

# Magewell Cloud

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## Introduction

For Magewell Cloud, we have rich APIs for developers to interact with products and customize your work flow. These APIs are based on the HTTP/HTTPS protocol and are lightweight, connectionless interfaces that respond to data in JSON format. This document gives you a detailed understanding of each API's functions and request method.

# API Agreement

## Overview

- Request protocol: HTTP/HTTPPs
- Request mode: by default, GET is used to request data and commit, and POST is used to upload a file.
- Request URL: http://ip[:port]/xxx?param1=value1&param2=value2...
- Return data format: when the status code is 200, it returns JSON data, otherwise it returns HTTP status codes.
- Login authentication: carry sid=xxxxxxxxx and mwcloud-uid=xxxxxxxxx in cookies

## Example Response

The result codes are as follows.

- 0 indicates a successful request.
- Other values refer to [API Status Codes](#).

The JSON formatted data is as follows.

```
{  
    "remote-ip": "127.0.0.1:33172",  
    "result": 0,  
    "status": {  
        "system-info": {  
            "date-time": 1634882136,  
            "cloud-version": "1.1.22535"  
        }  
        ...  
    }  
    ...  
}
```

# Device Modules

This chapter lists all devices support to register with Magewell Cloud.

## Product Family

Product family ID	Description
0	All Product Family
1	Ultra Stream
2	Ultra Encode
3	Pro Convert Encoder
4	Pro Convert Decoder

## Product List

Each product is represented by a unique hex index.

Product model ID	Product family ID	Model Name
0x301	1	Ultra Stream HDMI
0x302	1	Ultra Stream SDI
0x304	2	Ultra Encode HDMI
0x305	2	Ultra Encode SDI
0x401	3	Pro Convert HDMI 4K Plus
0x402	3	Pro Convert HDMI Plus
0x403	3	Pro Convert SDI 4K Plus
0x404	3	Pro Convert SDI Plus
0x405	3	Pro Convert HDMI TX
0x406	3	Pro Convert SDI TX
0x409	3	Pro Convert 12G SDI 4K Plus
0x410	4	Pro Convert for NDI to HDMI
0x411	4	Pro Convert for NDI to HDMI 4K
0x413	4	Pro Convert H.26x to HDMI
0x414	4	Pro Convert H.26x to HDMI 4K
0x415	4	Pro Convert for NDI to SDI
0x417	4	Pro Convert H.26x to SDI
0x421	4	Pro Convert for NDI to AIO

## **API Status Code**

```

{
    SC_RET_INVALID_PARAMETER           int = 10000
    SC_RET_INVALID_COMMAND            int = 10001
    SC_RET_INVALID_REQUEST             int = 10002
    SC_RET_INVALID_PORT_NUMBER         int = 10003
    SC_RET_CONNECT_TARGET_TIMEOUT     int = 10004
    SC_RET_HTTP_METHOD_NOT_SUPPORTED  int = 10005
    SC_RET_CLIENT_NOT_EXIST           int = 10006
    SC_RET_CLIENT_OFFLINE             int = 10007
    SC_RET_NEEDS_AUTH                 int = 10008

    retUpgradeCompleted   int = 109
    retUpgradeIdel        int = 108
    retUpgradeFailed       int = 107
    retUpgradeUpdating     int = 106

    retSamePort              int = 105 // This port is occupied.
    retDeleted                int = 104 // The device has been deleted from Cloud.
    retWaiting                int = 103 // The registration is waiting for approval.
    retRefused                int = 102 // The registration has been rejected.
    retAccepted               int = 101 // The registration has been accepted.
    retLivingDNS               int = 28
    retLivingInit               int = 27
    retReadyForRecord          int = 26
    retBitrate                 int = 25
    retLivingWaiting            int = 24
    retLivingConnecting         int = 23
    retLivingConnected          int = 22
    retPushReboot               int = 21
    retAudioSignalChange        int = 20
    retBlueWrite                int = 19
    retBlueRead                 int = 18
    retBlueShutDown             int = 17
    retDiskOn                  int = 16
    retDiskOff                  int = 15
    retDiskChange                int = 14
    retSnapshotOver             int = 13
    retPushReset                int = 12
    retPushLiving                int = 11
    retPushRecord                int = 10
    retSignalChange              int = 9
    retRouteChange               int = 8
    retIPChange                  int = 7
    retNetChange                 int = 6
    retExit                     int = 5
    retLowSpace                  int = 4
    retLowSpeed                  int = 3
    retRunning                   int = 2
    retRepeat                    int = 1 // Repeated operations.
    retSucceed                   int = 0 // Operation succeeded.
    errPasswd                   int = -1
    errOccupied                  int = -2
    errDisconnect                int = -3
    errDevice                     int = -4
    errDisk                      int = -5
    errUnconnect                  int = -6
    errKey                       int = -7
    errVersion                   int = -8
    errBusy                      int = -9
    errParam                     int = -10
    errUsage                     int = -11
    errTimeout                   int = -12
    errIP                        int = -13
    errNotFound                  int = -14
    errFile                      int = -15
    errNoSpace                   int = -16
    errNeedAuth                  int = -17
    errSystem                     int = -18
    errDiskSpeed                 int = -19
    errEmpty                     int = -20
    errNetwork                   int = -21
    errEvent                     int = -22
}

```

```
errCodec           int = -23
errBlue            int = -24
errDB              int = -101
errCALicense       int = -102
errCAKey           int = -103
errNoLogin         int = -104 // Login failed.
errValues          int = -105
errFullLicense     int = -106
errOverTime        int = -107 // Your subscription has expired.
errClientID        int = -108
}
```

## Status Mask of Abnormal Device

```
{  
    warningNoSignal      = 0x01 // No signal.  
    warningNoUSB         = 0x02 // USB Flash Drive is invalid.  
    warningFullUSB       = 0x04 // USB Flash Drive is full.  
    warningFullMSD       = 0x08 // Local storage is full.  
    warningNoSD          = 0x10 // Local storage is invalid.  
}
```

# DEMO (Node.js)

This chapter introduces how to call the Magewell Cloud API in Node.js.

Download DEMO: [magewell-cloud-api-demo-nodejs.zip](#)

DEMO Structure

```
magewell-cloud-api-demo-nodejs
|
|-- httpUtils.js // based on HTTP get, post and upload in Node.js
|-- constant.js // constant
|-- xxxx.mwf      // the uploaded file called by 'uploadFirmware' interface in upload.js
|-- get.js        // request data using GET
|-- upload.js     // upload file using POST
```

## Requirements

- Operating System: macOS, Linux, Windows
- Node.js Runtime: 8.x and later; it is recommended that you use LTS Releases.

## Running Mode

1. Navigate into the DEMO directory in the terminal.

```
cd magewell-cloud-api-demo-nodejs
```

2. Replay CLOUD\_IP in constant.js with the IP address of the Magewell Cloud.

3. Run get.js.

```
node get
```

4. Run upload.js.

```
node upload
```

# login

Use the interface to log in. The cookie will carry the Session ID after logging in successfully. For example, Cookie:mwcloud-sid=xxx;mwcloud-uid=xxx.

## Prototype

Protocol	HTTP/HTTPS POST
URL	ip:[port]/sc_cloud/login
Data Format	Request: Content-Type: multipart/form-data Response: Content-Type: application/json

## Request Parameters

### Request Header

Parameter	Description
Content-Type	Value: 'multipart/form-data;'

### Request Body

Parameter	Description
id	Username
pass	MD5 encrypted user password

## Request Example

```
POST /sc_cloud/login HTTP/1.1
Content-Length: 261
Accept: application/json, text/plain, /*
Content-Type: multipart/form-data; boundary=----WebKitFormBoundaryGXbvCk8Vzymt6WUB
-----4437964479282813733506153675
Content-Disposition: form-data; name="id"

Admin
-----4437964479282813733506153675
Content-Disposition: form-data; name="pass"

e3afed0047b08059d0fada10f400c1e5
-----4437964479282813733506153675--
```

## Response Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

### Response Body

Parameter	Description
id	User ID.
name	User name.
result	<p>Result code. The options are as follows:</p> <ul style="list-style-type: none"> <li>• 0: success.</li> <li>• -1: password incorrect.</li> <li>• -14: user does not exist.</li> <li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li> </ul>

## Response Example

```

HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 85
{
  "id":1,
  "name":"Admin",
  "pass":"",
  "result":0,
  "sid":"OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP"
}

```

# logout

Use the interface to log out and return to the "SIGN IN" page.

## Prototype

Protocol	HTTP/HTTPS POST
URL	ip:[port]/sc_cloud/logout
Data Format	Response: Content-Type: application/json

## Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

## Request Example

```
POST /sc_cloud/logout HTTP/1.1
Content-Length: 0
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin
```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 53
Set-Cookie: mwcloud-sid=; Path=/; Domain=127.0.0.1; Max-Age=60; HttpOnly
{
  "result":0,
  "sid":"OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP"
}
```

## get-status

Use the interface to obtain status and parameters of the Cloud, including CPU, memory, network, Cloud security policy, abnormal hosted device statistics, and logs of hosted device and Cloud.

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-status
Data Format	Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-status HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWNOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
status	Cloud status.

#### status

Parameter	Description
system-info	Cloud information.
system-status	Cloud performance.
app-settings	Cloud security policy.
all-count	The number of hosted devices.
warning-count	The number of hosted devices with warnings.
pending-count	The number of applications waiting for approval.
online-count	The number of online devices.
cur-convert-count	The number of current stream conversion tasks.
cur-srt-count	The number of current input and output SRT streams.
license-reg	Available licenses added to Cloud.
cur-license	Current effective license.
warning-devs	The latest device warnings. You can obtain the warning device list by using <a href="#">get-warning-devs</a> .
dev-logs	The latest device logs. You can obtain logs of a specified device by using <a href="#">get-dev-logs</a> .
sys-logs	Part of cloud logs. You can obtain the Cloud running logs by using <a href="#">get-logs</a> .

## system-info

Parameter	Description
date-time	Current system time in seconds.
cloud-version	System version.

## system-status

Parameter	Description
cpu	CPU utilization.
mem	Memory usage.
net-tx	Network transmit throughput.
net-rx	Network receive throughput.

## app-settings

Parameter	Description
is-code	Whether an invitation code is needed when a device registers for Cloud remote control. 0 indicates No, 1 indicates Yes.
code-value	4-digit invite code. NULL indicates no code.
is-http	Whether to allow HTTP access to Cloud. 0 indicates No, 1 indicates Yes.
http-port	HTTP port.
is-https	Whether to allow HTTPS access to Cloud. 0 indicates No, 1 indicates Yes.
https-port	HTTPS port.
is-cert-valid	Whether CA certificate is valid. 0 indicates invalid. 1 indicates valid.
is-certkey-valid	Whether private CA certificate is valid. 0 indicates invalid. 1 indicates valid.

## license-reg

Parameter	Description
status	Status code of license. The options are <ul style="list-style-type: none"><li>• 0: add license is valid.</li><li>• -20: default license is used since no license is added.</li><li>• -107: the authorized license has expired.</li><li>• -10: license error.</li></ul>
user-name	License title.
sn	License SN.
license	Authorized license information.

## license

Parameter	Description
max-dev-count	Maximum number of hosted devices.
max-convert-count	Maximum number of stream conversion tasks.
max-srt-count	Maximum number of SRT inputs and outputs.
limited-date	License validity in seconds.

## warning-devs

Parameter	Description
name	Product name.
SN	Serial number of device.
module-name	<a href="#">Product model name</a> .
hardware-ver	Hardware version.
firmware-ver	Firmware version.
dev-warning	Whether the device has warnings, 0 indicates not; 1 indicates yes.
is-online	Whether the device is online.

## logs

Parameter	Description
id	Log ID.
date	Log generated time in seconds (unix timestamp).
info	Log description.
type	Log type. 1: information; 2: warning; 3: error.
sn	Serial number.

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
{
    "result": 0,
    "status": {
        "system-info": {
            "date-time": 1634891748,
            "cloud-version": "1.1.1"
        },
        "system-status": {
            "cpu": [],
            "mem": [],
            "net-tx": [],
            "net-rx": []
        },
        "app-settings": {
            "is-https": 1,
            "https-port": 443,
            "is-cert-valid": 1,
            "is-certkey-valid": 1,
            "is-http": 1,
            "http-port": 80,
            "is-code": 0,
            "code-value": "NULL"
        },
        "all-count": 18,
        "warning-count": 13,
        "pending-count": 0,
        "online-count": 7,
        "cur-convert-count": 7,
        "cur-srt-count": 3,
        "license-reg": {
            "status": 0,
            "user-name": "magewell-ltd",
            "sn": "9C4E*****F769",
            "license": {
                "max-dev-count": 100,
                "max-convert-count": 3,
                "max-srt-count": 2,
                "limited-date": 1769904000
            }
        },
        "cur-license": {
            "max-dev-count": 100,
            "max-convert-count": 3,
            "max-srt-count": 2,
            "limited-date": 1769904000
        },
        "warning-devs": [
            {
                "name": "Ultra Stream",
                "SN": "xxx",
                "module-name": "Ultra Stream SDI",
                "hardware-ver": "A",
                "firmware-ver": "1.0.0",
                "dev-warning": 1,
                "is-online": true
            }
        ],
        "dev-logs": [
            {
                "id": 3366,
                "date": 1634891480,
                "info": "Offline.",
                "type": 2,
                "sn": "xxx"
            }
        ],
        "sys-logs": []
    }
}
```

## get-dev-catalogs

Use the interface to obtain device groups.

