Flexus L Instance

API Reference

Issue 01

Date 2024-09-27

Huawei Cloud Computing Technologies Co., Ltd.

Contents

1 Before You Start

Overview

Flexus L Instance is a new-generation out-of-the-box lightweight cloud server product series designed for small- and medium-sized enterprises and developers. FlexusL provides a range of images for you to choose from and is suitable for medium- and light-load scenarios such as website setup, development and testing environment, enterprise applications, website analysis, and audio and video scenarios. It is secure, cost-effective, and easy-to-use.

This document describes the APIs, syntax, parameters, and examples of FlexusL instances.

Before calling an API of FlexusL instances, ensure that you are familiar with FlexusL instances. For details, see **What Is FlexusL?**

API Calling

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

Endpoint

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

2 API Overview

A FlexusL instance is a package of resources that include cloud servers, EIPs, EVS disks, CBR vaults, and HSS. Cloud servers are servers in a FlexusL instance.

This section describes some common APIs of FlexusL instances. Before using an API, learn **Calling APIs**.

- You can use the APIs according to the sequence from subscribing to a FlexusL instance to logging in to the FlexusL instance according to **Table 1**.

Table 2-1 APIs used from subscription to login to a FlexusL instance

API	Description
Purchasing a FlexusL Instance	Creates an order for one or more FlexusL instances.
Querying a Created FlexusL Instance	Queries details about a FlexusL instance, including the running status, name, and public IP address of the FlexusL instance.
Resetting Cloud Server Passwords in a Batch	Resets the passwords of FlexusL instance management accounts (**root** or **Administrator**) in batches.
Remote login	There is no API for remote login. Log in to FlexusL using the following methods: ● **Logging In to a Linux FlexusL Instance Using CloudShell** ● **Logging In to a Windows ECS Using MSTSC** You can also select other login modes based on **Login Modes**.

- You can use common APIs listed in **Table 2-2** to maintain FlexusL instances.

Table 2-2 Common O&M APIs

API	Description
Starting Cloud Servers in a Batch	Starts cloud servers in batches based on the specified cloud server IDs.
Restarting Cloud Servers in a Batch	Restarts cloud servers in batches based on specified cloud server IDs.
Stopping Cloud Servers in a Batch	Stops cloud servers in batches based on the specified cloud server IDs.
Modifying the Cloud Server Information of a FlexusL Instance	Modifies the cloud server information. Currently, the cloud server name, description, and hostname can be modified.

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3 API

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3.1 Purchasing a FlexusL Instance

Function

This API is used to subscribe to one or more FlexusL instances.

This API is an asynchronous API. After a subscription API request is delivered, **order_id** and **instances_ids** are returned. In this case, **the order is created**, but the FlexusL instance is not created.

Use the **order_id** returned by this API to call the API of **Querying Order Details**. Check the creation status of the FlexusL instance based on the value of **status** in the response message. If the value of **status** is **5**, the FlexusL instance is created.

API Gateway Address

https://hcss.ap-southeast-3.myhuaweicloud.com

URL

POST /v1/light-instances

Request Message

Table 3-1 Header parameters

Parameter	Mandatory	Type	Description
Client-Request-Id	Yes	String	Unique request ID. It is specified by a user and is used to locate a request. UUID is recommended. The value contains 36 to 128 characters.

Parameter	Mand atory	Type	Description
X-Auth-Token	Yes	String	User token.
			This API uses token authentication. You can obtain the token by calling the API of **Obtaining a User Token Through Password Authentication**.
			The value of **X-Auth-Token** is that of **X-Subject-Token** in the response message header of the API of **Obtaining a User Token Through Password Authentication**.

Table 3-2 Body parameters.

Parameter	Mand atory	Type	Description
instance_nam e	Yes	String	Instance name. The value can contain letters, digits, underscores (_), and hyphens (-). The name is case-sensitive and must start with a letter.
			The value contains 1 to 128 characters.
description	No	String	Instance description.
			The value contains 0 to 1024 characters.
plan_spec	Yes	String	Specification code.
			Different images support different specification codes. For details, see **Appendix**.
image_ref	No	ImageRe f	Image information. For details, see **Table 3-3**.
region	Yes	String	Region.
			Currently, only ap-southeast-1 (CN-Hong Kong), ap-southeast-3 (AP-Singapore), ap-southeast-2 (AP-Bangkok), tr-west-1 (TR-Istanbul), sa-brazil-1 (LA-Sao Paulo1), and me-east-1 (ME-Riyadh) are supported.
charging_mo de	No	String	Billing mode. The default value is **prePaid**, which indicates the yearly/monthly billing mode.

Parameter	Mandatory	Type	Description
period_type	Yes	String	Subscription period. • **month**: indicates that the subscription period is month. • **year**: indicates that the subscription period is year.
period_num	Yes	String	Subscribed periods. • If **periodType** is **month**, the value ranges from **1** to **9**. • If **periodType** is **year**, the value ranges from 1 to 3.
purchase_quantity	No	int	Purchase quantity. The default value is **1**. Value range: [1,200]
is_auto_renew	No	boolean	Whether auto-renewal is enabled. The default value is **false**. • **true**: indicates that auto-renewal is enabled. • **false**: indicates that auto-renewal is disabled.
is_auto_pay	No	boolean	Whether the payment will be automatically deducted from your account balance when an order is submitted. The default value is **false**. • **true**: The order will be automatically paid. • **false**: You must manually pay the order.
ExtraResources	No	Array of ExtraResources	Additional resource information. For details, see **Table 3-4**.
tags	No	Array of Tags	Custom tags. For details, see **Table 3-5**.

