

CUBEX1 HTTP API Description

Welcome use kiloview product

The CUBE X1 HTTP API is a software development programming interface. The CUBEX1 HTTP API aims to achieve control of various device functions through a simple HTTP request/response mechanism. Software developers can use the CUBEX1 HTTP API to achieve the purpose of remote management and control of devices. Each function of the API corresponds to an HTTP request path. In the current version of the API, the format of this path is:

```
http://[:]/api/cube/v2/[module name]/[method].
```

This document will list the filename corresponding to each API function and its function description. At the same time, in each API document, there will be a test interface. According to the description of the request parameters, you can fill in the request parameters you need to test in the test interface and execute the test. It is very convenient to verify the API function online.

API requests follow the standard HTTP protocol. Developers can use any tool or software development library that complies with the HTTP standard to complete API calls (such as web browsers, JavaScript libraries, C/C++ HTTP protocol libraries, JAVA,.NET, etc.). The submission of parameters may be POST or GET, or both, depending on the interface requirements of different APIs. For details, please refer to the API description. The response of the API is in JSON format. For the meaning of each parameter in the JSON object, please refer to the documentation description of each API.

We try our best to keep the product API interfaces consistent, but it cannot be excluded that due to product characteristic differences, the API interfaces of different products may have some differences. Therefore, please follow the official guidance and distinguish and handle these detailed differences.

If you need 《CUBEX1-0.01.0085-COMPATIBLE-API》 which is compatible with the API of the old version CubeX1. please contact with technical support engineer of kiloview.

Calling Interface Description

The return form of all interfaces is uniformly:

Normal return

```
{
  "result": "ok",
  "msg": {} // "Some type of data, such as strings, numbers, arrays,
            dictionaries, etc., and this field may not exist."
}
```

Error return

```
{
  "result": "error",
  "error": {
    "code": "10002",
    "info": "User name does not exist"
  }
}
```

Module List

Module Name	Description
user	User management
system	System management
log	Log management
server	Service management
resource	Resource management
panel	Panel management
template	Template management
ws	WebSocket message

1 User Management

1.1 User Login

API URL

```
/api/cube/v2/user/login
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
screen	[BOOL], Required	Whether it is a small screen. True: small screen, False: others

Parameter

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
name	[STRING], Required	Username
alias	[STRING], Required	Alias
passwd	[STRING], Required	Password
system_m	[BOOL], Required	Whether it is a system administrator. True: yes, False: no
panel_m_per	[BOOL], Required	Whether there is panel operation permission. True: yes, False: no
resource_m_per	[BOOL], Required	Whether there is resource management permission. True: yes, False: no
firmware_m_per	[BOOL], Required	Whether there is firmware upgrade permission. True: yes, False: no

Note:

- If system_m=True, then panel_m_per, resource_m_per, and firmware_m_per are all True.
- If system_m=False, then panel_m_per, resource_m_per, and firmware_m_per are all False.

Example:

```
curl -X 'POST' \
  'http://192.168.40.111/api/cube/v2/user/add' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZiI6Im15bWwzZSwiY3JlYXR1X3RpbWUiOiIyMDIzLTUwLTA5IDExOjA1OjI1LjgzNzEXNCIsImV4cCI6MTY5Njg5MTAyNX0.30iWafBwYmlTKovKIVn081TvtHLHcb-frD2vv99ZL-I' \
  -H 'Content-Type: application/json' \
  -d '{
    "name": "user1",
    "alias": "user1",
    "passwd": "Admin123",
    "system_m": true,
    "panel_m_per": true,
```

```
"resource_m_per": true,  
"firmware_m_per": true  
'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": ""  
}
```

1.4 Delete User

API URL

```
/api/cube/v2/user/de1
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
user_id	[INT], Required	User ID

Example:

```
curl -X 'POST' \
  'http://192.168.40.111/api/cube/v2/user/delete' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MiwibmFtZSI6ImNoZW5xIiwic2N5ZWVudjpwYXZzSWiY3JlYXRlX3RpbWUiOiIyMDIzLTUwLTA5IDExOjA1OjI1LjgzNzEXNCIsImV4cCI6MTY5Njg5MTAyNX0.30iWAFBwYm1TKoVKIVn081TvtHLHcb-frD2vv99ZL-I' \
  -H 'Content-Type: application/json' \
  -d '{
  "user_id": 4
}'
```