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-dev-catalogs
Data Format	Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-dev-catalogs HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWNOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
dev-catalogs	Device groups.

#### dev-catalogs

Parameter	Description
id	Device group ID.
name	Group name.
is-everyone	Whether the group is available for all Cloud users. 0: No; 1: Yes.
users	Available user list of this group when 'is-everyone' =0
childs	Sub-groups list.

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 310
{
    "result": 0,
    "dev-catalogs": [
        {
            "id": 1,
            "name": "Group1",
            "is-everyone": 1,
            "users": null,
            "childs": [
                {
                    "id": 3,
                    "name": "Group11",
                    "is-everyone": 1,
                    "users": null,
                    "childs": [
                        {
                            "id": 4,
                            "name": "Group111",
                            "is-everyone": 0,
                            "users": [
                                "Admin",
                                "Test"
                            ],
                            "childs": null
                        }
                    ]
                }
            ],
            "id": 2,
            "name": "Group2",
            "is-everyone": 0,
            "users": [
                "Admin"
            ],
            "childs": null
        }
    ]
}
```

## get-all-firmwares

Use the interface to obtain all available firmware files of specified devices.

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-all-firmwares?dev-type=1&product-id=770&hardware-ver=A
Data Format	Response:Content-Type: application/json

### URL Parameters

Items	Mandatory	Description
dev-type	Yes	Product family ID.
product-id	No	Product model ID.
hardware-ver	No	Hardware version.

The result would be all hosted devices when the request URL only has one parameter, dev-type, and the value of dev-type is 0.

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-all-firmwares?dev-type=1&product-id=770&hardware-ver=A HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWNOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>0: success.</li><li>Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
firmwares	All available firmware versions of the specified device.

#### firmwares

All available firmware versions of the specified device.

Parameter	Description
id	Firmware ID.
file-path	Firmware saved path.
upload-date	Firmware upload time.
product-id	Product model ID.
firmware-id	Firmware version type. <ul style="list-style-type: none"> <li>• 1: test version.</li> <li>• Other values: released revisions.</li> </ul>
hardware-ver	Hardware version.
major-ver	Major version.
minor-ver	Minor version.
build-number	Build number.

This version number is physically represented as a three-part string with the following format:

```
<major version>.<minor version>.<build number>
```

For example, version 1.5.178. indicates 1 as the major version, 5 as the minor version, and 178 as the build number.

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 219
{
  "result": 0,
  "firmwares": [
    {
      "id": 21,
      "file-path": "/data/firmware/firmware-770-1-A-1.5.178.mwf",
      "upload-date": 1635151650,
      "product-id": 770,
      "firmware-id": 1,
      "hardware-ver": "A",
      "major-ver": 1,
      "minor-ver": 5,
      "build-number": 178
    }
  ]
}
```

## get-logs

Use the interface to obtain Cloud system logs.

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-logs
Data Format	Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-logs HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
logs	Cloud log list.

#### logs

Parameter	Description
id	Log ID.
date	Generated time.
info	Log descriptions.
type	Log types. The options are 1: information. 2: warning. 3: error.
sn	Cloud serial number.

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
{
    "result": 0,
    "logs": [
        {
            "id": 4030,
            "date": 1635479011,
            "info": "Admin logged in from '10.10.13.100'.",
            "type": 1,
            "sn": "CLOD200914001"
        }
    ]
}
```

## clear-logs

Use the interface to clear logs of Cloud or a specified hosted device.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/log/clear
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
sn	Serial number. <ul style="list-style-type: none"><li>• CLOUD200914001: indicates to clear all Cloud logs.</li><li>• Other values: indicates to clear the logs of the specified device.</li></ul>

### Request Example

```
POST /sc_cloud/log/clear HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 22
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
    "sn": "CLOUD200914001"
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	clear-logs

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 34
{
  "method": "clear-logs",
  "result": 0
}
```

## get-wait-devs

Use the interface to obtain the cloud-joining applications waiting for approval.

Only available for users with administrative rights.

You can perform the following operations for the applications:

- [accept-dev](#)
- [reject-dev](#)
- [delete-dev](#)

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-wait-devs
Data Format	Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-wait-devs HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
wait-devs	List of devices waiting for approval.

#### wait-devs

Parameter	Description
catalog-id	Device group ID.
sn	Serial number.
module	Product family ID. Indicate all hosted devices when it is 0.
dev-warning	A number greater than 0 indicates the device has warning(s). The value and mask value in <a href="#">Status Mask of Abnormal Device</a> perform binary logic "and" operator. There might be multiple warnings. For example, if (dev-warning & 0x01) == 0x01, it means the device has no signal.
is-everyone	Whether the device is available for all users. 0: no; 1: yes.
users	Operators of the current device when the value of "is-everyone" is 0.
apply-date	Time of applying to join the cloud.
online-date	Device online state. A number greater than 0 indicates the device is online, otherwise it is offline.
is-upload-file	Whether the device is uploading the firmware. 1 indicates it is uploading. Otherwise, it is not. Usage refers to <a href="#">update procedures</a> .
upload-file-pos	The upload process in percentage.
status	Information of hosted device.

#### status

Parameter	Description
name	Device name.
product-id	Product model ID in hex.
module-name	Product family name.
hardware-ver	Product hardware version.
firmware-ver	Product firmware version.
up-time	Equipment uptime in seconds.
cur-status	Current device status mask refers to <a href="#">Status Mask of Abnormal Device</a> .
eth	Ethernet IP.
wifi	WI-FI IP.
rndis	USB RNDIS IP.
upgrade-ret	Firmware update status code refers to <a href="#">API Status Code</a> . Update usage refers to <a href="#">update procedures</a> .
upgrade-step	Current process of the firmware update procedure, there are 4 steps in total.
upgrade-percent	Update process in percentage.

## Response Example

HTTP/1.1 200 OK  
Content-Type: application/json; charset=utf-8

```
{  
    "result": 0,  
    "wait-devs": [  
        {  
            "catalog-id": 0,  
            "sn": "B401190213050",  
            "module": 3,  
            "dev-status": 0,  
            "network": "",  
            "is-upgrade": 0,  
            "users": null,  
            "is-everyone": 0,  
            "apply-date": 1635152916,  
            "online-date": 1635152917,  
            "offline-date": 0,  
            "cpu": [],  
            "mem": [],  
            "net": [],  
            "net2": [],  
            "net3": [],  
            "sid": "7e0d83332a03a5074268b19286063722",  
            "status": {  
                "name": "Pro Convert",  
                "product-id": 1025,  
                "module-name": "HDMI 4K Plus",  
                "hardware-ver": "B",  
                "firmware-ver": "1.1.207",  
                "conn-ip": "",  
                "up-time": 30491,  
                "eth": "10.10.8.13",  
                "sd-total": 0,  
                "cur-status": 0,  
                "wifi": "",  
                "input": "1920x1080p60.00",  
                "output": "unconnected",  
                "usb-total": 0,  
                "usb-free": 0,  
                "usb-used": 0,  
                "usb-status": 0,  
                "usb-usage": 0,  
                "sd-free": 0,  
                "sd-used": 0,  
                "sd-status": 0,  
                "sd-usage": 0,  
                "rec-codec": "",  
                "rec-sec": 0,  
                "rec-kbps": 0,  
                "live-codec": "",  
                "live-sec": 0,  
                "live-kbps": 0,  
                "ndi-connected": false,  
                "ndi-url": "",  
                "ndi-enabled": true,  
                "rndis": "192.168.65.1",  
                "ndi-name": "#00 B401190213050",  
                "ndi-video-width": 1920,  
                "ndi-video-height": 1080,  
                "ndi-video-scan": "progressive",  
                "ndi-video-field-rate": 60,  
                "ndi-audio-sample-rate": 48000,  
                "ndi-audio-channels": 1,  
                "ndi-audio-bit-count": 16,  
                "upgrade-ret": 108,  
                "upgrade-step": 0,  
                "upgrade-percent": 0,  
                "usb-option": 0,  
                "sd-option": 0,  
                "CPUStatus": 15,  
                "NetStatus": 87701504,  
                "MemStatus": 59,  
            }  
        }  
    ]  
}
```

```
    "Net2Status": 0,  
    "Net3Status": 0  
,  
    "is-upload-file": 0,  
    "upload-file-pos": 0,  
    "dev-warning": 0  
}  
]  
}
```

## get-reject-devs

Use the interface to obtain the rejected device list.

Only available for users with administrative rights.

You can delete the rejected device by using the following interface:

- [delete-dev](#)

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-reject-devs
Data Format	Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-reject-devs HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
reject-devs	Rejected device list.

#### reject-devs

Parameter	Description
catalog-id	Group id
sn	serial number
module	Indicates <a href="#">Product family name</a> . 0 indicates all devices.
dev-warning	A number greater than 0 indicates the device has warning(s). The value and mask value in <a href="#">Status Mask of Abnormal Device</a> perform binary logic "and" operator. There might be multiple warnings. For example, if (dev-warning & 0x01) == 0x01, means the device has no signal.
is-everyone	Whether the device is available for all users. 0: no; 1: yes.
users	Operators of the current device when the value of "is-everyone" is 0.
apply-date	Time of applying to join the cloud.
online-date	Device online state. A number greater than 0 indicates the device is online, otherwise it is offline.
is-upload-file	Whether the device is uploading the firmware. 1 indicates it is uploading. Otherwise, it is not.
upload-file-pos	The upload process in percentage.
status	Information of hosted device.

#### status

Parameter	Description
name	Device name.
product-id	<a href="#">Product model ID</a> in hex.
module-name	<a href="#">Product family name</a> .
hardware-ver	Product hardware version.
firmware-ver	Product firmware version.
up-time	Equipment uptime in seconds.
cur-status	Current device status mask refers to <a href="#">Status Mask of Abnormal Device</a> .
eth	Ethernet IP.
wifi	WI-FI IP.
rndis	USB RNDIS IP.
upgrade-ret	Firmware update status code refers to <a href="#">API Status Code</a> . Update usage refers to <a href="#">update procedures</a> .
upgrade-step	Current process of the firmware update procedure, there are 4 steps in total.
upgrade-percent	Update process in percentage.

#### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
{
    "result": 0,
    "reject-devs": [
        {
            "catalog-id": 0,
            "sn": "A305200908004",
            "module": 2,
            "dev-status": 1,
            "network": "",
            "is-upgrade": 0,
            "users": null,
            "is-everyone": 1,
            "apply-date": 1635152956,
            "online-date": 1635211116804,
            "offline-date": 1635165703,
            "cpu": [],
            "mem": [],
            "net": [],
            "net2": [],
            "net3": [],
            "sid": "681042eca9234d40455259395c1b608e",
            "is-upload-file": 0,
            "upload-file-pos": 0,
            "dev-warning": 0,
            "status": {
                "name": "Ultra Encode A305200908004",
                "product-id": 773,
                "module-name": "Ultra Encode SDI",
                "hardware-ver": "A",
                "firmware-ver": "1.3.484",
                "conn-ip": "",
                "up-time": 85854,
                "eth": "10.10.8.36",
                "sd-total": 0,
                "cur-status": 64,
                "wifi": "",
                "input": "1920x1080p, 60.00 Hz",
                "output": "",
                "usb-total": 0,
                "usb-free": 0,
                "usb-used": 0,
                "usb-status": 0,
                "usb-usage": 0,
                "sd-free": 0,
                "sd-used": 0,
                "sd-status": 0,
                "sd-usage": 0,
                "rec-codec": "1920x1080, By Input, 16384 Kbps",
                "rec-sec": 0,
                "rec-kbps": 0,
                "live-codec": "1280x720, 30.00, 1024 Kbps",
                "live-sec": 0,
                "live-kbps": 0,
                "ndi-connected": false,
                "ndi-url": "",
                "ndi-enabled": false,
                "rndis": "",
                "ndi-name": "",
                "ndi-video-width": 0,
                "ndi-video-height": 0,
                "ndi-video-scan": "",
                "ndi-video-field-rate": 0,
                "ndi-audio-sample-rate": 0,
                "ndi-audio-channels": 0,
                "ndi-audio-bit-count": 0,
                "upgrade-ret": 27,
                "upgrade-step": 0,
                "upgrade-percent": 0,
                "usb-option": 0,
                "sd-option": 0,
            }
        }
    ]
}
```

```
    "CPUStatus": 23,  
    "NetStatus": 279440,  
    "MemStatus": 37,  
    "Net2Status": 0,  
    "Net3Status": 0  
  }  
}  
]  
}
```

## accept-dev

Use the interface to accept applications for remote control via Magewell Cloud.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/registry/accept-dev
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
sn	Specify the serial numbers of devices whose Cloud-join applications will be accepted.

