000009	Failed to create the vAG management node. Click Retry or Cancel Service, and then Apply Now again.	Failed to create the vAG management node.	Click Retry or Cancel Service, and then Apply Now again.
500	WKS.00000010	There are ongoing tasks.	There are ongoing tasks.	Please wait for the task to stop and try again
500	WKS.00000011	Failed to refresh WKSLiteAS configurations.	Failed to refresh WKSLiteAS configurations.	Please contact your system administrator.
500	WKS.00000012	Failed to obtain task information.	Failed to obtain task information.	Please contact your system administrator.
500	WKS.00000013	Failed to obtain information about internal tokens. Click Retry or Cancel Service, and then Apply Now again.	Failed to obtain information about internal tokens.	Click Retry or Cancel Service, and then Apply Now again.
500	WKS.00000014	Failed to clear tenant data.	Failed to clear tenant data.	Please contact your system administrator.
500	WKS.00000015	Failed to invoke IMS interface.	Failed to invoke IMS interface.	Please contact your system administrator.
500	WKS.00000016	Failed to invoke WKSITA interface.	Failed to invoke WKSITA interface.	Please contact your system administrator.

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.00000017	Failed to delete the tenant information in WKSDesktops Controller.	Failed to delete the tenant information in WKSDesktops Controller.	Please contact your system administrator.
500	WKS.00000018	Failed to invoke ELB interface.	Failed to invoke ELB interface.	Please contact your system administrator.
500	WKS.00000019	Failed to invoke VPCEP interface.	Failed to invoke VPCEP interface.	Please contact your system administrator.
500	WKS.00000020	Failed to invoke EIP interface.	Failed to invoke EIP interface.	Please contact your system administrator.
500	WKS.00000021	Failed to query agent information.	Failed to query agent information.	Please contact your system administrator.
500	WKS.00000022	Failed to config agent.	Failed to config agent.	Please contact your system administrator.
500	WKS.00000023	Failed to install agent.	Failed to install agent.	Please contact your system administrator.
500	WKS.00000024	Failed to obtain the resource tenant token.	Failed to obtain the resource tenant token.	Please contact your system administrator.
500	WKS.00000025	The service status does not allow task retry.	The service status does not allow task retry.	Please wait for account opening success or failure and try again
500	WKS.00000026	Failed to create the task.	Failed to create the task.	Please configure cron expression
500	WKS.00000027	The domain type is invalid.	The domain type is invalid.	Please confirm that the AD domain has been configured

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.00000028	Internal task operation error (an internal error of task framework). Please check whether the task time is set to Never trigger.	Internal task operation error (an internal error of task framework).	Please check whether the task time is set to Never trigger.
500	WKS.00000029	Failed to create the task because the interval is less than or equal to 0.	Failed to create the task because the interval is less than or equal to 0.	The interval is less than or equal to 0.
500	WKS.00000030	Failed to invoke WKSDesktops Controller interface.	Failed to invoke WKSDesktops Controller interface.	Please contact your system administrator.
500	WKS.00000031	Failed to invoke WKSDesktops Manager interface.	Failed to invoke WKSDesktops Manager interface.	Please contact your system administrator.
500	WKS.00000032	The third-party password data is not configured. The Enable switch cannot be turned on.	The third-party password data is not configured.	Please configure third-party password data first
500	WKS.00000033	The configuration item values are incorrect. Please check the input value and try again.	The configuration item values are incorrect.	Please check the input value and try again.

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.00000034	The Configuration Name already exists.	The Configuration Name already exists.	Please replace with a different configuration name
500	WKS.00000035	The configuration is being called by another component. Ensure that it is not used and try again.	The configuration is being called by another component.	Ensure that it is not used and try again.
500	WKS.00000036	The button 'Whether to Enable Third-party SSO' cannot be toggled on because no third-party SSO data is available.	The button 'Whether to Enable Third-party SSO' cannot be toggled on because no third-party SSO data is available.	Please configure third-party single sign-on data
500	WKS.00000037	The value can not contain the special characters: <>.	The value can not contain the special characters: <>.	Please enter a drive path without '<>'
500	WKS.00000041	Cache error or parameter configuration error.	Cache error or parameter configuration error.	Please contact your system administrator.
500	WKS.00000042	Apollo error or parameter configuration error.	Apollo error or parameter configuration error.	Please contact your system administrator.
500	WKS.00000043	Failed to invoke WKSOPS interface.	Failed to invoke WKSOPS interface.	Please contact your system administrator.