Response

Example:

```
{
  "result": "ok",
  "msg": ""
}
```

1.5 Modify User

API URL

```
/api/cube/v2/user/modify
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
user_id	[INT], Required	User ID
alias	[STRING], Required	Alias

Field	Value	Description
system_m	[BOOL], Required	Whether it is a system administrator. True: yes, False: no
panel_m_per	[BOOL], Required	Whether there is panel operation permission. True: yes, False: no
resource_m_per	[BOOL], Required	Whether there is resource management permission. True: yes, False: no
firmware_m_per	[BOOL], Required	Whether there is firmware upgrade permission. True: yes, False: no

Note:

- If system_m=True, then panel_m_per, resource_m_per, and firmware_m_per are all True.
- If system_m=False, then panel_m_per, resource_m_per, and firmware_m_per are all False.

Example:

```
curl -X 'POST' \
  'http://192.168.40.111/api/cube/v2/user/modify' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImwiIiwiaWF0IjoiYmYwZzZSwiY3JlYXRlX3RpbWUiOiIyMDIzLTUwLTA5IDExOjE0OjAzLjE5NjM4NSIsImV4cCI6ImY5Njg5MTU0M30. -hZyCq28oaVC1US0GRlIpZ_-PHFky-pzk67_asjQlki' \
  -H 'Content-Type: application/json' \
  -d '{
  "user_id": 5,
  "alias": "user1",
  "system_m": true,
  "panel_m_per": true,
  "resource_m_per": true,
  "firmware_m_per": true
}'
```

Response

Example:

```
{
  "result": "ok",
  "msg": ""
}
```


1.6 Modify User Password

API URL

```
/api/cube/v2/user/passwd/modify
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
user_id	[INT], Required	User ID
passwd	[STRING], Required	Password

Example:

```
curl -X 'POST' \  
  'http://192.168.40.111/api/cube/v2/user/passwd/modify' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImwibmFtZSI6ImNoZW5xIiwic2NyZWVudjpwYXZzZWwiY3JlYXR1X3RpbWUiOiIyMDIzLTEwLTA5IDExOjE0OjAzLjE5NjM4NSIsImV4cCI6MTY5Njg5MTU0M30.eyJhbnV4cCI6ImwibmFtZSI6ImNoZW5xIiwic2NyZWVudjpwYXZzZWwiY3JlYXR1X3RpbWUiOiIyMDIzLTEwLTA5IDExOjE0OjAzLjE5NjM4NSIsImV4cCI6MTY5Njg5MTU0M30.-hZYCq28oaVC1US0GRlIpZ-_PHFky-pzk67_asjQlki' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "user_id": 5,  
    "passwd": "Admin123"  
  }'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": ""  
}
```

1.7 Query User

API URL

```
/api/cube/v2/user/query
```

Request

```
Method: GET
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
filter	[STRING, NULL], Optional	Filter condition, default is null. [Optional]
user_name	[STRING, NULL], Optional	User name, default is null. [Optional]

Note:

- When filter = NULL and user_name = NULL, query all users.
- When filter!= NULL and user_name = NULL, query users according to the condition.
- When filter = NULL and user_name!= NULL, query users according to the user_name.

Example:

```
curl -X 'GET' \
  'http://192.168.40.111/api/cube/v2/user/query?user_name=user1' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImwibmFtZSI6ImNoZW5xIiwic2N5ZWVudjpwYXZzZWwiY3JlYXRlX3RpbWUiOiIyMDIzLTEwLTA5IDExOjE4OjU2Ljk3OTAyMCIsImV4cCI6MTY5Njg5MTgzNn0.BYv2-XMPx25Jk6RuRmsmt87ESpJSGC8GK0uaU7U0i0'
```

Response

Example:

```
{
  "result": "ok",
  "msg": [
```

```

{
  "id": 5,
  "name": "user1",
  "alias": "user1",
  "role": 1,
  "panel_m_per": true,
  "resource_m_per": true,
  "firmware_m_per": true,
  "panel_per_list": [
    {
      "panel_id": 1,
      "view_per": true,
      "switch_per": false,
      "modify_per": false
    }
  ],
  "create_time": "2023-10-09T11:13:06.847033"
}
]
}

```

Field	Value	Description
id	[INT]	User ID
name	[STRING]	User name
alias	[STRING]	User nickname
role	[INT]	User role. 0: admin administrator, 1: administrator, 2: ordinary user
panel_m_per	[BOOL]	Whether there is panel operation permission. True: yes, False: no
resource_m_per	[BOOL]	Whether there is resource management permission. True: yes, False: no
firmware_m_per	[BOOL]	Whether there is firmware upgrade permission. True: yes, False: no
panel_per_list	[LIST]	Panel permission list
create_time	[STRING]	Creation time

Details of panel_per_list:

Field	Value	Description
panel_id	[INT]	Panel ID
view_per	[BOOL]	Whether there is view panel permission. True: yes, False: no
switch_per	[BOOL]	Whether there is switch panel permission. True: yes, False: no
modify_per	[BOOL]	Whether there is modify panel permission. True: yes, False: no

1.8 Get New Token

API URL

```
/api/cube/v2/user/token/get
```

Request

```
Method: GET
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description

Note:

- The token is valid for 5 minutes by default. A new token needs to be obtained before it expires.