### Request Example

```
POST /sc_cloud/registry/accept-dev HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 24
Cookie: mwcloud-sid=OCXWUMGEYPGIAWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
    "sn": ["B401190213050"]
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other value. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	accept-dev

### Response Example

```
HTTP/1.1 200 OK
content-type: application/json; charset=utf-8
content-length: 34
{
    "method": "accept-dev",
    "result": 0
}
```



## reject-dev

Use the interface to obtain the rejected device list.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/registry/reject-dev
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
sn	Specify the serial numbers of all rejected devices.

### Request Example

```
POST /sc_cloud/registry/reject-dev HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 24
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "sn": ["A305200908004"]
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	reject-dev

### Response Example

```
HTTP/1.1 200 OK
content-type: application/json; charset=utf-8
content-length: 34
{
  "method": "reject-dev",
  "result": 0
}
```



## delete-dev

Use the interface to delete devices from Cloud. Devices state include waiting for approval, hosted successfully and rejected.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/registry/delete-dev
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
sn	Specify the serial numbers of devices which will be deleted from Cloud.

### Request Example

```
POST /sc_cloud/registry/delete-dev HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 24
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
    "sn": ["A304200731001"]
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	delete-dev

### Response Example

```
HTTP/1.1 200 OK
content-type: application/json; charset=utf-8
content-length: 34
{
    "method": "delete-dev",
    "result": 0
}
```



## get-devs

Use the interface to obtain all approved applications.

After approval, you can perform the following operators remotely on the device:

- to [start recording/stop recording](#)
- to [start streaming/stop streaming](#)
- to [move a device to a specified group](#)
- to [update, reboot](#) and [delete](#) all hosted devices.
- to call WebGUI tool of a device to configure via [WebGUI tool](#) interface.

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-devs?id=0&module=0
Data Format	Response: Content-Type: application/json

### Request URL

Parameter	Description
id	<a href="#">Device group ID</a> . 0 indicates all hosted devices.
module	module index refers to <a href="#">Product family ID</a> .

id and module both are 0 indicate all hosted devices.

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-devs?id=0&module=0 HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWNOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
devs	Device list waiting for approval.

**devs**

Parameter	Description
catalog-id	Device group ID.
sn	Serial number.
module	Product family ID.
dev-warning	A number greater than 0 indicates the device has warning(s). The value and mask value in <a href="#">Status Mask of Abnormal Device</a> perform binary logic "and" operator. There might be multiple warnings. For example, if (dev-warning & 0x01) == 0x01, means the device has no signal.
is-everyone	Whether the device is available for all users. 0: no; 1: yes.
users	Operators of the current device when the value of "is-everyone" is 0.
apply-date	Time of applying to join the cloud.
online-date	Device online state. A number greater than 0 indicates the device is online, otherwise it is offline.
is-upload-file	Whether the device is uploading the firmware. 1 indicates it is uploading. Otherwise, it is not. Usage refers to <a href="#">update procedures</a> .
upload-file-pos	The upload process in percentage.
status	Information of hosted device.

#### status

Parameter	Description
name	Product name.
product-id	Product model ID.
module-name	Product family name.
hardware-ver	Product hardware version.
firmware-ver	Product firmware version.
up-time	Equipment uptime in seconds.
cur-status	Current device status mask refers to <a href="#">Status Mask of Abnormal Device</a> .
eth	Ethernet IP.
wifi	Wi-Fi IP.
rndis	USB RNDIS IP.
upgrade-ret	Firmware update status code refers to <a href="#">API Status Code</a> . Update usage refers to <a href="#">update procedures</a> .
upgrade-step	Current process of the firmware update procedure, there are 4 steps in total.
upgrade-percent	Update process in percentage.

## Update Procedures

1. Load firmware from Cloud to hosted device;
2. After load successfully, the device will automatically install the firmware and then reboot.

When [module](#) is Pro Convert Encoder or Pro Convert Decoder, the workflow is as follows.

```

getConvertUpgradeStatus (ret, step, percent) {
// ret: upgrade-ret  step: upgrade-step  percent:upgrade-percent
let desc = ''
let progress = 0
switch (ret) {
  case 106: // upgrading...
    desc = 'upgrading'
    progress = percent
    break
  case 107: // upgrade failed
    desc = 'upgrade-err'
    break
  case 109:
    desc = 'rebooting'
    progress = 100
    break
  // case 108: // Initialize update status
  // stepTitle = ''
  // progress = 0
  // break
}
return { step, desc, progress, isUpdating: desc !== '' }
}

```

When [module](#) is Ultra Stream or Ultra Encode, the workflow is as follows.

```

getUpgradeStatus (ret, step, percent) {
// ret: upgrade-ret  step: upgrade-step  percent:upgrade-percent
let desc = ''
let progress = 0
switch (ret) {
  case 2:
    switch (step) {
      case 1: // download
        desc = 'upgrading'
        progress = Math.ceil(percent * 2 / 10)
        break
      case 2: // install
        desc = 'upgrading'
        progress = 20 + Math.ceil(percent * 0.78)
        break
      case 3: // install
        desc = 'upgrading'
        progress = 98 + Math.ceil(percent * 0.02)
        break
      case 4: // rebooting
        desc = 'rebooting'
        progress = 100
    }
    break
  case 0:
    if (step === 4) {
      desc = 'rebooting'
      progress = 100
    }
    break
  // case 5:
  // case 27: // Initialize update status
  // stepTitle = ''
  // progress = 0
  // break
}
return { step, desc, progress, isUpdating: desc !== '' }
}

```

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
{
  "result": 0,
  "devs": [
    {
      "catalog-id": 0,
      "sn": "C301191111021",
      "module": 1,
      "dev-status": 2,
      "network": "",
      "is-upgrade": 0,
      "users": null,
      "is-everyone": 1,
      "apply-date": 1634797918,
      "online-date": 1635294552,
      "offline-date": 0,
      "is-upload-file": 0,
      "upload-file-pos": 0,
      "dev-warning": 0,
      "sid": "7e09c8036bea4a10d7e428a3403533e7",
      "cpu": [],
      "mem": [],
      "net": [],
      "net2": [],
      "net3": [],
      "status": {
        "name": "Ultra Stream C301191111021s",
        "product-id": 769,
        "module-name": "Ultra Stream HDMI",
        "hardware-ver": "D",
        "firmware-ver": "1.5.170",
        "conn-ip": "",
        "up-time": 5472,
        "eth": "192.168.123.47",
        "sd-total": 31895175168,
        "cur-status": 6,
        "wifi": "",
        "input": "1920x1080i, 59.95 Hz",
        "output": "",
        "usb-total": 0,
        "usb-free": 0,
        "usb-used": 0,
        "usb-status": 0,
        "usb-usage": 0,
        "sd-free": 30733156352,
        "sd-used": 88276992,
        "sd-status": 1,
        "sd-usage": 0,
        "rec-codec": "1920x1080, 29.97, 2048 Kbps",
        "rec-sec": 13448,
        "rec-kbps": 0,
        "live-codec": "1280x720, 30.00, 1024 Kbps",
        "live-sec": 23192,
        "live-kbps": 138703,
        "ndi-connected": false,
        "ndi-url": "",
        "ndi-enabled": false,
        "rndis": "",
        "ndi-name": "",
        "ndi-video-width": 0,
        "ndi-video-height": 0,
        "ndi-video-scan": "",
        "ndi-video-field-rate": 0,
        "ndi-audio-sample-rate": 0,
        "ndi-audio-channels": 0,
        "ndi-audio-bit-count": 0,
        "upgrade-ret": 27,
        "upgrade-step": 0,
        "upgrade-percent": 0,
        "usb-option": 0,
        "sd-option": 1,
        "sd-usage": 0
      }
    }
  ]
}
```

```
    "CPUStatus": 35,  
    "NetStatus": 1259264,  
    "MemStatus": 48,  
    "Net2Status": 0,  
    "Net3Status": 0  
  }  
}  
]  
}
```

## get-warning-devs

Use the interface to obtain abnormal device list.

Abnormal devices include:

- offline devices
- others. For details, refer to [Status Mask of Abnormal Device](#).

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-warning-devs?module=0
Data Format	Response: Content-Type: application/json

### Request URL

Parameter	Description
module	Product family ID.

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-warning-devs?module=0 HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWOOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
warning-devs	Abnormal device list.

#### warning-devs

Parameter	Description
catalog-id	Device group ID.
sn	Serial number.
module	Product family ID.
dev-warning	A number greater than 0 indicates the device has warning(s). The value and mask value in <a href="#">Status Mask of Abnormal Device</a> perform binary logic "and" operator. There might be multiple warnings. For example, if (dev-warning & 0x01) == 0x01, means the device has no signal.
is-everyone	Whether the device is available for all users. 0: no; 1: yes.
users	Operators of the current device when the value of "is-everyone" is 0.
apply-date	Time of applying to join the cloud.
online-date	Device online state. A number greater than 0 indicates the device is online, otherwise it is offline.
is-upload-file	Whether the device is uploading the firmware. 1 indicates it is uploading. Otherwise, it is not. Update usage refers to <a href="#">update procedures</a> .
upload-file-pos	The upload process in percentage.
status	Information of hosted device.

## status

Parameter	Description
name	Product name.
product-id	Product model ID.
module-name	Product family name.
hardware-ver	Product hardware version.
firmware-ver	Product firmware version.
up-time	Equipment uptime in seconds.
cur-status	Current device status mask refers to <a href="#">Status Mask of Abnormal Device</a> .
eth	Ethernet IP.
wifi	WI-FI IP.
rndis	USB RNDIS IP.
upgrade-ret	Firmware update status code refers to <a href="#">API Status Code</a> . Update usage refers to <a href="#">update procedures</a> .
upgrade-step	Current process of the firmware update procedure, there are 4 steps in total.
upgrade-percent	Update process in percentage.