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.00000061	Failed to connect to Windows AD. Check the following configurations:1. Whether the network connectivity between the LiteAS and Windows AD is normal.2. Whether the domain name, domain administrator account, and password are correct.3. Whether the time of the LiteAS is synchronized with that of Windows AD.	Failed to connect to Windows AD.	Check the following configurations:1. Whether the network connectivity between the LiteAS and Windows AD is normal.2. Whether the domain name, domain administrator account, and password are correct.3. Whether the time of the LiteAS is synchronized with that of Windows AD.
500	WKS.00000062	Enter a standard auth URL, for example, https://cc.idp4.idsmanager.com/oauth/authorize.	Enter a standard auth URL.	For example, https://cc.idp4.idsmanager.com/oauth/authorize.
500	WKS.00000063	The AD domain information already exists.	The AD domain information already exists.	Please contact your system administrator.

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.00000064	Enter a standard token URL, for example, https://cc.idp4.idsmanager.com/oauth/token.	Enter a standard token URL.	For example, https://cc.idp4.idsmanager.com/oauth/token.
500	WKS.00000065	Enter a standard redirect URL, for example, https://10.23.126.80:8080/servlet/AuthenServlet.	Enter a standard redirect URL.	For example, https://10.23.126.80:8080/servlet/AuthenServlet.
500	WKS.00000066	Invalid user information template. Use a template in the correct format.	Invalid user information template.	Pay attention to the check or fill in the information by referring to the online help.
500	WKS.00000067	Invalid screen unlocking template. Use a template in the correct format.	Invalid screen unlocking template.	Pay attention to the check or fill in the information by referring to the online help.
500	WKS.00000068	The format of the parameters entered through the interface is invalid.	The format of the parameters entered through the interface is invalid.	Pay attention to the check or fill in the information by referring to the online help.
500	WKS.00000069	Invalid user synchronization template. Use a template in the correct format.	Invalid user synchronization template.	Pay attention to the check or fill in the information by referring to the online help.

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.0001	The format of the parameters entered through the interface is invalid. {0} is invalid.	The format of the parameters entered through the interface is invalid.	Please enter correct request information
500	WKS.0002	Internal error. Please contact your system administrator. {0}.	Internal error.	Please contact your system administrator.
500	WKS.0003	Database error or parameter configuration error.	Database error or parameter configuration error.	Please try again after opening service
500	WKS.0005	Failed to invoke ECS interface.	Failed to invoke ECS interface.	Please try again after opening service
500	WKS.0006	Failed to invoke VPC interface.	Failed to invoke VPC interface.	Please try again after opening service
500	WKS.0009	Failed to authenticate user information.	Failed to authenticate user information.	Please try again after opening service
500	WKS.0010	No resources in the system. {0} is not found.	No resources in the system.	Please try again after opening service
500	WKS.0011	This operation is not allowed because the service has not been enabled for the tenant.	This operation is not allowed because the service has not been enabled for the tenant.	Please try again after opening service
500	WKS.0014	Failed to invoke EVS interface.	Failed to invoke EVS interface.	Please contact your system administrator.

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.0032	Failed to init the job. Please contact your system administrator.	Failed to init the job.	Please contact your system administrator.
500	WKS.0033	The domain information does not exist.	The domain information does not exist.	Please fill in the correct domain information
500	WKS.0036	The number of tenants exceeds the maximum.	The number of tenants exceeds the maximum.	Please contact your system administrator.
500	WKS.0106	Insufficient quota.	Insufficient quota.	Please contact your system administrator.
500	WKS.0207	A user cannot cancel Workspace in the current service status.	A user cannot cancel Workspace in the current service status.	Please wait for account opening success or failure and try again
500	WKS.0216	When the domain type is LOCAL_AD, the IP addresses of the active controller and active DNS cannot be empty.	When the domain type is LOCAL_AD, the IP addresses of the active controller and active DNS cannot be empty.	Please fill in the primary controller IP and primary DNS IP and try again
500	WKS.0220	Failed to access WKSLiteAS, please check whether WKSLiteAS is normal.	Failed to access WKSLiteAS.	Please check whether WKSLiteAS is normal.