Table 3-3 Parameters in **ImageRef**

Parameter	Mandatory	Type	Description
image_name	No	String	Names of the application images or system images supported by a FlexusL instance. This parameter is required when a FlexusL instance is created using application images or system images. This parameter is not required when a FlexusL instance is created using a **private image**. For details about the supported image names, see **Application Images** or **System Images**.
image_version	No	String	Versions of the application images or system images supported by a FlexusL instance. This parameter is required when a FlexusL instance is created using application images or system images. This parameter is not required when a FlexusL instance is created using a **private image**. For details about the supported image versions, see **Application Images** or **System Images**.
image_id	No	String	Private image ID. The image ID of the private image is provided by a user only when a **private image** is used to create a FlexusL instance. This parameter is not required if a system image or application image is used to create a FlexusL instance.

Table 3-4 Parameters in **ExtraResources**

Parameter	Mandatory	Type	Description
type	Yes	String	Additional resource type. Currently, **evs**, **cbr**, and **hss** are supported. • **evs** indicates data disks. • **cbr** indicates cloud backups. • **hss** indicates host security.

Paramet er	Mandat ory	Type	Description
size	No	Int	Capacity of the additional EVS or CBR resources. The unit is GiB. The value range is [10,2048]. This parameter is not involved for the **hss** resource type.

Table 3-5 Tags parameters

Paramete r	Mandat ory	Type	Operation
key	Yes	String	Key. The value contains 1 to 32 characters.
value	Yes	String	Tag value. The value contains 0 to 2,048 characters.

Response Message

Table 3-6 Tags parameters

Parameter	Type	Description
order_id	String	Order number.
instance_ids	Array of strings	Instance IDs.

☐ **NOTE**

Use the **order_id** returned by this API to call the API of **Querying Order Details**. Check the creation status of the FlexusL instance based on the value of **status** in the response message. If the value of **status** is **5**, the FlexusL instance is created.

Example Request

Create an order of two instances named **test-0620-01**. The instances use the flavor code **hf.large.1.30m.linux** and image version BT 6.8.35 and are created in the AP-Singapore region. The required duration is 1 month, and auto payment and auto-renewal are enabled. The order also includes 20 GB data disks, 20 GB cloud backups, and HSS.

```
{
  "instance_name": "test-0620-01",
  "description": "test",
  "plan_spec": "hf.large.1.30m.linux",
  "image_ref": {
    "image_name": "BT",
    "image_version": "6.8.35"
```

```
    },
    "region": "ap-southeast-3",
    "charging_mode": "prePaid",
    "period_type": "month",
    "period_num": 1,
    "purchase_quantity": 2,
    "is_auto_renew": true,
    "is_auto_pay": true
    ,"extra_resources": [
      {
        "type": "evs",
        "size": 20
      },
      {
        "type": "cbr",
        "size": 20
      },
      {
        "type": "hss"
      }
    ]
}
```

Example Response

```
{
    "order_id": "CS24022811305H1EW",
    "instance_ids": [
        "65dea8d23005da564c78d9d2"
    ]
}
```

Returned Values

Table 3-7 Returned values

Status Code	Description
202	The request is accepted and processed asynchronously.
400	Invalid request.
401	Authentication failed.
403	The user does not have the permission to call this API.
429	There are too many requests.
500	Internal server error.

Error Codes

Table 3-8 Error codes

HTTP Status Code	Error Code	Description
400	HCSS.14000001	Invalid parameters.

HTTP Status Code	Error Code	Description
400	HCSS.14000002	CORS service request exception.
400	HCSS.14000003	CBC service request exception.
400	HCSS.14000004	ECS service request exception.
400	HCSS.14000005	EVS service request exception.
400	HCSS.14000006	EIP service request exception.
400	HCSS.14000007	ELB service request exception.
400	HCSS.14000008	IMS service request exception.
400	HCSS.14000009	Marketplace image request exception.
400	HCSS.14000010	Insufficient specifications.
400	HCSS.14000011	Insufficient quota.
429	HCSS.14290001	Too many requests. Try again later.
500	HCSS.15000001	Server exception.

Appendix

This section describes the specification codes of images supported by this API.

Application Images

For details about the specifications corresponding to the application images and their specification codes supported by the API, see **Table 3-12** and **Table 3-13**.

Table 3-9 Application image specification codes

Image Name	Image Version	Supported Specification Code
BT	6.8.35	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux

Image Name	Image Version	Supported Specification Code
CRM	8.0	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
Ghost	5.67	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
GitLab	16.9.3	hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
Joomla	5.0.3	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
KodBox	1.49	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
Matomo	5.0.3	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
Moodle	4.3.4	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux

Image Name	Image Version	Supported Specification Code
Nextcloud	28.0.3	hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
Nodejs	21	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
Odoo	17.0	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
Portainer	2.19.4	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
PrestaShop	8.1.5	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
Redmine	5.1	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
SRS	6.0.101	hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
Superset	3.1.1	hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux

Image Name	Image Version	Supported Specification Code
WordPress	6.4	hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux

System Images

For details about the specifications corresponding to the system images and their specification codes supported by the API, see **Table 3-12** and **Table 3-13**.

Table 3-10 System image specification codes

Image Name	Version	Supported Specification Code
Ubuntu	22.04/20.04/18.04/16.04	hf.large.05.30m.linux hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
Huawei Cloud EulerOS	2.0	hf.large.025.30m.linux (supported only in the CN-Hong Kong and AP-Singapore regions) hf.large.05.30m.linux hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux

Image Name	Version	Supported Specification Code
CentOS	8.2/8.1/8.0/7.9/7.8/7.7/7.6/ 7.5/ 7.4/7.3/7.2 **NOTE** The TR-Istanbul and ME-Riyadh regions do not support 8.2, 8.1, 8.0, 7.3, and 7.2.	hf.large.025.30m.linux (supported only by images of version 7.6 in the CN-Hong Kong and AP-Singapore regions) hf.large.05.30m.linux hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux
Debian	11.1/9.0	hf.large.025.30m.linux (supported only by images of version 11.1 in the CN-Hong Kong and AP-Singapore regions) hf.large.05.30m.linux hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux

Private Images

For details about the specifications corresponding to the private images and their specification codes supported by the API, see **Table 3-12** and **Table 3-13**.