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
{
  "result": 0,
  "warning-devs": [
    {
      "catalog-id": 2,
      "sn": "D301210104248",
      "module": 1,
      "dev-status": 0,
      "network": "",
      "is-upgrade": 0,
      "users": null,
      "is-everyone": 0,
      "apply-date": 1635216013,
      "online-date": 1635402331798,
      "offline-date": 1635402327768,
      "cpu": [],
      "mem": [],
      "net": [],
      "net2": [],
      "net3": [],
      "sid": "2ee065cb8edd6c3e63d3fa72e5634acd",
      "status": {
        "name": "Ultra Stream D301210104248",
        "product-id": 769,
        "module-name": "Ultra Stream HDMI",
        "hardware-ver": "D",
        "firmware-ver": "1.5.179",
        "conn-ip": "",
        "up-time": 103558,
        "eth": "10.10.10.122",
        "sd-total": 31249055744,
        "cur-status": 64,
        "wifi": "192.168.48.1",
        "input": "No Signal",
        "output": "",
        "usb-total": 0,
        "usb-free": 0,
        "usb-used": 0,
        "usb-status": 0,
        "usb-usage": 0,
        "sd-free": 9576153088,
        "sd-used": 20599160832,
        "sd-status": 1,
        "sd-usage": 68,
        "rec-codec": "1920x1080, 30.00, 2048 Kbps",
        "rec-sec": 0,
        "rec-kbps": 0,
        "live-codec": "1280x720, 30.00, 1024 Kbps",
        "live-sec": 0,
        "live-kbps": 0,
        "ndi-connected": false,
        "ndi-url": "",
        "ndi-enabled": false,
        "rndis": "",
        "ndi-name": "",
        "ndi-video-width": 0,
        "ndi-video-height": 0,
        "ndi-video-scan": "",
        "ndi-video-field-rate": 0,
        "ndi-audio-sample-rate": 0,
        "ndi-audio-channels": 0,
        "ndi-audio-bit-count": 0,
        "upgrade-ret": 27,
        "upgrade-step": 0,
        "upgrade-percent": 0,
        "usb-option": 1,
        "sd-option": 1,
        "CPUStatus": 26,
        "NetStatus": 72296,
        "MemStatus": 10,
      }
    }
  ]
}
```

```
    "Net2Status": 10328,  
    "Net3Status": 0  
,  
    "is-upload-file": 0,  
    "upload-file-pos": 0,  
    "dev-warning": 3  
}  
]  
}
```

# Reboot

Use the interface to reboot specified devices.

Only available for users with administrative rights.

## Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/path?method=reboot&sc-client-id=A302190930002
Data Format	Response: Content-Type: application/json

- Path definition for request URL of [product family](#) is as follows.

Product Family	Value
Ultra Stream	socket/usapi
Ultra Encode	socket/usapi
Pro Convert Encoder	socket/mwapi
Pro Convert Decoder	socket/mwapi

- Parameter of request URL is as follows.

Parameter	Description
method	reboot
sc-client-id	Specify serial number of reboot device.

## Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

## Request Example

Rebooting methods vary from product families.

- For Ultra Stream, and Ultra Encode, request example is as follows.

```
GET /socket/usapi?method=reboot&sc-client-id=A302190930002 HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin
```

- For Pro Convert Encoder and Decoder, request example is as follows.

```
GET /socket/mwapi?method=reboot&sc-client-id=B401190213050 HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin
```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json'

### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"> <li>• 0: success.</li> <li>• 1: repeat operations.</li> <li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li> </ul>
status	Result code. The options are as follows: <ul style="list-style-type: none"> <li>• 0: success.</li> <li>• 1: repeat operations.</li> <li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li> </ul>

## Response Example

Response examples vary from product families.

- For Ultra Stream and Ultra Encode, response example is as follows.

```
HTTP/1.1 200 OK
Content-Type: application/json
{
    "result": 0
}
```

- For Pro Convert Encoder and Decoder, response example is as follows.

```
HTTP/1.1 200 OK
Content-Type: application/json
{
    "status": 0
}
```

# Rename Devices

Use the interfaces to rename hosted devices.

Only available for users with administrative rights.

## Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/path?method=xxx&name=xxx&sc-client-id=xxx
Data Format	Response: Content-Type: application/json

## Request URL

- URL parameters vary from different [product families](#).

Product Family	path	method
Ultra Stream	socket/usapi	set-name
Ultra Encode	socket/usapi	set-name
Pro Convert Encoder	socket/mwapi	set-eth-config
Pro Convert Decoder	socket/mwapi	set-eth-config

- Parameters are as follows.

Parameter	Description
method	Refer to <a href="#">method</a> .
name	New name of devices.
sc-client-id	SN of the renamed device.

## Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

## Request Example

Requests vary from different products.

- For Ultra Stream, Ultra Encode

```
GET /socket/usapi?method=set-name&name=Encode&sc-client-id=A305200908004 HTTP/1.1
Accept: application/json, text/plain, /*
Connection: keep-alive
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin
```

- For Pro Convert Encoder and Decoder

```
GET /socket/mwapi?method=set-eth-config&name=Convert&sc-client-id=A421210928002 HTTP/1.1
Accept: application/json, text/plain, /*
Connection: keep-alive
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin
```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json'

### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"> <li>• 0: success.</li> <li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li> </ul>
status	Result code. The options are as follows: <ul style="list-style-type: none"> <li>• 0: success.</li> <li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li> </ul>

### Response Example

Responses vary from different products.

- For Ultra Stream, Ultra Encode

```
HTTP/1.1 200 OK
Content-Type: application/json
{
  "result": 0
}
```

- For Pro Convert Encoder, Pro Convert Decoder

```
HTTP/1.1 200 OK
Content-Type: application/json
{
  "status": 0,
  "reconnect": true
}
```

# start-upgrade

Use the interface to update firmware for one or multiple devices.

Batch update requires the devices with the same [Product family ID](#), [Product model ID](#) and hardware version.

Only available for users with administrative rights.

Ensure that the target firmware file is available before operation. You can get all firmware version of specified devices by using [get-all-firmwares](#).

## Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/upgrade/start
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

## Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

## Request Body

Parameter	Description
sn	Specify the device SN which will perform update operation.
firmware-id	Firmware index on Cloud obtained using <a href="#">get-all-firmwares</a> .

## Request Example

```
POST /sc_cloud/upgrade/start HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 41
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
    "sn": ["A302190930002"],
    "firmware-id": 21
}
```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>0: success.</li><li>Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	start-upgrade
details	Update results.

### details

Update results are as follows.

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"> <li>• 0: success.</li> <li>• 1: repeat operations.</li> <li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li> </ul>
sn	the SN of update devices.

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 83
{
  "result": 0,
  "method": "start-upgrade",
  "details": [
    {
      "sn": "A302190930002",
      "result": 0
    }
  ]
}
```

## start-rec

Use the interface to start recording.

Only available for users with administrative rights.

You can stop recording by using [stop-live](#).

It is available for the following [product family](#).

- Ultra Stream

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/socket/usapi?method=start-rec&sc-client-id=xxx
Data Format	Response:Content-Type: application/json

### Request URL

Parameter	Description
method	start-rec
sc-client-id	Specify the device SN which will start recording.

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /socket/usapi?method=start-rec&sc-client-id=D301210104248 HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• 1: repeat operations.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json
{
    "result": 0
}
```

## stop-rec

Use the interface to stop recording.

Only available for users with administrative rights.

It is available for the following [product family](#).

- Ultra Stream

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/socket/usapi?method=stop-rec&sc-client-id=xxx
Data Format	Response:Content-Type: application/json

### Request URL

Parameter	Description
method	stop-rec
sc-client-id	Specify the device SN which will stop recording.

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /socket/usapi?method=stop-rec&sc-client-id=D301210104248 HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• 1: repeat operations.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json
{
    "result": 0
}
```

## start-live

Use the interface to start streaming.

Only available for users with administrative rights.

You can stop streaming by using [stop-live](#).

It is available for the following [product family](#).

- Ultra Stream

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/socket/usapi?method=start-live&sc-client-id=xxx
Data Format	Response:Content-Type: application/json

### Request URL

Parameter	Description
method	start-live
sc-client-id	Specify the device SN which will start streaming.

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /socket/usapi?method=start-live&sc-client-id=D301210104248 HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• 1: repeat operations.</li><li>• -53: configuration error.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json
{
    "result": 0
}
```



## stop-live

Use the interface to stop streaming.

Only available for users with administrative rights.

It is available for the following [product family](#).

- Ultra Stream

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/socket/usapi?method=stop-live&sc-client-id=xxx
Data Format	Response: Content-Type: application/json

### Request URL

Parameter	Description
method	stop-live
sc-client-id	Specify the device SN which will stop streaming.

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /socket/usapi?method=stop-live&sc-client-id=D301210104248 HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• 1: repeat operations.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json
{
    "result": 0
}
```

## get-dev

Use the interface to obtain detailed information of devices hosted successfully.

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-dev?sn=xxx
Data Format	Response: Content-Type: application/json

### Request URL

Parameter	Description
sn	Device serial number.

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-dev?sn=A302190930002 HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
dev	Detailed information of the specified device.

dev

Parameter	Description
catalog-id	Device group ID.
sn	Serial number.
module	Product family ID.
dev-warning	A number greater than 0 indicates the device has warning(s). The value and mask value in <a href="#">Status Mask of Abnormal Device</a> perform binary logic "and" operator. There might be multiple warnings. For example, if (dev-warning & 0x01) == 0x01, means the device has no signal.
is-everyone	Whether the device is available for all users. 0: no; 1: yes.
users	Operators of the current device when the value of "is-everyone" is 0.
apply-date	Time of applying to join the cloud.
online-date	Device online state. A number greater than 0 indicates the device is online, otherwise it is offline.
is-upload-file	Whether the device is uploading the firmware. 1 indicates it is uploading. Otherwise, it is not.
upload-file-pos	The upload process in percentage.
status	Information of hosted device.

#### status

Parameter	Description
name	Product name.
product-id	Product model ID.
module-name	Product family name
hardware-ver	Product hardware version.
firmware-ver	Product firmware version.
up-time	Equipment uptime in seconds.
cur-status	Current device status mask refers to <a href="#">Status Mask of Abnormal Device</a> .
eth	Ethernet IP.
wifi	Wi-Fi IP.
rndis	USB RNDIS IP.
upgrade-ret	Firmware update status code refers to <a href="#">API Status Code</a> . Update usage refers to <a href="#">update procedures</a> .
upgrade-step	Current process of the firmware update procedure, there are 4 steps in total.
upgrade-percent	Update process in percentage.
input	Input signal format includes resolution and frame rate.
output	Output signal format includes resolution and frame rate.

## Response Example

HTTP/1.1 200 OK  
Content-Type: application/json; charset=utf-8  
Content-Length: 1600  
Connection: keep-alive

```
{  
    "result": 0,  
    "dev": {  
        "catalog-id": 2,  
        "sn": "A302190930002",  
        "module": 1,  
        "dev-status": 2,  
        "network": "",  
        "is-upgrade": 0,  
        "users": [  
            "Admin"  
        ],  
        "is-everyone": 0,  
        "apply-date": 1634088523,  
        "online-date": 1635413950,  
        "offline-date": 0,  
        "is-upload-file": 0,  
        "upload-file-pos": 100,  
        "dev-warning": 1,  
        "sid": "245afe8cc4362ad0355f672433ff8608",  
        "cpu": [],  
        "mem": [],  
        "net": [],  
        "net2": [],  
        "net3": [],  
        "status": {  
            "name": "Ultra Stream A302190930002",  
            "product-id": 770,  
            "module-name": "Ultra Stream SDI",  
            "hardware-ver": "A",  
            "firmware-ver": "1.5.178",  
            "conn-ip": "",  
            "up-time": 104370,  
            "eth": "",  
            "sd-total": 32217448448,  
            "cur-status": 0,  
            "wifi": "10.10.3.34",  
            "input": "No Signal",  
            "output": "",  
            "usb-total": 0,  
            "usb-free": 0,  
            "usb-used": 0,  
            "usb-status": 0,  
            "usb-usage": 0,  
            "sd-free": 18495471616,  
            "sd-used": 12648235008,  
            "sd-status": 1,  
            "sd-usage": 40,  
            "rec-codec": "1280x720, 59.94, 2048 Kbps",  
            "rec-sec": 0,  
            "rec-kbps": 0,  
            "live-codec": "1280x720, 30.00, 1024 Kbps",  
            "live-sec": 0,  
            "live-kbps": 0,  
            "ndi-connected": false,  
            "ndi-url": "",  
            "ndi-enabled": false,  
            "rndis": "",  
            "ndi-name": "",  
            "ndi-video-width": 0,  
            "ndi-video-height": 0,  
            "ndi-video-scan": "",  
            "ndi-video-field-rate": 0,  
            "ndi-audio-sample-rate": 0,  
            "ndi-audio-channels": 0,  
            "ndi-audio-bit-count": 0,  
            "upgrade-ret": 27,  
            "upgrade-step": 0,  
            "status": {}  
        }  
    }  
}
```

```
"upgrade-percent": 0,  
"usb-option": 0,  
"sd-option": 1,  
"CPUStatus": 18,  
"NetStatus": 0,  
"MemStatus": 44,  
"Net2Status": 2328,  
"Net3Status": 0  
}  
}  
}
```

## set-dev-secu

Use the interface to set security interface for devices.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/registry/set-dev-secu
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
sn	Array of Device SN.
param-int	Whether the device is available for all users. 0: no; 1: yes.
params	User list when param-int = 0.