Example:

```
curl -X 'GET' \  
  'http://192.168.40.111/api/cube/v2/user/token/get' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImwibmFtZSI6ImNoZW5xIiwic2NyZWVudIjp  
mYwzZSwiY3JlYXRlX3RpbWUiOiIyMDIzLTEwLTA5IDExOjM1OjE2LjMzMzUxOSIsImV4cCI6ImY5Njg  
yMjgXNn0.dPvpxLobAprvtR4pSYBI1_AGwu31dOvxr2WuUJXO7zu'
```

Response

Example:

```

{
  "result": "ok",
  "msg": {
    "access_token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImwibmFtZSI6ImNoZW5xIiwic2NyZWVudjpmYXZzZW50IiwiaWF0IjoiYmYMDiZLTEwLTA5IDExOjM1OjIwLjg0NzgzOSIsImV4cCI6MTY5NjgyMjgyMH0.Rrsp6XYUIBYUBhdF-CdPxUcw_sJN_ZdQ3nSK2PeNVvw",
    "token_type": "bearer"
  }
}

```

Field	Value	Description
access_token	[STRING]	token value
token_type	[STRING]	token type is bearer

1.9 Get Long-Term Valid Token

API URL

```
/api/cube/v2/user/token/permanent
```

Request

Method: POST

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
username	[STRING], Required	Username
password	[STRING], Required	User password
minutes	[INT, NULL], Optional	Token validity period, default is permanent [Optional]

Example:

```
curl -X 'POST' \  
  'http://192.168.40.114/api/cube/v2/user/token/permanent' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "username": "username",  
    "password": "password"  
  }'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": {  
    "access_token":  
    "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImwiYmFtZSI6ImNoZW5xIiwic2NyZWVudjpmYXZzZWwiY3JlYXRlX3RpbWUiOiIyMDIzLTUwLTA5IDExOjM1OjIwLjg0Nzg0OSIsImV4cCI6MTY5NjgyMjgyMH0.Rrsp6XYUIBYUBhdF-CdPxUcw_sJN_ZdQ3nSK2PeNVvw",  
    "token_type": "bearer"  
  }  
}
```

Field	Value	Description
access_token	[STRING]	token value
token_type	[STRING]	token type is bearer

2 System Management

2.1 Get System Information

Description: Mainly obtain information such as the server's CPU, memory, and network.

API URL

```
/api/cube/v2/system/info
```

Request

```
Method: GET
```

Header

Field	Value	Description
-------	-------	-------------

Field	Value	Description

Parameter

Field	Value	Description

```
curl -X 'GET' \
  'http://192.168.40.111/api/cube/v2/system/info' \
  -H 'accept: application/json'
```