Table 3-11 Private image specification codes

OS	Specifications Code
Linux	hf.large.025.30m.linux hf.large.05.30m.linux hf.large.1.30m.linux hf.large.2.30m.linux hf.large.4.30m.linux hf.xlarge.2.30m.linux hf.xlarge.4.30m.linux

OS	Specifications Code
Windows	hf.large.1.30m.byol hf.large.2.30m.byol hf.large.4.30m.byol hf.xlarge.2.30m.byol hf.xlarge.4.30m.byol

The following table lists the specifications corresponding to the specification codes.

Table 3-12 Specifications corresponding to the Linux system specification codes

Specifications Code	vCPU	Memory (GiB)	System Disk (GiB)	Peak Bandwidth (Mbit/s)	Data Package (GB)
hf.large.025.30m.linux	2	0.5	20	30	1024
hf.large.05.30m.linux	2	1	40	30	2048
hf.large.1.30m.linux	2	2	60	30	3072
hf.large.2.30m.linux	2	4	80	30	4096
hf.large.4.30m.linux	2	8	160	30	5120
hf.xlarge.2.30m.linux	4	8	240	30	6144
hf.xlarge.4.30m.linux	4	16	320	30	7168

Table 3-13 Specifications of the Windows system specification codes

Specifications Code	vCPU	Memory (GiB)	System Disk (GiB)	Peak Bandwidth (Mbit/s)	Data Package (GB)
hf.large.1.30m.byol	2	2	60	30	3072
hf.large.2.30m.byol	2	4	80	30	4096
hf.large.4.30m.byol	2	8	160	30	5120

Specifications Code	vCPU	Memory (GiB)	System Disk (GiB)	Peak Bandwidth (Mbit/s)	Data Package (GB)
hf.xlarge.2.30m.byol	4	8	240	30	6144
hf.xlarge.4.30m.byol	4	16	320	30	7168

3.2 Querying a Created FlexusL Instance

Function

This API is used to query information about a created FlexusL instance, including the instance name, instance ID, and EIP. It is the RMS API for listing all resources. This section lists the key information about API usage. For more information about the API, see **Querying All Resources Under Your Account**.

Constraints

The current user must have the **rms:resources:list** permission.

URI

GET /v1/resource-manager/domains/{domain_id}/all-resources

When querying a created FlexusL instance, pay attention to the following **Query** parameters:

Table 3-14 Query parameters

Parameter	Mandatory	Description
region_id	No	Region ID. It specifies whether to query created FlexusL instances **by region**. ● If this parameter is specified, the created FlexusL instances are queried by region. ● If this parameter is not specified, FlexusL instances created in all regions are queried.
type	**Yes**	Resource type list. To query a FlexusL instance, set this parameter to **hcss.l-instance**.
limit	No	**limit** and **marker** are both required for pagination query.
marker		

Response Message

The common query information is as follows.

Parameter	Description
id	FlexusL instance ID.
name	Name of a FlexusL instance.
region_id	Region where the FlexusL instance is located.
resource_spec_code	Specification code. For details, see **Table 3-12**.
order_id	Order ID.
physical_resource_id	Cloud server ID.
physical_resource_name	Cloud server name.
public_ip_address	EIP of a FlexusL instance.

Example Request

Query information about all FlexusL instances of the current user.

GET https://{*endpoint*}/v1/resource-manager/domains/{*domain_id*}/all-resources?**type=hcss.l-instance**