#### params

- When param-int = 1, params are [""].
- When param-int = 0, params are array of the specified usename.

### Request Example

```
POST /sc_cloud/registry/set-dev-secu HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 64
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "sn": [
    "A302190930002"
  ],
  "param-int": 0,
  // Only available for "Admin" and "Test" users
  "params": [
    "Admin",
    "Test"
  ]
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	set-dev-secu

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 36
Connection: keep-alive
{
  "method": "set-dev-secu",
  "result": 0
}
```

## get-dev-logs

Use the interface to obtain logs of specified devices.

[clear-logs](#) can be used to clear logs.

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-dev-logs?sn=xxx
Data Format	Response: Content-Type: application/json

### Request URL

Parameter	Description
sn	Device serial number.

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-dev-logs?sn=D301210104248 HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
logs	Device logs displayed on Cloud.

#### logs

Parameter	Description
id	Log ID.
date	Log generated time.
info	Log information.
type	Log types. The options are as follows: 1: information. 2: warning. 3: error.
sn	Device serial number.

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
{
    "result": 0,
    "logs": [
        {
            "id": 3630,
            "date": 1635217459,
            "info": "The device is offline.",
            "type": 2,
            "sn": "D301210104248"
        },
        {
            "id": 3631,
            "date": 1635218146,
            "info": "The device is online.",
            "type": 1,
            "sn": "D301210104248"
        }
    ]
}
```

## WebGUI

Not only Cloud but also WebGUI is provided for device remote control. You can access WebGUI from Cloud, and then use it to configure detailed parameters for each online device.

### Interface Definition

Protocol	HTTP/HTTPS GET
URL	ip[:port]/socket/sc-remote/<serial-number>/

### Call Instance

Step 1: Log in the Cloud and get Cookie.

Step 2: Access WebGUI via URL. Call instance is as follows.

```
<a href="http://ip[:port]/socket/sc-remote/D301210104248/" target="_blank">
    WebGUI tool
</a>
```

## get-srt-server

Use the interface to obtain SRT server list.

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-srt-server
Data Format	Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-srt-server HTTP/1.1
Accept: application/json, text/plain, /*
Connection: keep-alive
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
status	SRT server status.

#### status

Parameter	Description
is-running	Whether the SRT server is on. You can start SRT server by using <a href="#">start-srt-server</a> , and shutdown it using <a href="#">stop-srt-server</a> .
connections	The number of enabled SRT servers.
down-bitrate	Total downstream bitrate.
up-bitrate	Total upstream bitrate.
clients	Detailed information of SRT server list.

#### clients

Parameter	Description
name	Stream name.
player	Play server list.
publisher	Detailed information of upload server(s).

#### player

Parameter	Description
addr	Play server address.
bitrate	Play bitrate.
port	Port number.
stream_name	Stream name.
type	Constant value: player.
uptime	Running time in ms.

#### publisher

Parameter	Description
addr	Upload server address.
bitrate	Upload bitrate.
port	Port number.
stream_name	Stream name.
type	Constant value: publisher.
uptime	Running time in ms.

### Response Example

There are 2 players in the following example.

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 487
{
  "result": 0,
  "status": {
    "is-running": true,
    "connections": 3,
    "down-bitrate": 1228800,
    "up-bitrate": 609280,
    "clients": [
      {
        "name": "streamID",
        "player": [
          {
            "addr": "10.10.14.135",
            "bitrate": 614400,
            "port": 46660,
            "stream_name": "streamID",
            "type": "player",
            "uptime": 13600
          },
          {
            "addr": "10.10.15.84",
            "bitrate": 614400,
            "port": 34154,
            "stream_name": "streamID",
            "type": "player",
            "uptime": 13602
          }
        ],
        "publisher": {
          "addr": "10.10.6.142",
          "bitrate": 609280,
          "port": 40089,
          "stream_name": "streamID",
          "type": "publisher",
          "uptime": 13616
        }
      }
    ]
  }
}
```

## set-srt-settings

Use the interface to configure SRT server.

Only available for users with administrative rights.

### SRT server cautions

- Use SRT Caller to pull and push.
- The port, stream name, security enhancements (encryption and its passphrase) must be the same.

Stream ID formats are as follows.  
Push ID: <upload\_domain\_name>/live/<Stream\_name>  
pull ID: <play\_domain\_name>/live/<Stream\_name>

- The SRT pull and push clients should be pinged. They can be either applications or hardwares.

The SRT pull and push clients do not need to register to Cloud platform.

## Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/srtserver/set-settings
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

## Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

## Request Body

Parameter	Description
port	Port number ranges from 1024 to 65535.
domain_player	Play domain name.
domain_publisher	Upload domain name.
pbkeylen	Stream is not encrypted by default. The options are as follows: <ul style="list-style-type: none"><li>• 0: not encrypted</li><li>• 16: AES-128</li><li>• 24: AES-192</li><li>• 32: AES-256</li></ul>
passphrase	Encryption passphrase. It is 10 to 79 characters when pbkeylen is 0.
app_player_name	Play app name. <ul style="list-style-type: none"><li>• You can obtain the name by using <a href="#">get-srt-server-settings</a>.</li><li>• It can not be modified.</li></ul>
app_publisher_name	Upload app name. <ul style="list-style-type: none"><li>• You can obtain the name by using <a href="#">get-srt-server-setting</a>.</li><li>• It can not be modified.</li></ul>
idle_streams_timeout	Timeout. <ul style="list-style-type: none"><li>• You can obtain the name by using <a href="#">get-srt-server-settings</a>.</li><li>• It can not be modified.</li></ul>
latency	Latency time. <ul style="list-style-type: none"><li>• You can obtain the name by using <a href="#">get-srt-server-settings</a>.</li><li>• It can not be modified.</li></ul>
max_connections	The maximum number of connections. <ul style="list-style-type: none"><li>• You can obtain the name by using <a href="#">get-srt-server-settings</a>.</li><li>• It can not be modified.</li></ul>

```
Upload ID: <domain_publisher>/<app_publisher_name>/<stream_name>
Play ID: <domain_player>/<app_player_name>/<stream_name>
```

## Request Example

```
POST /sc_cloud/srtserver/set-settings HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 227
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
    "app_player_name": "live",
    "app_publisher_name": "live",
    "domain_player": "play.srt",
    "domain_publisher": "upload.srt",
    "idle_streams_timeout": 10,
    "latency": 20,
    "port": 8001,
    "max_connections": 20,
    "pbkeylen": 16,
    "passphrase": "111111111111"
}
```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	set-srt-settings

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 40
Connection: keep-alive
{
    "method": "set-srt-settings",
    "result": 0
}
```

## get-srt-server-settings

Use the interface to obtain SRT server configurations.

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-srt-server-settings
Data Format	Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-srt-server-settings HTTP/1.1
Accept: application/json, text/plain, /*
Cookie: mwcloud-sid=OCXWUMGEYPGIAWNOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
settings	SRT server settings.

#### settings

Parameter	Description
app_player_name	Constant value: live.
app_publisher_name	Constant value: live.
domain_player	Play domain name.
domain_publisher	Upload domain name.
latency	Latency time ranges from 20ms to 8000ms and the default value is 120ms.
port	Port number ranges from 1024 to 65535.
pbkeylen	Your stream is not encrypted by default. The options are as follows: <ul style="list-style-type: none"><li>• 0: not encrypted</li><li>• 16: AES-128</li><li>• 24: AES-192</li><li>• 32: AES-256</li></ul>
passphrase	Encryption passphrase. It is 10 to 79 characters when pbkeylen is 0.
max_connections	The maximum number of connections.

```
Upload ID: <domain_publisher>/<app_publisher_name>/<stream_name>
Play ID: <domain_player>/<app_player_name>/<stream_name>
```

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 238
{
    "result": 0,
    "settings": {
        "app_player_name": "live",
        "app_publisher_name": "live",
        "domain_player": "play.srt",
        "domain_publisher": "upload.srt",
        "idle_streams_timeout": 10,
        "latency": 20,
        "port": 8000,
        "pbkeylen": 0,
        "passphrase": "",
        "max_connections": 20
    }
}
```

## start-srt-server

Use the interface to start SRT service on Cloud.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/srtserver/start
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Null

### Request Example

```
POST /sc_cloud/srtserver/start HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 0
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	start-srt-server

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 42
Connection: keep-alive
{
  "method": "start-srt-server",
  "result": 0
}
```

## stop-srt-server

Use the interface to shutdown SRT service, then all SRT connection(s) will be lost.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/srtserver/stop
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Null

### Request Example

```
POST /sc_cloud/srtserver/stop HTTP/1.1
Accept: application/json, text/plain, /*
Connection: keep-alive
Content-Length: 0
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	stop-srt-server

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 39
Connection: keep-alive
{
  "method": "stop-srt-server",
  "result": 0
}
```

## get-channels

Use the interface to obtain the task list of stream conversion. You can get detailed information of a stream when specifying its stream ID in request URL.

An input and multiple outputs can be added to a stream conversion task.

Input source can be the following protocol streams.

- 1) RTMP/RTMPS
- 2) SRT Listener

Outputs can be the following protocol streams.

- 1) RTMP/RTMPS
- 2) SRT Caller
- 3) SRT Listener

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-channels[?id=xx]
Data Format	Response: Content-Type: application/json

### Request URL

Parameters	Mandatory	Description
id	No	Stream ID. <ul style="list-style-type: none"><li>• With ID: obtain the detailed information of the specified task.</li><li>• Without ID: obtain all task list.</li></ul>

The following example shows an example of request URL without id.

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-channels HTTP/1.1
Accept: application/json, text/plain, /*
Connection: keep-alive
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
channels	Shows the conversion task list.

## channels

Parameter	Description
id	Session ID.
is-enable	Whether the conversion task is enabled.
name	Session name. The string range is as follows. <ul style="list-style-type: none"><li>• 1 to 32 characters;</li><li>• uppercase and lowercase letters, numbers, special symbols including ._-+'[]() and spaces.</li><li>• It can not start or end with spaces.</li></ul>
source	Detailed input information.
sink	Detailed output(s) information.

## source

Parameter	Description
id	Source ID.
is-enable	Whether input source switch is on.
name	def-channel-src-name. It can not be modified.
type	Source type. The options are <ul style="list-style-type: none"><li>• 1: RTMP/RTMPS</li><li>• 2: SRT Caller</li><li>• 3: SRT Listener</li></ul>
status	Connection status.
uptime	Conversion task running time in ms.
bitrate	Transmission bitrate in bps.
rtmp	Indicates input RTMP/RTMPS stream when <code>type</code> = 1.
srt	Indicates input SRT Listener stream when <code>type</code> = 3.

## sink

sink is an Object. It needs to traverse the properties of the object to get the list of output streams under sink.

- Each key is an output stream ID.
- Each key and its corresponding value in the Object are used to parametrize the detailed information of delivery.

Parameter	Description
id	Output stream ID.
is-enable	Whether output is enabled.
name	Output stream name. The string range is as follows. <ul style="list-style-type: none"><li>• 1 to 32 characters;</li><li>• uppercase and lowercase letters, numbers, special symbols including ._-+'[]() and spaces.</li><li>• It can not start or end with spaces.</li></ul>
type	Stream type. The options are <ul style="list-style-type: none"><li>• 1: RTMP/RTMPS</li><li>• 2: SRT Caller</li><li>• 3: SRT Listener</li></ul>
status	Connection status.
uptime	Conversion task running time in ms.
bitrate	Transmission bitrate in bps.
rtmp	Indicates output RTMP/RTMPS stream when <code>type</code> = 1.
srt	Indicates output SRT Caller when <code>type</code> = 2. Indicates output SRT Listener stream when <code>type</code> = 3.

## rtmp

Parameter	Description
type	Constant value: 1.
url	Server URL.
key	Stream key.
is-auth	Authentication state. <ul style="list-style-type: none"> <li>0: disabled.</li> <li>1: enabled. User name and password are required.</li> </ul>
user	User name.
passwd	User password.