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Status Code	Error Codes	Error Message	Description	Solution
500	WKS.0808	The current user cannot deregister the Workspace service because the user still has desktops.	The current user cannot deregister the Workspace service because the user still has desktops.	Please delete all desktops first
500	WKS.0904	Failed to query domain users.	Failed to query domain users.	Please check whether the AD component is normal in the alarm monitoring, and then try again
500	WKS.2001	Authentication failed.	Authentication failed.	Please contact your system administrator.

A.3 Obtaining a Project ID

Obtaining a Project ID by Calling an API

You can also obtain the project ID by calling the API used to **query project information based on the specified criteria**.

The API for obtaining a project ID is **GET https://*{Endpoint}*/v3/projects**, where *{Endpoint}* indicates the IAM endpoint. You can obtain the IAM endpoint from **Regions and Endpoints**. For details about API authentication, see **3.2 Authentication**.

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

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

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```
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects"
    }
}
```

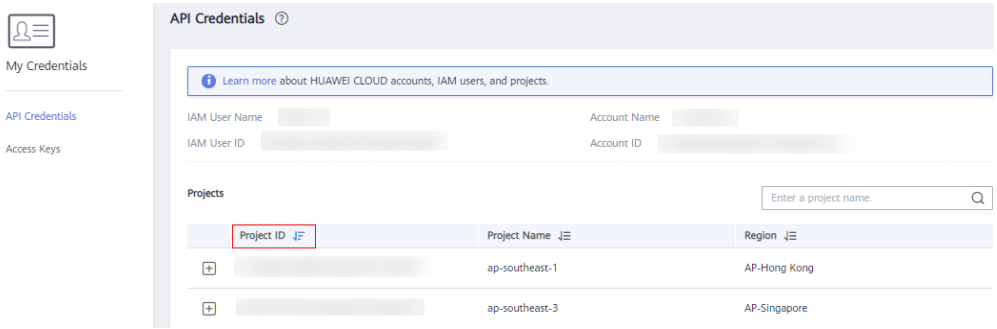
Obtaining a Project ID from the Console

A project ID needs to be specified in the URLs of some APIs. Therefore, you need to obtain a project ID before calling such APIs. Perform the following steps to obtain a project ID:

1. Log in to Workspace Console.
2. Hover over the username and choose **My Credentials** from the drop-down list.

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

Figure A-1 Viewing a project ID



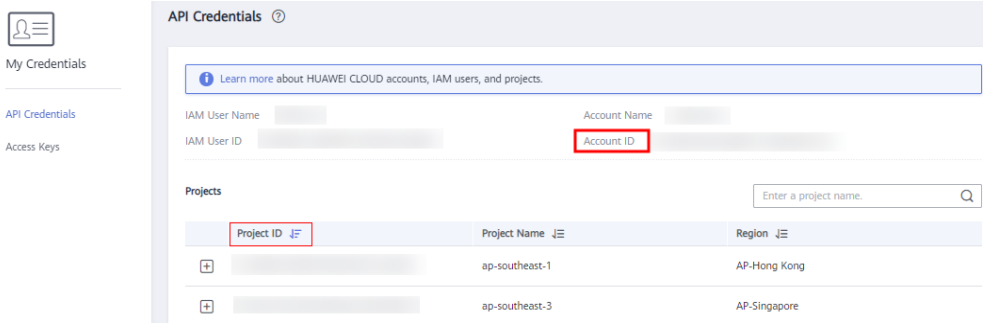
A.4 Obtaining an account ID

An account ID is required for some URLs when an API is called. To obtain the account ID, perform the following steps:

1. Log in to Workspace Console.
2. Hover over the username and choose **My Credentials** from the drop-down list.

   On the **API Credentials** page, view **Account ID**.

Figure A-2 Obtaining an account ID



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B Change History

Release Date	Description
2023-01-04	This issue is the first official release.

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