Example

```
"resources": [
 {
  "id": "66e3e9f8b271f8319ef19e86",  //FlexusL instance ID
  "name": "BT-cn-north-4-X6p4",    //FlexusL instance name
  "provider": "hcss",
  "type": "l-instance",
  "region_id": "cn-north-4",     //Region of the FlexusL instance
  "project_id": "067cf8aecf3845d1ad7a5d308322f13b",
  "project_name": "cn-north-4",
  "ep_id": "0",
  "ep_name": "default",
  "checksum": "a9c783ed32927aff443932a9cf43cb8e3dd8a5bf1ddd4ae0495aa182c4e02938",
  "created": "2024-09-13T07:30:00.000Z",
  "updated": "2024-09-13T07:31:11.000Z",
  "provisioning_state": "Succeeded",
  "state": "Normal",
  "tags": {},
  "properties": {
  "metadata": {
   "charging_mode": "prePaid",
   "resource_type": "hws.resource.type.hecsfusion",
   "resource_spec_code": "ahf.large.1.40g.2m.linux", //Specification code
   "order_id": "CS2409131529QL4NJ",   //Order ID
   "cloud_service_type": "hws.service.type.hcss"
  },
  "instance_name": "BT-cn-north-4-X6p4",
  "create_time": "2024-09-13T07:30:00Z",
  "description": "",
  "resources": [
   {
    "physical_resource_type": "hws.resource.type.marketplace",
    "logical_resource_type": "hws.resource.type.marketplace",
    "physical_resource_id": "66e3e9f8b271f8319ef19e86_f267d4ce-0d85-41ce-99c3-f5c4b3ca4640_0",
    "logical_resource_name": "huaweicloudinternal_ecs_instance_image",
    "cloud_service_type": "hws.service.type.marketplace"
   },
   {
```

```
"physical_resource_type": "hws.resource.type.vm",
"logical_resource_type": "huaweicloudinternal_ecs_instance",
"physical_resource_id": "72a270de-665a-4f46-8d64-24ad6edccdd2",  //Cloud server ID
"physical_resource_name": "hcss_ecs_ff60",  //Cloud server name
"resource_attributes": [
 {
  "value": "null",
  "key": "admin_pass"
 },
 {
  "value": "cn-north-4g",
  "key": "availability_zone"
 },
 {
  "value": "null",
  "key": "batch_create_in_multi_az"
 },
 {
  "value": "[]",
  "key": "data_volumes"
 },
 {
  "value": "null",
  "key": "description"
 },
 {
  "value": "{\"chargingMode\":\"prePaid\",\"imageproductid\":\"OFFI890411017782276096\",\"orderID
\":\"CS2409131529QL4NJ\",\"productID\":\"OFFI1017640863722074117\"}",
  "key": "extendparam"
 },
 {
  "value": "at7.large.1",
  "key": "flavor_id"
 },
 {
  "value": "null",
  "key": "frozen"
 },
 {
  "value": "72a270de-665a-4f46-8d64-24ad6edccdd2",
  "key": "id"
 },
 {
  "value": "f267d4ce-0d85-41ce-99c3-f5c4b3ca4640",
  "key": "image_id"
 },
 {
  "value": "null",
  "key": "is_auto_rename"
 },
 {
  "value": "null",
  "key": "key_name"
 },
 {
  "value": "{\"__support_agent_list\":\"hss,hss-pc,ces\"}",
  "key": "metadata"
 },
 {
  "value": "hcss_ecs_ff60",
  "key": "name"
 },
 {
  "value": "[{\"ip_address\":\"\",\"ipv6_bandwidth\":[],\"ipv6_enable\":false,\"subnet_id
\":\"d99a81d0-4262-4a0b-8258-8ac2357d7bcf\"}]",
  "key": "nics"
 },
 {
  "value": "null",
```

```
            "key": "os_scheduler_hints"
          },
          {
           "value": "db18e1cd-7fea-4e8d-95b0-e31db879b8ee",
           "key": "primary_port_id"
          },
          {
           "value": "[]",
           "key": "publicip"
          },
          {
           "value": "[{\"cluster_id\":\"\",\"cluster_type\":\"\",\"extendparam\":{\"orderID\":\"CS2409131529QL4NJ
\"},\"hw_passthrough\":false,\"iops\":0,\"metadata\":{},\"size\":40,\"throughput\":0,\"volumetype
\":\"SAS_for_smb\"}]",
           "key": "root_volume"
          },
          {
           "value": "[{\"id\":\"b88fdd7e-fe03-4e3f-ab64-1e5e1f8de0d9\"}]",
           "key": "security_groups"
          },
          {
           "value": "[]",
           "key": "server_tags"
          },
          {
           "value": "0",
           "key": "status"
          },
          {
           "value": "2cda750e-d6d8-4153-b4cc-e15fb22e6ea8",
           "key": "system_disk_id"
          },
          {
           "value": "[\"_sys_type_hcss_l\"]",
           "key": "tags"
          },
          {
           "value": "null",
           "key": "timeouts"
          },
          {
           "value": "null",
           "key": "total_count"
          },
          {
           "value": "null",
           "key": "user_data"
          },
          {
           "value": "4022721e-0476-41ea-91f4-1883065a68cc",
           "key": "vpc_id"
          },
          {
           "value": "2024-09-13T07:31:11Z",
           "key": "cors_crm_updated_at"
          }
        ],
        "logical_resource_name": "huaweicloudinternal_ecs_instance_light_server_compute_instance",
        "cloud_service_type": "hws.service.type.ec2"
       },
       {
        "physical_resource_type": "hws.resource.type.volume",
        "logical_resource_type": "hws.resource.type.volume",
        "physical_resource_id": "2cda750e-d6d8-4153-b4cc-e15fb22e6ea8",
        "logical_resource_name": "huaweicloudinternal_ecs_instance_system_disk",
        "cloud_service_type": "hws.service.type.ebs"
       },
       {
        "physical_resource_type": "hws.resource.type.bandwidth",
```

```
        "logical_resource_type": "huaweicloudinternal_cbc_freeresource",
        "physical_resource_id": "4fb5cd67-73f8-4313-bc1b-f76ed15c9d09",
        "resource_attributes": [
         {
          "value": "null",
          "key": "bundle_product_id"
         },
         {
          "value": "3c24f6f8852945a0af194f93ce075fbd",
          "key": "customer_id"
         },
         {
          "value": "2024-10-13 16:00:00",
          "key": "end_time"
         },
         {
          "value": "null",
          "key": "enterprise_project_id"
         },
         {
          "value": "4fb5cd67-73f8-4313-bc1b-f76ed15c9d09",
          "key": "id"
         },
         {
          "value": "CS2409131529QL4NJ",
          "key": "order_id"
         },
         {
          "value": "32bd0fdf-772b-41a8-8495-afbc5a46e00f",
          "key": "oriented_resource_id"
         },
         {
          "value": "OFFI879567668502900737",
          "key": "product_id"
         },
         {
          "value": "cn-north-4",
          "key": "region_code"
         },
         {
          "value": "2024-09-13T07:31:11Z",
          "key": "cors_crm_updated_at"
         }
        ],
        "logical_resource_name": "huaweicloudinternal_cbc_freeresource_cbc_freeresource",
        "cloud_service_type": "hws.service.type.vpc"
       },
       {
        "physical_resource_type": "hws.resource.type.ip",
        "logical_resource_type": "huaweicloudinternal_eip",