## srt

Parameter	Description
ip	IP Address or domain name. For an SRT Caller sink, you need to specify an SRT Listener address.
port	Port number ranges from 1 to 65535.
latency	Latency time ranges from 20ms to 8000ms. The default value is 120ms.
bandwidth	Cost of overhead in percentage, ranging from 5% to 100% and the default value is 25%.
stream-id	Stream ID. Only available for SRT Caller. The string value ranges from 0 to 256 characters which should be consistent with that of its sender.
enc-type	Encryption algorithm. The options are as follows: <ul style="list-style-type: none"> <li>0: not encrypted</li> <li>16: AES-128</li> <li>24: AES-192</li> <li>32: AES-256</li> </ul> The default value is 0.
enc-pass	Encryption passphrase. It is 10 to 79 characters when enc-type is not 0.

## Connection Status Code for Input/Output Streams

Status code	Description
0	Idle.
1	Resolving DNS.
2	Connecting.
3	Handshaking.
4	Connecting stream.
5	Ready.
6	State error.
7	Failed to resolve DNS.
8	Failed to connect to TCP port.
9	Handshake failed.
10	Stream connection failed.
11	Auth failed.
100	Failed to listen on port.
101	Connection interrupted.
102	Remote rejected your request.

## Response Example

HTTP/1.1 200 OK  
Content-Type: application/json; charset=utf-8

```
{
  "result": 0,
  "channels": [
    {
      "id": 6,
      "is-enable": 1,
      "name": "Stream Conversion 0001",
      "source": {
        "id": 8,
        "is-enable": 1,
        "name": "def-channel-src-name",
        "type": 3,
        "status": 5,
        "bitrate": 0,
        "uptime": 0,
        "rtmp": {
          "type": 0, "url": "", "key": "",
          "is-auth": 0, "user": "", "passwd": "", "param": ""
        },
        "srt": {
          "ip": "0.0.0.0", "port": 8666, "latency": 120, "bandwidth": 0,
          "stream-id": "", "enc-type": 0, "enc-pass": "", "Param": ""
        }
      },
      "sink": {
        "19": {
          "id": 19,
          "is-enable": 1,
          "name": "rtmp",
          "type": 1,
          "status": 0,
          "bitrate": 0,
          "uptime": 0,
          "rtmp": {
            "type": 1, "url": "rtmps://10.0.1.32/live", "key": "234",
            "is-auth": 0, "user": "", "passwd": "", "param": ""
          },
          "srt": {
            "ip": "", "port": 0, "latency": 0, "bandwidth": 0,
            "stream-id": "", "enc-type": 0, "enc-pass": "", "Param": ""
          }
        }
      }
    },
    {
      "id": 8,
      "is-enable": 1,
      "name": "Stream Conversion 0002",
      "source": {
        "id": 10,
        "is-enable": 1,
        "name": "def-channel-src-name",
        "type": 1,
        "status": 5,
        "bitrate": 0,
        "uptime": 1698,
        "rtmp": {
          "type": 1, "url": "rtmps://10.0.1.32:1936/live", "key": "22",
          "is-auth": 0, "user": "", "passwd": "", "param": ""
        },
        "srt": {
          "ip": "", "port": 0, "latency": 0, "bandwidth": 0,
          "stream-id": "", "enc-type": 0, "enc-pass": "", "Param": ""
        }
      },
      "sink": {
        "11": {
          "id": 11,
          "is-enable": 1,
          "name": "rtmp",
        }
      }
    }
  ]
}
```

```

    "type": 1,
    "status": 0,
    "bitrate": 0,
    "uptime": 0,
    "rtmp": {
        "type": 1, "url": "rtmps://10.0.1.32:1936/live", "key": "12",
        "is-auth": 0, "user": "", "passwd": "", "param": ""
    },
    "srt": {
        "ip": "", "port": 0, "latency": 0, "bandwidth": 0,
        "stream-id": "", "enc-type": 0, "enc-pass": "", "Param": ""
    }
},
"16": {
    "id": 16,
    "is-enable": 0,
    "name": "SRT Caller",
    "type": 2,
    "status": 0,
    "bitrate": 0,
    "uptime": 0,
    "rtmp": {
        "type": 0, "url": "", "key": "",
        "is-auth": 0, "user": "", "passwd": "", "param": ""
    },
    "srt": {
        "ip": "10.10.11.105", "port": 6666, "latency": 120, "bandwidth": 25,
        "stream-id": "", "enc-type": 0, "enc-pass": "", "Param": ""
    }
},
"20": {
    "id": 20,
    "is-enable": 1,
    "name": "SRT Listener",
    "type": 3,
    "status": 0,
    "bitrate": 0,
    "uptime": 0,
    "rtmp": {
        "type": 0, "url": "", "key": "",
        "is-auth": 0, "user": "", "passwd": "", "param": ""
    },
    "srt": {
        "ip": "0.0.0.0", "port": 5236, "latency": 120, "bandwidth": 0,
        "stream-id": "", "enc-type": 0, "enc-pass": "", "Param": ""
    }
}
}
]
}
}

```

## add-channel

Use the interface to add input sources. Protocol streams include:

- RTMP/RTMPS
- SRT Listener

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/channel/add
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
name	Protocol stream name. The string range is as follows. <ul style="list-style-type: none"><li>• 1 to 32 characters;</li><li>• uppercase and lowercase letters, numbers, special symbols including ._-+'[]() and spaces.</li><li>• It can not start or end with spaces.</li></ul>
protocol	Detailed information of protocol stream.

#### protocol

Parameter	Description
name	Input stream name: def-channel-src-name. It can not be modified.
is-enable	Whether the input switch is enabled. <ul style="list-style-type: none"><li>• 1: enabled</li><li>• 0: disabled</li></ul> The default value is 1.
type	Input protocol stream. The options are <ul style="list-style-type: none"><li>• 1: RTMP/RTMPS</li><li>• 3: SRT Listener</li></ul>
rtmp	When type=1, Request Body refers to <a href="#">RTMP/RTMPS</a> .
srt	When type=3, Request Body refers to <a href="#">SRT Listener</a> .

#### rtmp

Parameter	Description
type	Constant value: 1.
url	RTMP server URL.
key	Stream key.
is-auth	Whether authentication is enabled. <ul style="list-style-type: none"><li>• 0: disabled.</li><li>• 1: enabled. User name and password are required.</li></ul>
user	User name.
passwd	Password.

#### srt

Parameter	Description
ip	0.0.0.0
port	Port number ranges from 1 to 65535.
latency	Latency time ranges from 20ms to 8000ms and the default value is 120ms.
enc-type	<p>Encryption algorithm. The options are as follows:</p> <ul style="list-style-type: none"> <li>• 0: not encrypted</li> <li>• 16: AES-128</li> <li>• 24: AES-192</li> <li>• 32: AES-256</li> </ul> <p>The default value is 0.</p>
enc-pass	Encryption passphrase. It is 10 to 79 characters when enc-type is 0.

## Request Example

- RTMP/RTMPS

```
POST /sc_cloud/channel/add HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 179
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "name": "rtmp push",
  "protocol": {
    "name": "def-channel-src-name",
    "is-enable": 1,
    "type": 1,
    "rtmp": {
      "type": 1,
      "url": "rtmp://127.0.0.1/live",
      "key": "test",
      "is-auth": 0,
      "user": "",
      "passwd": ""
    }
  }
}
```

- SRT Listener

```
POST /sc_cloud/channel/add HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 179
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "name": "srt listener",
  "protocol": {
    "name": "def-channel-src-name",
    "is-enable": 1,
    "type": 3,
    "srt": {
      "ip": "0.0.0.0",
      "port": 3522,
      "latency": 120,
      "enc-type": 16,
      "enc-pass": "dddddddddd"
    }
  }
}
```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"> <li>• 0: success.</li> <li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li> </ul>
id	Stream ID
method	add-channel

#### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 43
Connection: keep-alive
{
  "id": 13,
  "method": "add-channel",
  "result": 0
}
```

## set-channel-source

Use the interface to modify input source.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/channel/set-source
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
name	Stream name. You can modify the parameter by using <a href="#">set-channel-name</a> .
id	Stream ID.
protocol	Detailed information of protocol stream.

#### protocol

Parameter	Description
id	Source ID.
name	def-channel-src-name. It can not be modified.
is-enable	Whether input source switch is on. You can modify the parameter by using <a href="#">set-channel-enable</a> .
type	Source type. The options are <ul style="list-style-type: none"><li>• 1: RTMP/RTMPS</li><li>• 2: SRT Caller</li><li>• 3: SRT Listener</li></ul>
status	Connection status.
uptime	Conversion task running time in ms.
bitrate	Transmission bitrate in bps.
rtmp	Indicates input RTMP/RTMPS stream when <code>type</code> = 1. Request Body refers to <a href="#">RTMP/RTMPS</a> .
srt	Indicates input SRT Listener stream when <code>type</code> = 3. Request Body refers to <a href="#">SRT Listener</a> .

#### rtmp

Parameter	Description
type	Constant value: 1.
url	Server URL.
key	Stream key.
is-auth	Authentication state. <ul style="list-style-type: none"><li>• 0: disabled.</li><li>• 1: enabled. User name and password are required.</li></ul>
user	User name.
passwd	User password.

## srt

Parameter	Description
ip	Constant value: "0.0.0.0".
port	Port number ranges from 1 to 65535.
latency	Latency ranges from 20ms to 8000ms. The default value is 120ms.
enc-type	Encryption algorithm. The options are as follows: <ul style="list-style-type: none"><li>• 0: not encrypted</li><li>• 16: AES-128</li><li>• 24: AES-192</li><li>• 32: AES-256</li></ul> The default value is 0.
enc-pass	Encryption passphrase. It is 10 to 79 characters when enc-type is 0.

## Request Example

- RTMP/RTMPS

```
POST /sc_cloud/channel/set-source HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 208
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "name": "rtmp",
  "id": 12,
  "protocol": {
    "id": 22,
    "name": "def-channel-src-name",
    "is-enable": 1,
    "type": 1,
    "rtmp": {
      "type": 1,
      "url": "rtmp://10.0.1.32/live",
      "key": "pull-modify",
      "is-auth": 0,
      "user": "",
      "passwd": ""
    }
  }
}
```

- SRT Listener

```
POST /sc_cloud/channel/set-source HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 202
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "name": "srt listener",
  "id": 13,
  "protocol": {
    "id": 23,
    "name": "def-channel-src-name",
    "is-enable": 1,
    "type": 3,
    "srt": {
      "ip": "0.0.0.0",
      "port": 3522,
      "latency": 120,
      "enc-type": 16,
      "enc-pass": "ddddddddddffff"
    }
  }
}
```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	set-channel-source

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 42
Connection: keep-alive
{
  "method": "set-channel-source",
  "result": 0
}
```

## set-channel-name

Use the interface to modify the input stream name.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/channel/set-name
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	Stream ID. You can add stream tasks by using <a href="#">add-channel</a> and obtain the IDs by using <a href="#">get-channels</a> .
name	New stream name. The string range is as follows. <ul style="list-style-type: none"><li>• 1 to 32 characters;</li><li>• uppercase and lowercase letters, numbers, special symbols including ._-+'[]() and spaces.</li></ul>

### Request Example

```
POST /sc_cloud/channel/set-name HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 35
Connection: keep-alive
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 13,
  "name": "new name"
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	set-channel-name

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 40
Connection: keep-alive
{
  "method": "set-channel-name",
  "result": 0
}
```

## set-channel-enable

Use the interface to start/stop stream conversion tasks by turning on/off the input switches.

- The input switch is on by default.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/channel/set-enable
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	Stream ID. You can add stream tasks by using <a href="#">add-channel</a> and obtain the IDs by using <a href="#">get-channels</a> .
is-enable	Whether the stream conversion task is started, namely the input switch is on or not. <ul style="list-style-type: none"><li>1: on</li><li>0: off</li></ul>

### Request Example

```
POST /sc_cloud/channel/set-enable HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 23
Cookie: mwcloud-sid=OCXWUMGEYPGIAWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 13,
  "is-enable": 0
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>0: success.</li><li>Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	set-channel-enable

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 42
Connection: keep-alive
{
  "method": "set-channel-enable",
  "result": 0
}
```

## delete-channel

Use the interface to delete a stream conversion task including the input source and all outputs of this task.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/channel/delete
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	Stream ID. You can add stream tasks by using <a href="#">add-channel</a> and obtain the IDs by using <a href="#">get-channels</a> .