        "physical_resource_id": "ad75ed90-2cd5-4f96-a65c-c4cb0b3690c0",
        "resource_attributes": [
         {
          "value": "hcss_eip_ff60",
          "key": "alias"
         },
         {
          "value": "null",
          "key": "associate_instance_id"
         },
         {
          "value": "null",
          "key": "associate_instance_type"
         },
         {
          "value": "[{\"billing_info\":\"\",\"charge_mode\":\"traffic\",\"id\":\"32bd0fdf-772b-41a8-8495-
afbc5a46e00f\",\"name\":\"hcss_bandwidth_ff60\",\"share_type\":\"PER\",\"size\":2,\"status\":0}]",
          "key": "bandwidth"
         },
```

```
          {
           "value": "null",
           "key": "billing_info"
          },
          {
           "value": "null",
           "key": "cascade_delete_by_instance"
          },
          {
           "value": "null",
           "key": "description"
          },
          {
           "value": "null",
           "key": "eip_id"
          },
          {
           "value": "null",
           "key": "enterprise_project_id"
          },
          {
           "value": "ad75ed90-2cd5-4f96-a65c-c4cb0b3690c0",
           "key": "id"
          },
          {
           "value": "4",
           "key": "ip_version"
          },
          {
           "value": "119.3.166.187",      //EIP
           "key": "public_ip_address"
          },
          {
           "value": "",
           "key": "public_ipv6_address"
          },
          {
           "value": "5_bgp",
           "key": "publicip_pool_name"
          },
          {
           "value": "0",
           "key": "status"
          },
          {
           "value": "null",
           "key": "type"
          },
          {
           "value": "2024-09-13T07:31:11Z",
           "key": "cors_crm_updated_at"
          }
         ],
         "logical_resource_name": "huaweicloudinternal_eip_light_server_eip",
         "cloud_service_type": "hws.service.type.vpc"
        },
        {
         "physical_resource_type": "",
         "logical_resource_type": "huaweicloudinternal_eip_attach",
         "physical_resource_id": "ad75ed90-2cd5-4f96-a65c-c4cb0b3690c0",
         "resource_attributes": [
          {
           "value": "db18e1cd-7fea-4e8d-95b0-e31db879b8ee",
           "key": "associate_instance_id"
          },
          {
           "value": "PORT",
           "key": "associate_instance_type"
          },
```

```
                  {
                   "value": "null",
                   "key": "cascade_delete_by_instance"
                  },
                  {
                   "value": "ad75ed90-2cd5-4f96-a65c-c4cb0b3690c0",
                   "key": "eip_id"
                  },
                  {
                   "value": "ad75ed90-2cd5-4f96-a65c-c4cb0b3690c0",
                   "key": "id"
                  },
                  {
                   "value": "2024-09-13T07:31:11Z",
                   "key": "cors_crm_updated_at"
                  }
                 ],
                 "logical_resource_name": "huaweicloudinternal_eip_attach_light_server_eip_attach_ecs",
                 "cloud_service_type": ""
                },
                {
                 "physical_resource_type": "",
                 "logical_resource_type": "huaweicloudinternal_eip_bandwidth_lock",
                 "physical_resource_id": "32bd0fdf-772b-41a8-8495-afbc5a46e00f",
                 "resource_attributes": [
                  {
                   "value": "resize,change_charge_mode,delete",
                   "key": "action"
                  },
                  {
                   "value": "32bd0fdf-772b-41a8-8495-afbc5a46e00f",
                   "key": "bandwidth_id"
                  },
                  {
                   "value": "32bd0fdf-772b-41a8-8495-afbc5a46e00f",
                   "key": "id"
                  },
                  {
                   "value": "hcss",
                   "key": "scene"
                  },
                  {
                   "value": "72a270de-665a-4f46-8d64-24ad6edccdd2",
                   "key": "source_id"
                  },
                  {
                   "value": "hcss",
                   "key": "source_type"
                  },
                  {
                   "value": "2024-09-13T07:31:11Z",
                   "key": "cors_crm_updated_at"
                  }
                 ],
                 "logical_resource_name": "huaweicloudinternal_eip_bandwidth_lock_light_server_bandwidth_lock_ecs",
                 "cloud_service_type": ""
                },
                {
                 "physical_resource_type": "",
                 "logical_resource_type": "huaweicloudinternal_eip_lock",
                 "physical_resource_id": "ad75ed90-2cd5-4f96-a65c-c4cb0b3690c0",
                 "resource_attributes": [
                  {
                   "value": "associate_instance,disassociate_instance,change_bandwidth,delete,change_charge_mode",
                   "key": "action"
                  },
                  {
                   "value": "ad75ed90-2cd5-4f96-a65c-c4cb0b3690c0",
                   "key": "eip_id"
```

```
    },
    {
      "value": "ad75ed90-2cd5-4f96-a65c-c4cb0b3690c0",
      "key": "id"
    },
    {
      "value": "hcss",
      "key": "scene"
    },
    {
      "value": "72a270de-665a-4f46-8d64-24ad6edccdd2",
      "key": "source_id"
    },
    {
      "value": "hcss",
      "key": "source_type"
    },
    {
      "value": "2024-09-13T07:31:11Z",
      "key": "cors_crm_updated_at"
    }
    ],
    "logical_resource_name": "huaweicloudinternal_eip_lock_light_server_eip_lock_ecs",
    "cloud_service_type": ""
    }
    ],
    "custom_tags": [
    {
      "value": "light_server",
      "key": "product_type"
    },
    {
      "value": "basic",
      "key": "plan_type"
    },
    {
      "value": "BT",
      "key": "image_name"
    },
    {
      "value": "application",
      "key": "image_type"
    }
    ],
    "product_name": "BT_light_server_8_0",
    "platform": "SMB",
    "plan_name": "basic_v12",
    "update_time": "2024-09-13T07:31:11Z",
    "instance_id": "66e3e9f8b271f8319ef19e86",
    "product_id": "64c12fefcd938770a92ea433",
    "region": "cn-north-4",
    "plan_id": "66b03ab8bb1fd66087123683",
    "status": "RUNNING"
    }
    }
    ],
  "page_info": {
  "current_count": 1,
  "next_marker": null
  }
}
```

3.3 Resetting Cloud Server Passwords in a Batch

Function

This API is used to reset the password of the cloud server management accounts (**root** or **Administrator**) in a batch. It is the API for resetting the passwords of ECS management accounts in a batch. This section lists the key information about using the API. For more information about the API, see **Resetting the Passwords for Logging In to ECSs in a Batch**.

📖 **NOTE**

This API used by **cloud servers** in the FlexusL instances is the same as that used by **ECSs**. The response parameter description, API usage example, and return values of ECSs also apply to the FlexusL instances.

Constraints

- Before using this API, you must install the password reset plug-in.

  By default, the password reset plug-in has been installed in the system images and application images provided by the FlexusL instances.

  If the private image is created from a server on another cloud platform or downloaded from a third party, the image may not have the password reset plug-in installed, so the password reset function is unavailable. Install the plug-in by following the instructions provided in **What Should I Do If the Password Cannot Be Reset After I Use a Private Linux Image to Create a FlexusL Instance or Change the OS of an Existing Instance and I Forgot the Initial Password of the Private Image?**

- After the request for resetting the password is issued, this API does not report an error if executing the script failed.

- A new password takes effect after the cloud server is started or restarted.

- This API allows you to reset passwords when the target cloud servers are running or stopped.

URI

PUT /v1/{project_id}/cloudservers/os-reset-passwords

Request Message

In the request message, **id** in the **servers** field is the cloud server ID. Obtain the cloud server ID based on **Querying a Created FlexusL Instance**.

Example Request

Reset the passwords of the FlexusL instances whose cloud server IDs are **72a270de-665a-4f46-8d64-24ad6edccdd1** or **72a270de-665a-4f46-8d64-24ad6edccdd2** to **password@123**.

```
PUT https://{endpoint}/v1/{project_id}/cloudservers/os-reset-passwords
{
```

```
  "new_password": "password@123",
  "servers": [
   {
    "id": "72a270de-665a-4f46-8d64-24ad6edccdd1"
   },
   {
    "id": "72a270de-665a-4f46-8d64-24ad6edccdd2"
   }
  ]
}
```

Example Response

```
{
 "response": [
  {
   "id": "72a270de-665a-4f46-8d64-24ad6edccdd1"
  }
  {
   "id": "72a270de-665a-4f46-8d64-24ad6edccdd2"
  }
 ]
}
```

3.4 General O&M APIs

3.4.1 Querying Details About a FlexusL Cloud Server

Function

This API is used to query details about a cloud server based on the cloud server ID, including the cloud server running status, cloud server name, and EIP. It is the API for querying ECS details. The information that can be queried includes the cloud server billing mode and whether the cloud server is frozen. This section lists the key information about using the API. For more information about the API, see **Querying Details About an ECS**.

📖 NOTE

This API used by **cloud servers** in the FlexusL instances is the same as that used by **ECSs**. The response parameter description, API usage example, and return values of ECSs also apply to the FlexusL instances.

URI

GET /v1/{project_id}/cloudservers/{server_id}

In the parameter description, **server_id** indicates the cloud server ID. Obtain the cloud server ID based on **Querying a Created FlexusL Instance**.

Example Request

Query details about the cloud server whose ID is **72a270de-665a-4f46-8d64-24ad6edccdd2**.

GET https://{*endpoint*}/v1/{*project_id*}/cloudservers/72a270de-665a-4f46-8d64-24ad6edccdd2