### Request Example

```
POST /sc_cloud/channel/delete HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 9
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 13
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	delete-channel

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 38
Connection: keep-alive
{
  "method": "delete-channel",
  "result": 0
}
```

## add-channel-sink

Use the interface to add outputs. Protocols can be:

- RTMP/RTMPS
- SRT Listener
- SRT Caller

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/channel/add-sink
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	Stream ID. You can add output streams by using <a href="#">add-channel</a> and obtain the IDs by using <a href="#">get-channels</a> .
protocol	Detailed information of protocol stream.

#### protocol

Parameter	Description
name	Output stream name.
is-enable	Whether auto-streaming is enabled. The default value is 1.
type	Stream type. The options are <ul style="list-style-type: none"><li>• 1: RTMP/RTMPS</li><li>• 2: SRT Caller</li><li>• 3: SRT Listener</li></ul>
rtmp	When <code>type=1</code> , Request Body refers to <a href="#">RTMP/RTMPS</a> .
srt	When <code>type=2</code> , Request Body refers to <a href="#">SRT Caller</a> . When <code>type=3</code> , Request Body refers to <a href="#">SRT Listener</a> .

#### rtmp

Parameter	Description
type	Constant value: 1.
url	Source URL.
key	Input stream key.
is-auth	Authentication state. <ul style="list-style-type: none"><li>• 0: disabled.</li><li>• 1: enabled. User name and password are required.</li></ul>
user	User name.
passwd	Password.

#### srt

Parameter	Description
ip	IP address or domain name. When type is SRT Listener, IP address is "0.0.0.0".
port	Port numbers range from 1 to 65535.
latency	Latency ranges from 20 to 8000ms and the default value is 120ms.
bandwidth	Cost of overhead in percentage, ranging from 5% to 100% and the default value is 25%. Only available for SRT Caller.
stream-id	Stream ID. Only available for SRT Caller. The value ranges from 0 to 256 characters which should be consistent with that of its sender.
enc-type	Encryption algorithm. The options are as follows: <ul style="list-style-type: none"> <li>• 0: not encrypted</li> <li>• 16: AES-128</li> <li>• 24: AES-192</li> <li>• 32: AES-256</li> </ul> The default value is 0.
enc-pass	Encryption passphrase. It is 10 to 79 characters when enc-type is not 0.

## Request Example

- RTMP/RTMPS

```
POST /sc_cloud/channel/add-sink HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 190
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 13,
  "protocol": {
    "name": "output-rtmp",
    "is-enable": 1,
    "type": 1,
    "rtmp": {
      "type": 1,
      "url": "rtmp://10.2.3.63/live",
      "key": "",
      "is-auth": 1,
      "user": "test",
      "passwd": "12345678",
      "name": "output-rtmp"
    }
  }
}
```

- SRT Caller

```

POST /sc_cloud/channel/add-sink HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 225
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 13,
  "protocol": {
    "name": "output-srt caller",
    "is-enable": 1,
    "type": 2,
    "srt": {
      "ip": "10.0.2.3",
      "port": 678,
      "latency": 120,
      "enc-type": 16,
      "enc-pass": "passphrase",
      "stream-id": "stream id",
      "bandwidth": 25,
      "name": "output-srt caller"
    }
  }
}

```

- SRT Listener

```

POST /sc_cloud/channel/add-sink HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 178
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 13,
  "protocol": {
    "name": "output-srt listener",
    "is-enable": 1,
    "type": 3,
    "srt": {
      "ip": "0.0.0.0",
      "port": 666,
      "latency": 120,
      "enc-type": 0,
      "enc-pass": "",
      "name": "output-srt listener"
    }
  }
}

```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"> <li>• 0: success.</li> <li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li> </ul>
method	add-channel-sink

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 40
Connection: keep-alive
{
  "method": "add-channel-sink",
  "result": 0
}
```

# set-channel-sink

Use the interface to modify the output settings.

Only available for users with administrative rights.

## Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/channel/set-sink
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

## Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

## Request Body

Parameter	Description
id	Stream ID which you can add by using <a href="#">add-channel</a> and obtain the IDs by using <a href="#">get-channels</a> .
protocol	Detailed information of protocol stream.

### protocol

Parameter	Description
name	Output stream name. You can modify the parameter by using <a href="#">set-channel-sink-name</a> .
is-enable	Whether output switch is on. You can modify the parameter by using <a href="#">set-channel-sink-enable</a> .
type	Stream type. The options are <ul style="list-style-type: none"><li>• 1: RTMP/RTMPS</li><li>• 2: SRT Caller</li><li>• 3: SRT Listener</li></ul>
rtmp	Indicates output RTMP/RTMPS stream when <code>type</code> = 1. Request Body refers to <a href="#">RTMP/RTMPS</a> .
srt	Indicates output SRT Caller stream when <code>type</code> = 2. Request Body refers to <a href="#">SRT Caller</a> . Indicates output SRT Listener stream when <code>type</code> = 3. Request Body refers to <a href="#">SRT Listener</a> .

### rtmp

Parameter	Description
type	Constant value: 1.
url	Server URL.
key	Stream key.
is-auth	Authentication state. <ul style="list-style-type: none"><li>• 0: disabled.</li><li>• 1: enabled. User name and password are required.</li></ul>
user	User name.
passwd	User password.

### srt

Parameter	Description
ip	IP address or domain name. When type is SRT Listener, IP address is "0.0.0.0".
port	Port numbers range from 1 to 65535.
latency	Latency ranges from 20 to 8000ms and the default value is 120ms.
bandwidth	Cost of overhead in percentage, ranging from 5% to 100% and the default value is 25%. Only available for SRT Caller.
stream-id	Stream ID. Only available for SRT Caller. The value ranges from 0 to 256 characters which should be consistent with that of its sender.
enc-type	Encryption algorithm. The options are as follows: <ul style="list-style-type: none"> <li>• 0: not encrypted</li> <li>• 16: AES-128</li> <li>• 24: AES-192</li> <li>• 32: AES-256</li> </ul> The default value is 0.
enc-pass	Encryption passphrase. It is 10 to 79 characters when enc-type is 0.

## Request Example

- RTMP/RTMPS

```
POST /sc_cloud/channel/set-sink HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 212
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 13,
  "protocol": {
    "id": 24,
    "name": "output-rtmp-new",
    "is-enable": 1,
    "type": 1,
    "rtmp": {
      "type": 1,
      "url": "rtmp://10.2.3.63/live",
      "key": "addkey",
      "is-auth": 1,
      "user": "test",
      "passwd": "12345678",
      "name": "output-rtmp"
    }
  }
}
```

- SRT Caller

```

POST /sc_cloud/channel/set-sink HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 245
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 13,
  "protocol": {
    "id": 25,
    "name": "output-srt caller",
    "is-enable": 1,
    "type": 2,
    "srt": {
      "ip": "10.0.2.3",
      "port": 678,
      "latency": 120,
      "enc-type": 24,
      "enc-pass": "passphrase",
      "stream-id": "modify caller",
      "bandwidth": 25,
      "name": "output-srt caller-new"
    }
  }
}

```

- SRT Listener

```

POST /sc_cloud/channel/set-sink HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 206
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 13,
  "protocol": {
    "id": 26,
    "name": "output-srt listener",
    "is-enable": 1,
    "type": 3,
    "srt": {
      "ip": "0.0.0.0",
      "port": 666,
      "latency": 120,
      "enc-type": 16,
      "enc-pass": "fsfsfffffff",
      "name": "output-srt listener-new"
    }
  }
}

```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"> <li>• 0: success.</li> <li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li> </ul>
method	set-channel-sink

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 40
Connection: keep-alive
{
  "method": "set-channel-sink",
  "result": 0
}
```

## set-channel-sink-name

Use the interface to modify output stream name.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/channel/set-sink-name
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	Stream ID which you can add by using <a href="#">add-channel</a> and obtain the IDs by using <a href="#">get-channels</a> .
protocol	Detailed information of protocol stream.

#### protocol

Parameter	Description
id	Output stream ID which you can add by using <a href="#">add-channel-sink</a> and obtain by using <a href="#">get-channels</a> .
name	New output stream name. The string range is as follows. <ul style="list-style-type: none"><li>• 1 to 32 characters;</li><li>• uppercase and lowercase letters, numbers, special symbols including ._-+'[]() and spaces.</li><li>• It can not start or end with spaces.</li></ul>

### Request Example

```
POST /sc_cloud/channel/set-sink-name HTTP/1.1
Accept: application/json, text/plain, */*
Content-Type: application/json; charset=utf-8
Content-Length: 61
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 13,
  "protocol": {
    "id": 26,
    "name": "new output name"
  }
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	set-channel-sink-name

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 40
Connection: keep-alive
{
  "method": "set-channel-sink-name",
  "result": 0
}
```

## set-channel-sink-enable

Use the interface to turn on/off the output switch.

- The output switch is on by default.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/channel/set-sink-enable
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	Stream ID. You can add stream tasks by using <a href="#">add-channel</a> and obtain the IDs by using <a href="#">get-channels</a> .
protocol	Detailed information of protocol stream.

#### protocol

Parameter	Description
id	Output stream ID which you can add by using <a href="#">add-channel-sink</a> and obtain by using <a href="#">get-channels</a> .
is-enable	Whether the output switch is on. <ul style="list-style-type: none"><li>1: on</li><li>0: off</li></ul>

### Request Example

```
POST /sc_cloud/channel/set-sink-enable HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 44
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 13,
  "protocol": {
    "id": 25,
    "is-enable": 0
  }
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	set-channel-sink-enable

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 47
Connection: keep-alive
{
  "method": "set-channel-sink-enable",
  "result": 0
}
```

# delete-channel-sink

Use the interface to delete an output stream.

Only available for users with administrative rights.

## Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/channel/delete-sink
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

## Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

## Request Body

Parameter	Description
id	Stream ID. You can add stream tasks by using <a href="#">add-channel</a> and obtain the IDs by using <a href="#">get-channels</a> .
protocol	Detailed information of protocol stream.

### protocol

Parameter	Description
id	Output stream ID. You can add the output streams by using <a href="#">add-channel-sink</a> and obtain by using <a href="#">get-channels</a> .

## Request Example

```
POST /sc_cloud/channel/delete-sink HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 30
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 13,
  "protocol": {
    "id": 26
  }
}
```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	delete-channel-sink

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 43
Connection: keep-alive
{
    "method": "delete-channel-sink",
    "result": 0
}
```

## set-code

Use the interface to set the invitation code for advanced Cloud security.

Devices need to register with right invitation code after this setting.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/settings/set-code
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
is-code	Whether to enable invitation code. 1 indicates yes, 0 indicates no.
code-value	4-digit numbers.

### Request Example

```
POST /sc_cloud/settings/set-code HTTP/1.1
Content-Length: 33
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=UTF-8
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
    "is-code":0,
    "code-value":"1234"
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	set-code

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 32
{
  "method": "set-code",
  "result": 0
}
```

## set-web

Use the interface to set Cloud certificate.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/settings/set-web
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
is-http	Whether HTTP access is allowed. 1 indicates yes, 0 indicates not allowed.
http-port	HTTP port.
is-https	Whether HTTPS access is allowed. 1 indicates yes, 0 indicates not allowed.
https-port	HTTPS port.

### Request Example

```
POST /sc_cloud/settings/set-web HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 58
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "is-http": 1,
  "http-port": 80,
  "is-https": 1,
  "https-port": 443
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	set-web

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 31
{
  "method": "set-web",
  "result": 0
}
```

# uploadCert

Use the interface to upload CA certificate (.crt).

Only available for users with administrative rights.

## Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/uploadCert
Data Format	Request: Content-Type: multipart/form-data; boundary=xxx Response: Content-Type: application/json

## Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

## Request Body

The CA certificate file is as follows.

## Request Example

```
POST /sc_cloud/uploadCert HTTP/1.1
Content-Type: multipart/form-data; boundary=-----22383205084807890342375037721
Content-Length: 1510
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;

-----22383205084807890342375037721
Content-Disposition: form-data; name="file"; filename="cloudserver.crt"
Content-Type: application/x-x509-ca-cert

-----BEGIN CERTIFICATE-----
MIIDezCCAmOgAwIBAgIUQbp2VyDbpm0m7+hI07YzHX9+fQAwDQYJKoZIhvcNAQEL
BQAwVTELMAkGA1UEBhMCQ04xCzAJBgNVBAgMAkpTMQswCQYDVQQHDAJOSjERMA8G
...
YBTqm8X2bFJgDh069AtJsPSBsn1HJv0DMzyhtuCIGg==
-----END CERTIFICATE-----

-----22383205084807890342375037721--
```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>0: success.</li><li>Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
filename	File name.

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 31
{
  "filename": "/data/cloudserver.crt",
  "result": 0
}
```

## uploadCertKey

Use the interface to upload a PEM file stored CA private key.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/uploadCertKey
Data Format	Request: Content-Type: multipart/form-data; boundary=xxx Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

A CA private key file is shown as follows.