Example Response

```
{
 "server": {
  "fault": null,
  "id": "72a270de-665a-4f46-8d64-24ad6edccdd2",
  "name": "hcss_ecs_ff60",  //Cloud server name
  "addresses": {          //Cloud server network information
   "4022721e-0476-41ea-91f4-1883065a68cc": [
    {
     "version": "4",
     "addr": "192.168.12.151",
     "primary": true,
     "OS-EXT-IPS-MAC:mac_addr": "fa:16:3e:74:d8:63",
     "OS-EXT-IPS:type": "fixed",
     "OS-EXT-IPS:port_id": "db18e1cd-7fea-4e8d-95b0-e31db879b8ee"
    },
    {
     "version": "4",
     "addr": "119.3.166.187",
     "primary": true,
     "OS-EXT-IPS-MAC:mac_addr": "fa:16:3e:74:d8:63",
     "OS-EXT-IPS:type": "floating",
     "OS-EXT-IPS:port_id": "db18e1cd-7fea-4e8d-95b0-e31db879b8ee"
    }
   ]
  },
  "flavor": {
   "disk": "0",
   "vcpus": "2",
   "ram": "2048",
   "id": "at7.large.1",
   "name": "at7.large.1",
   "gpus": [],
   "asic_accelerators": []
  },
  "accessIPv4": "",
  "accessIPv6": "",
  "status": "ACTIVE",
  "progress": 0,
  "hostId": "fc724a7f21982eec27a7c4d3ab33275733834e1d4316cadd2a684387",
  "updated": "2024-09-13T07:31:12Z",
  "created": "2024-09-13T07:30:25Z",
  "metadata": {
   "lockScene":
"OTHER_SVC_LOCK=changeos,resize,delete,attachvolume,detachvolume,detachnics,attachnics,renewfee",
   "charging_mode": "1",
   "vpc_id": "4022721e-0476-41ea-91f4-1883065a68cc",
   "metering.productcode": "0a1438ad-a2d3-4b89-bed7-f3d261a853a8",
   "metering.product_id": "OFFI1017640863722074117",
   "lockSource": "hcss",
   "lockSourceId": "66e3e9f8b271f8319ef19e86",
   "__support_agent_list": "hss,hss-pc,ces",
   "metering.imagetype": "market",
   "metering.order_id": "CS2409131529QL4NJ",
   "image_name": "Linux BT panel 8.0.5",
   "metering.imageproductid": "OFFI890411017782276096",
   "metering.resourcespeccode": "at7.large.1.linux",
   "os_type": "Linux",
   "metering.resourcetype": "1",
   "metering.image_id": "f267d4ce-0d85-41ce-99c3-f5c4b3ca4640",
   "os_bit": "64",
   "lockCheckEndpoint": "",
   "cascaded.instance_extrainfo": "pcibridge:1,virtio_bus_count:8"
  },
  "tags": [
   "_sys_type_hcss_l"
  ],
  "description": "",
  "locked": false,
```

```
    "config_drive": "",
    "tenant_id": "067cf8aecf3845d1ad7a5d308322f13b",
    "user_id": "862856742c334c8a801460a39f1f1cfb",
    "key_name": null,
    "os-extended-volumes:volumes_attached": [
     {
      "id": "2cda750e-d6d8-4153-b4cc-e15fb22e6ea8",
      "delete_on_termination": "false",
      "device": "/dev/vda",
      "bootIndex": "0"
     }
    ],
    "OS-EXT-STS:task_state": null,
    "OS-EXT-STS:power_state": 1,
    "OS-EXT-STS:vm_state": "active",
    "OS-EXT-SRV-ATTR:host": "fc724a7f21982eec27a7c4d3ab33275733834e1d4316cadd2a684387",
    "OS-EXT-SRV-ATTR:instance_name": "instance-038ca5e0",
    "OS-EXT-SRV-ATTR:hypervisor_hostname":
"fc724a7f21982eec27a7c4d3ab33275733834e1d4316cadd2a684387",
    "OS-DCF:diskConfig": "MANUAL",
    "OS-EXT-AZ:availability_zone": "cn-north-4g",
    "os:scheduler_hints": {},
    "OS-EXT-SRV-ATTR:root_device_name": "/dev/vda",
    "OS-EXT-SRV-ATTR:ramdisk_id": "",
    "enterprise_project_id": "0",
    "OS-EXT-SRV-ATTR:user_data": null,
    "OS-SRV-USG:launched_at": "2024-09-13T07:30:39.000000",
    "OS-EXT-SRV-ATTR:kernel_id": "",
    "OS-EXT-SRV-ATTR:launch_index": 0,
    "host_status": "UP",
    "OS-EXT-SRV-ATTR:reservation_id": "r-hzt0k5xi",
    "OS-EXT-SRV-ATTR:hostname": "hcss-ecs-ff60",
    "OS-SRV-USG:terminated_at": null,
    "sys_tags": [
     {
      "key": "_sys_enterprise_project_id",
      "value": "0"
     }
    ],
    "security_groups": [
     {
      "id": "b88fdd7e-fe03-4e3f-ab64-1e5e1f8de0d9",
      "name": "sg-default-smb"
     }
    ],
    "image": {
     "id": "f267d4ce-0d85-41ce-99c3-f5c4b3ca4640"
    },
    "hypervisor": null,
    "auto_terminate_time": "",
    "cpu_options": {
     "hw:cpu_threads": null
    },
    "enclave_options": {
     "enabled": false
    },
    "capacity_reservation_id": null,
    "capacity_reservation_specification": {
     "id": null,
     "preference": null
    },
    "security_options": {
     "secure_boot_enabled": null,
     "tpm_enabled": null
    },
    "spod_id": null
   }
  }
```

3.4.2 Modifying the Cloud Server Information of a FlexusL Instance

Function

This API is used to modify cloud server information. Currently, the name, description, and host name of a cloud server can be modified. The API is the ECS API for modifying an ECS. This section lists the key information about using the API. For more information about the API, see **Modifying ECS Details**.

📖 **NOTE**

This API used by **cloud servers** in the FlexusL instances is the same as that used by **ECSs**. The response parameter description, API usage example, and return values of ECSs also apply to the FlexusL instances.

Constraints

After the host name of a cloud server is changed, you need to restart the cloud server for the change to take effect.

URI

PUT /v1/{project_id}/cloudservers/{server_id}

In the parameter description, **server_id** indicates the cloud server ID. Obtain the cloud server ID based on **Querying a Created FlexusL Instance**.

Example Request

Change host name of the cloud server whose ID is **72a270de-665a-4f46-8d64-24ad6edccdd2** to **NameA**.

```
PUT  /v1/{project_id}/cloudservers/{72a270de-665a-4f46-8d64-24ad6edccdd2}
{
 "server": {
  "hostname": "NameA"
 }
}
```

Example Response

```
{
 "server": {
  "tenant_id": "067cf8aecf3845d1ad7a5d308322f13b",
  "image": "",
  "accessIPv4": null,
  "metadata": {
   "__support_agent_list": "hss,hss-pc,ces"
  },
  "addresses": {
   "4022721e-0476-41ea-91f4-1883065a68cc": [
    {
     "addr": "192.168.12.151",
     "version": 4
    }
   ]
  },
  "security_options": {
```

```
  "secure_boot_enabled": null,
  "tpm_enabled": null
 },
 "accessIPv6": null,
 "created": "2024-09-13T07:30:25Z",
 "OS-EXT-SRV-ATTR:user_data": null,
 "hostId": "fc724a7f21982eec27a7c4d3ab33275733834e1d4316cadd2a684387",
 "description": "",
 "OS-EXT-SRV-ATTR:hostname": "NameA",
 "flavor": {
  "links": [
   {
    "rel": "bookmark",
    "href": "https://ecs.cn-north-4.myhuaweicloud.com/flavors/at7.large.1"
   }
  ],
  "id": "at7.large.1"
 },
 "OS-DCF:diskConfig": "MANUAL",
 "user_id": "862856742c334c8a801460a39f1f1cfb",
 "name": "hcss_ecs_ff60",
 "progress": 0,
 "links": [
  {
   "rel": "self",
   "href": "https://ecs.cn-north-4.myhuaweicloud.com/v1.0/servers/
72a270de-665a-4f46-8d64-24ad6edccdd2"
  },
  {
   "rel": "bookmark",
   "href": "https://ecs.cn-north-4.myhuaweicloud.com/servers/72a270de-665a-4f46-8d64-24ad6edccdd2"
  }
 ],
 "id": "72a270de-665a-4f46-8d64-24ad6edccdd2",
 "updated": "2024-09-14T06:20:34Z",
 "status": "ACTIVE"
 }
}
```