### Request Example

```
POST /sc_cloud/uploadCertKey HTTP/1.1
Content-Type: multipart/form-data; boundary=-----185266796315308751253203420120
Content-Length: 1920
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;

-----185266796315308751253203420120
Content-Disposition: form-data; name="file"; filename="cloudserver.pem"
Content-Type: application/octet-stream

-----BEGIN RSA PRIVATE KEY-----
MIIEpAIBAAKCAQEAxuYuD0+i1XNHvTRV+2HL1tNUNuiA15gh+0AGwJ7yhsXLrtEg
EMCbETTvTzM EgEfH1ya3fPKywDe084VT6/RId60tZY6RC/pDayRenQhABgQQe216
...
aoMgVhx+L+FFm9wgKHnZrLVRjN+Z26GLXWkkkSGaoJAAIMxPPy44Jg==
-----END RSA PRIVATE KEY-----

-----185266796315308751253203420120--
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
filename	File name.

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 31
{
  "filename": "/data/cloudserver.pem",
  "result": 0
}
```

## activation

Use the interface to add license to Cloud.

Only available for users with administrative rights.

You can check license information by using [get-status](#) and [license-reg](#).

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/license/activation
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
sn	License serial number.
user-name	License title.

### Request Example

```
POST /sc_cloud/license/activation HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 56
Connection: keep-alive
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "sn": "9C4E*****F769",
  "user-name": "magewell-ltd"
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	activation

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 37
{
    "result": 0,
    "method": "activation"
}
```

## deactivation

Use the interface to remove added license(s) from Cloud.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/license/deactivation
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
sn	License serial number. You can obtain by using <a href="#">get-status</a> and check <a href="#">license-reg</a> field.
user-name	License title. You can obtain by using <a href="#">get-status</a> and check <a href="#">license-reg</a> field.

### Request Example

```
POST /sc_cloud/license/deactivation HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 56
Connection: keep-alive
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "sn": "9C4E*****F769",
  "user-name": "magewell-ltd"
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	deactivation

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 37
{
    "result": 0,
    "method": "deactivation"
}
```

# uploadFirmware

Use the interface to upload device firmware file(.mwf) to Cloud.

Only available for users with administrative rights.

After uploading successfully, the firmware needs to be accepted by Cloud using [add-firmware](#), then it can be used to update hosted devices.

## Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/uploadFirmware
Data Format	Request: Content-Type: multipart/form-data; boundary=xxx Response: Content-Type: application/json

## Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

## Request Body

A firmware file example is shown as follows.

## Request Example

```
POST /sc_cloud/uploadFirmware HTTP/1.1
Content-Type: multipart/form-data; boundary=-----42288931224667793852045763104
Content-Length: 14556621
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;

-----42288931224667793852045763104
Content-Disposition: form-data; name="file"; filename="ultra_stream_sdi_rev_a_1_5_79.mwf"
Content-Type: application/octet-stream
...
-----42288931224667793852045763104--
```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
file-path	File saved path on Cloud.
file-size	Size of firmware file.
firmware-info	Information of uploaded firmware file.

#### firmware-info

Parameter	Description
product-id	Product model ID.
firmware-id	Firmware type. • 1 indicates test version. • The others are released revisions.
major-ver	Main version.
minor-ver	minor version.
build-number	Build number.
build-time	Version build time.
product-name	Product model name.
hardware-ver	Hardware version of device.

This version number is physically represented as a three-part string with the following format:

<major version>.<minor version>.<build number>

For example, version 1.5.79. indicates 1 as the major version, 5 as the minor version, and 79 as the build number.

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 285
{
  "result": 0,
  "file-path": "/data/new-firmware-6.mwf",
  "file-size": 14556364,
  "firmware-info": {
    "product-id": 770,
    "firmware-id": 0,
    "major-ver": 1,
    "minor-ver": 5,
    "build-number": 79,
    "build-time": "2021-05-13 05:27:59",
    "product-name": "Ultra Stream SDI",
    "firmware-name": "Standard",
    "hardware-ver": "A"
  }
}
```

## add-firmware

Use the interface to add the successfully uploaded firmware file to list which you can obtain by using [get-all-firmwares](#), then it can be used to update hosted devices on Cloud.

Only available for users with administrative rights.

To make a firmware file available for device update via Cloud, you need to perform the following 2 steps to prepare.

1. upload device firmware file(.mwf) by using [uploadFirmware](#).
2. add the successfully uploaded firmware to available file list by using [add-firmware](#).

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/firmware/add
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
file-path	Path of firmware file saved on Cloud. You can obtain the path by using <a href="#">uploadFirmware</a> .

### Request Example

```
POST /sc_cloud/firmware/add HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 40
Cookie: mwcloud-sid=OCXWUMGEYPGIAWlWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "file-path": "/data/new-firmware-6.mwf"
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	add-firmware

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 36
{
  "method": "add-firmware",
  "result": 1
}
```

## delete-firmware

Use the interface to delete firmware file(s) from Cloud.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/firmware/delete
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
ids	Firmware ID. You can obtain the ID by using <a href="#">get-all-firmwares</a> .

### Request Example

```
POST /sc_cloud/firmware/delete HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 12
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "ids": [24, 29]
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	add-firmware

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 36
{
  "method": "delete-firmware",
  "result": 0
}
```



## get-users

Use the interface to obtain all user accounts.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS GET
URL	ip[:port]/sc_cloud/scapi/get-users
Data Format	Request: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Example

```
GET /sc_cloud/scapi/get-users HTTP/1.1
Accept: application/json, text/plain, */*
Cookie: mwcloud-sid=0CXWUMGEYPGIAWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
users	User list.

#### users

Parameter	Description
id	User ID.
name	User name. Admin has <a href="#">administrative rights</a> .
nick	Nickname, reserved.

#### Admin

- The default administrator account is Admin.
- Admin cannot be deleted.

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 254
{
  "result": 0,
  "users": [
    {
      "id": 1,
      "name": "Admin",
      "nick": "Admin",
      "Passwd": "",
      "permit": -1
    },
    {
      "id": 2,
      "name": "Test",
      "nick": "",
      "Passwd": "",
      "permit": 1
    }
  ]
}
```

## add-user

Use the interface to add a new account to Cloud.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/user/add
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
name	User name.
passwd	MD5 encrypted password.

### Request Example

```
POST /sc_cloud/user/add HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 92
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "name": "guest",
  "passwd": "c4ca4238a0b923820dcc509a6f75849b"
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
id	User ID.
method	add-user

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 54
{
    "result": 0,
    "id": "5",
    "method": "add-user"
}
```

## delete-user

Use the interface to delete a Cloud user account.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/user/delete
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	User ID.

### Request Example

```
POST /sc_cloud/user/delete HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 8
Cookie: mwcloud-sid=OCXWUMGEYPGIAWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 5
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	delete-user

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 35
{
  "method": "delete-user",
  "result": 0
}
```



## change-passwd

Use the interface to validate and change a user's password.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/user/change-passwd
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	User ID. You can get the ID by using <a href="#">login</a> .
param	MD5 encrypted old password.
passwd	MD5 encrypted new password.

### Request Example

```
POST /sc_cloud/user/change-passwd HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 95
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 1,
  "param": "e3afed0047b08059d0fada10f400c1e5",
  "passwd": "2e33a9b0b06aa0a01ede70995674ee23"
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	change-passwd

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 37
{
  "method": "change-passwd",
  "result": 0
}
```

## reset-passwd

Use the interface to reset a user's password without validation.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/user/reset-passwd
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	User ID. You can obtain by usign <a href="#">get-users</a> .
passwd	MD5 encrypted new password.

### Request Example

```
POST /sc_cloud/user/reset-passwd HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 52
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 2,
  "passwd": "c81e728d9d4c2f636f067f89cc14862c"
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	reset-passwd

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 36
{
  "method": "reset-passwd",
  "result": 0
}
```

## add-catalog

Use the interface to create new device groups.

Then you can assigned a set of hosted devices based on your requirements for advanced control and security using [set-catalog](#).

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/devcatalog/add-catalog
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	Parent group ID. Customized group ID starts from 1.
param	Group name.

### Request Example

```
POST /sc_cloud/devcatalog/add-catalog HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 24
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 0,
  "param": "Group"
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
id	Added group ID.
method	add-catalog

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 42
{
  "result": 0,
  "id": 7,
  "method": "add-catalog"
}
```

## rename-catalog

Use the interface to modify group names.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/devcatalog/rename-catalog
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	The chosen device group ID.
param	New group name.

### Request Example

```
POST /sc_cloud/devcatalog/rename-catalog HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 28
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 7,
  "param": "Group_new"
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	rename-catalog

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 38
Connection: keep-alive
{
  "method": "rename-catalog",
  "result": 0
}
```

## delete-catalog

Use the interface to delete a group from Cloud.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/devcatalog/delete-catalog
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	The chosen device group ID.

### Request Example

```
POST /sc_cloud/devcatalog/delete-catalog HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 8
Connection: keep-alive
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 7,
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	delete-catalog

### Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 38
Connection: keep-alive
{
  "method": "delete-catalog",
  "result": 0
}
```

# set-catalog

Use the interface to move specified device(s) to a specified group.

Only available for users with administrative rights.

## Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/devcatalog/set-catalog
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

## Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

## Request Body

Parameter	Description
id	Group ID. You can obtain the <a href="#">device group ID</a> via <a href="#">get-dev-catalogs</a> . 0: remove the group(s) from Cloud.
params	Serial numbers of the chosen devices moved to a specified group.

## Request Example

```
POST /sc_cloud/devcatalog/set-catalog HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 35
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 2,
  "params": [
    "A305200908004",
    "A304200731001"
  ]
}
```

## Response Parameters

### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	set-catalog

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 35
{
  "method": "set-catalog",
  "result": 0
}
```

## set-catalog-secu

Use the interface to configure security policy settings for groups.

Only available for users with administrative rights.

### Prototype

Protocol	HTTP/HTTPS POST
URL	ip[:port]/sc_cloud/devcatalog/set-catalog-secu
Data Format	Request: Content-Type: application/json Response: Content-Type: application/json

### Request Cookies

Parameter	Description
mwcloud-sid	A string value that is used to uniquely identify user logged-in.
mwcloud-uid	Current logged-in username.

### Request Body

Parameter	Description
id	Device group ID.
param-int2	Constant value: 0.
param-int	Whether the group is available to all users. 0: No, 1: Yes.
params	User list when param-int = 0.

#### params

- When param-int = 1, params are [""].
- When param-int = 0, params are username array.

### Request Example

```
POST /sc_cloud/devcatalog/set-catalog-secu HTTP/1.1
Accept: application/json, text/plain, /*
Content-Type: application/json; charset=utf-8
Content-Length: 63
Cookie: mwcloud-sid=OCXWUMGEYPGIAWWOETYXPNMVHDZIAZJP; mwcloud-uid=Admin;
{
  "id": 1,
  "param-int2": 0,
  "param-int": 0,
  // Only available to "Admin" and "Test" users
  "params": [
    "Admin",
    "Test"
  ]
}
```

### Response Parameters

#### Response Header

Parameter	Description
Content-Type	Value: 'application/json; charset=UTF-8'

#### Response Body

Parameter	Description
result	Result code. The options are as follows: <ul style="list-style-type: none"><li>• 0: success.</li><li>• Other values. For details about the result codes, please refer to <a href="#">API Status</a>.</li></ul>
method	set-usercatalog

## Response Example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Content-Length: 39
Connection: keep-alive
{
  "method": "set-usercatalog",
  "result": 0
}
```