3.4.3 Starting Cloud Servers in a Batch

Function

This API is used to start cloud servers in a batch based on the specified cloud server IDs. A maximum of 1,000 cloud servers can be started within 1 minute. The API is the ECS API for starting ECSs in a batch. This section lists the key information about using the API. For more information about the API, see **Starting ECSs in a Batch**.

This API is an asynchronous API. After the batch start request is successfully delivered, a job ID is returned. This does not mean the batch start is complete. You need to call the API by referring to **Querying Task Execution Status** to query the job status. The **SUCCESS** status indicates that the batch start is successful.

☐ NOTE

This API used by **cloud servers** in the FlexusL instances is the same as that used by **ECSs**. The response parameter description, API usage example, and return values of ECSs also apply to the FlexusL instances.

URI

POST /v1/{project_id}/cloudservers/action

Request Message

In the request message, **id** in the **servers** field is the cloud server ID. Obtain the cloud server ID based on **Querying a Created FlexusL Instance**.

Example Request

Start FlexusL instances whose cloud server IDs are **72a270de-665a-4f46-8d64-24ad6edccdd1** and **72a270de-665a-4f46-8d64-24ad6edccdd2** in a batch.

```
POST https://{endpoint}/v1/{project_id}/cloudservers/action
{
 "os-start": {
  "servers": [
   {
    "id": "72a270de-665a-4f46-8d64-24ad6edccdd1"
   },
   {
    "id": "72a270de-665a-4f46-8d64-24ad6edccdd2"
   }
  ]
 }
}
```

Example Response

```
{
 "job_id": "ff80808290c6b7b60191ef4d78411d8d"
}
```

3.4.4 Restarting Cloud Servers in a Batch

Function

This API is used to restart cloud servers in a batch based on the specified cloud server IDs. A maximum of 1,000 cloud servers can be restarted within 1 minute. The API is the ECS API for restarting ECSs in a batch. This section lists the key information about using the API. For more information about the API, see **Restarting ECSs in a Batch**.

This API is an asynchronous API. After the batch restart request is successfully delivered, a job ID is returned. This does not mean the batch restart is complete. You need to call the API by referring to **Querying Task Execution Status** to query the job status. The **SUCCESS** status indicates that the batch restart is successful.

📖 **NOTE**

This API used by **cloud servers** in the FlexusL instances is the same as that used by **ECSs**. The response parameter description, API usage example, and return values of ECSs also apply to the FlexusL instances.

URI

POST /v1/{project_id}/cloudservers/action

Request Message

In the request message, **id** in the **servers** field is the cloud server ID. Obtain the cloud server ID based on **Querying a Created FlexusL Instance**.

Example Request

Restart FlexusL instances whose cloud server IDs are **72a270de-665a-4f46-8d64-24ad6edccdd1** and **72a270de-665a-4f46-8d64-24ad6edccdd2** in a batch.

```
POST https://{endpoint}/v1/{project_id}/cloudservers/action
{
 "reboot": {
  "servers": [
   {
    "id": "72a270de-665a-4f46-8d64-24ad6edccdd1"
   },
   {
    "id": "72a270de-665a-4f46-8d64-24ad6edccdd2"
   }
  ],
  "type": "SOFT"
 }
}
```

Example Response

```
{
 "job_id": "ff80808290c6b7b60191ef522de6257b"
}
```

3.4.5 Stopping Cloud Servers in a Batch

Function

This API is used to stop cloud servers in a batch based on the specified cloud server IDs. A maximum of 1,000 cloud servers can be stopped within 1 minute. The API is the ECS API for stopping ECSs in a batch. This section lists the key information about using the API. For more information about the API, see **Stopping ECSs in a Batch**.

This API is an asynchronous API. After the batch stop request is successfully delivered, a job ID is returned. This does not mean the batch stop is complete. You need to call the API by referring to **Querying Task Execution Status** to query the job status. The **SUCCESS** status indicates that the batch stop is successful.

☐ **NOTE**

This API used by **cloud servers** in the FlexusL instances is the same as that used by **ECSs**. The response parameter description, API usage example, and return values of ECSs also apply to the FlexusL instances.

URI

POST /v1/{project_id}/cloudservers/action

Request Message

In the request message, **id** in the **servers** field is the cloud server ID. Obtain the cloud server ID based on **Querying a Created FlexusL Instance**.

Example Request

Stop FlexusL instances whose cloud server IDs are **72a270de-665a-4f46-8d64-24ad6edccdd1** and **72a270de-665a-4f46-8d64-24ad6edccdd2** in a batch.

```
POST https://{endpoint}/v1/{project_id}/cloudservers/action
{
 "os-stop": {
  "servers": [
   {
    "id": "72a270de-665a-4f46-8d64-24ad6edccdd1"
   },
   {
    "id": "72a270de-665a-4f46-8d64-24ad6edccdd2"
   }
  ]
 }
}
```

Example Response

```
{
 "job_id": "ff80808290c6b8210191ef4a80e116d3"
}
```