Response

Example:

```
{
  "result": "ok",
  "msg": {
    "system_start_time": "2023-10-09T09:35:32.720201",
    "system_running_time": 7681.362058,
    "cpu_temp": {
      "c": 38,
      "f": 100
    },
    "cpu": 21,
    "cpu_record": [23, 22, 22, 22, 21, 21, 21, 21, 21, 21, 21, 21, 21, 22,
22, 21, 21, 21, 23, 23, 23, 22, 22, 22, 23, 23, 23, 21, 21, 21, 22, 22, 22, 21,
21, 21, 23, 23, 23, 21, 21, 21, 21, 21, 21, 22, 22, 22, 22, 22, 22, 23,
23, 23, 22, 22, 21],
    "mem_record": [21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21,
21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21,
21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21,
21, 21, 21, 21, 21],
    "mem": 21,
    "net_card": {
      "eth0": {
        "ip": "192.168.40.111",
        "bytes_sent": 171498,
        "bytes_recv": 32611131,
        "bytes_sent_total": 526743523,
        "bytes_recv_total": 87709316169,
        "is_up": true,
        "speed": 1000,
        "type": "Ethernet",
        "bytes_send_record": [185694, 175218, 171924, 176468, 176574,
171048, 178348, 170688, 173954, 181606, 179742, 174558, 170296, 175828, 179124,
182718, 168588, 175998, 179142, 150006, 195276, 174666, 173420, 170172, 181632,
183930, 182960, 177433, 178926, 178152, 179604, 176232, 179566, 178832, 178132,
177114, 174840, 173418, 182460, 177034, 182622, 177432, 171368, 174966, 176348,
183408, 176670, 181978, 177006, 175150, 180444, 176570, 179310, 178948, 178098,
178860, 175653, 175323, 176928, 171498],
```

```
    "bytes_rcv_record": [33962457, 33031270, 32358151, 33014352,
32824938, 32749709, 33341895, 32397510, 33171741, 33752934, 33777461, 32979248,
32334611, 32790933, 32889211, 33851332, 32541617, 33064417, 33654393, 29557420,
35787215, 32604653, 32777140, 33017749, 33629220, 33982484, 33553707, 33196962,
32851090, 32880521, 32605527, 32821459, 32752979, 33748764, 33737784, 33290120,
32499500, 32598664, 32949212, 33262598, 33759403, 33383247, 32621725, 32475710,
32827231, 32748141, 33103424, 33529970, 32839732, 32757745, 32711855, 33195314,
32789015, 32864886, 32960099, 33001856, 32615503, 32858111, 33172228, 32611131]
  },
  "enp1s0f0": {
    "ip": "",
    "bytes_sent": 0,
    "bytes_rcv": 0,
    "bytes_sent_total": 0,
    "bytes_rcv_total": 0,
    "is_up": false,
    "speed": 0,
    "type": "Fiber",
    "bytes_send_record": [0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0],
    "bytes_rcv_record": [0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0]
  },
  "enp1s0f1": {
    "ip": "",
    "bytes_sent": 0,
    "bytes_rcv": 0,
    "bytes_sent_total": 0,
    "bytes_rcv_total": 0,
    "is_up": false,
    "speed": 0,
    "type": "Fiber",
    "bytes_send_record": [0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0],
    "bytes_rcv_record": [0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0]
  }
},
  "sys_rcv_total_record": [33962457, 33031270, 32358151, 33014352,
32824938, 32749709, 33341895, 32397510, 33171741, 33752934, 33777461, 32979248,
32334611, 32790933, 32889211, 33851332, 32541617, 33064417, 33654393, 29557420,
35787215, 32604653, 32777140, 33017749, 33629220, 33982484, 33553707, 33196962,
32851090, 32880521, 32605527, 32821459, 32752979, 33748764, 33737784, 33290120,
32499500, 32598664, 32949212, 33262598, 33759403, 33383247, 32621725, 32475710,
32827231, 32748141, 33103424, 33529970, 32839732, 32757745, 32711855, 33195314,
32789015, 32864886, 32960099, 33001856, 32615503, 32858111, 33172228, 32611131],
```



```

    "sys_sent_total_record": [185694, 175218, 171924, 176468, 176574, 171048,
178348, 170688, 173954, 181606, 179742, 174558, 170296, 175828, 179124, 182718,
168588, 175998, 179142, 150006, 195276, 174666, 173420, 170172, 181632, 183930,
182960, 177433, 178926, 178152, 179604, 176232, 179566, 178832, 178132, 177114,
174840, 173418, 182460, 177034, 182622, 177432, 171368, 174966, 176348, 183408,
176670, 181978, 177006, 175150, 180444, 176570, 179310, 178948, 178098, 178860,
175653, 175323, 176928, 171498],
    "input_src_num": 16,
    "output_num": 32,
    "abnormal_input_src_num": 4,
    "abnormal_output_num": 8
  }
}

```

Field	Value	Description
system_start_time	[STRING]	System start time
system_running_time	[DOUBLE]	System running time
cpu_temp	[DICT]	CPU temperature
cpu	[INT, NULL]	CPU utilization rate
mem	[INT, NULL]	Memory utilization rate
cpu_record	[LIST[INT]]	CPU utilization rate record (60s)
mem_record	[LIST[INT]]	Memory utilization rate record (60s)
net_card	[DICT]	Network card information
sys_recv_total_record	[LIST[INT]]	System total upstream traffic record (60s)
sys_sent_total_record	[LIST[INT]]	System total downstream traffic record (60s)
input_src_num	[INT]	Number of input sources
output_num	[INT]	Number of outputs
abnormal_input_src_num	[INT]	Number of abnormal input sources
abnormal_output_num	[INT]	Number of abnormal outputs

Details of cpu_temp:

Field	Value	Description
c	[INT]	Degrees Celsius
f	[INT]	Degrees Fahrenheit

Details of net_card:

Field	Value	Description
-------	-------	-------------

Field	Value	Description
ip	[STRING]	IP address
bytes_recv	[INT]	Real-time upstream traffic
bytes_sent	[INT]	Real-time downstream traffic
bytes_recv_total	[INT]	Cumulative upstream traffic
bytes_sent_total	[INT]	Cumulative downstream traffic
is_up	[BOOL]	Whether the network interface is connected
speed	[INT]	Connection speed of the network interface, in Mbps
type	[STRING]	"Ethernet" or "Fiber"
bytes_recv_record	[LIST[INT]]	Upstream traffic record (60s)
bytes_send_record	[LIST[INT]]	Downstream traffic record (60s)

2.2 Get HTTP Port

API URL

```
/api/cube/v2/system/http/get
```

Request

```
Method: GET
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description

```
curl -X 'GET' \  
  'http://192.168.40.111/api/cube/v2/system/http/get' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImwibmFtZSI6ImNoZW5xIiwic2NyZWVudjpwYXZzZW50Y3JlYXR1X3RpbWUiOiIyMDIzLTUwLTA5IDEzOjE5OjUwLjU0Nm0MCI6ImV4cCI6MTY5Njg5OTA5MH0.eAKiAGS9ohSte5LoYMPUYfQSnGmz4edQ1x-JVsDEpQ'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": {  
    "http_port": 80,  
    "https_port": 443  
  }  
}
```

Field	Value	Description
http_port	[INT]	HTTP port
https_port	[INT]	HTTPS port

2.3 Set HTTP Port

API URL

```
/api/cube/v2/system/http/set
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
-------	-------	-------------

Field	Value	Description
enable_http	[BOOL], Required	Whether to enable HTTP port
enable_https	[BOOL], Required	Whether to enable HTTPS port
http_port	[INT], Required	HTTP port
https_port	[INT], Required	HTTPS port

```
curl -X 'POST' \
  'http://192.168.40.111/api/cube/v2/system/http/set' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImwibmFtZSI6ImNoZW5xIiwic2NyZWVudjpwYXZzZWwiY3JlYXRlX3RpbWUiaWYMDIzLTEwLTA5IDEzOjE5OjUwLjU0NjMOMCI6ImV4CCI6MTY5NjgyOTA5MH0.eAKiaGS9ohSte5LoYMPUYfqQSnGmz4edQ1x-JVsDEpQ' \
  -H 'Content-Type: application/json' \
  -d '{
  "enable_http": true,
  "enable_https": true,
  "http_port": 80,
  "https_port": 443
}'
```

Response

Example:

```
{
  "result": "ok",
  "msg": ""
}
```

3 Log Management

3.1 Get Operation Log

API URL

```
/api/cube/v2/log/operate/record
```

Request

```
Method: GET
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English

Field	Value	Description
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
page_index	[INT], Required	Page number
page_size	[INT], Required	Page size
filter	[STRING, NULL], Optional	Filter condition, can be NULL [Optional]

```
curl -X 'GET' \
  'http://192.168.40.114/api/cube/v2/log/operate/record?
page_index=1&page_size=10&filter=admin' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzSWiY3JlYXRlX3RpbWUiaWoiIyMDI0LTA3LTI2IDE3OjMwOjE1LjY0NTI1NiIsImV4cCI6MTcyMTk4NjUxNX0.orcOpCn1IW-kFkS5YD7w7ODXNmQQkmf__FmjiytKwvI'
```

Response

Example:

```
{
  "result": "ok",
  "msg": {
    "total_num": 8,
    "records": [
      {
        "name": "admin",
        "content_cn": "User login",
        "content_en": "User login",
        "result": true,
        "create_time": "2023-02-20T16:13:27.166071"
      },
      {
        "name": "admin",
        "content_cn": "User login",
        "content_en": "User login",
        "result": true,
        "create_time": "2023-02-20T16:04:33.551817"
      }
    ]
  }
}
```

Field	Value	Description
-------	-------	-------------

Field	Value	Description
total_num	[INR]	Total number of operation records
records	[LIST]	Record list

Details of records:

Field	Value	Description
name	[STRING]	User name
content_cn	[STRING]	Operation content: Chinese
content_en	[STRING]	Operation content: English
result	[BOOL]	Operation result true: operation successful, false: operation failed
create_time	[STRING]	Creation time

3.2 Download Operation Log

API URL

```
/api/cube/v2/log/operate/download
```

Request

Method: GET

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
filter	[STRING, NULL], Optional	Filter condition, can be NULL [Optional]

```
curl -X 'GET' \  
  'http://192.168.40.114/api/cube/v2/log/operate/download?filter=admin' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1Iiwic2NyZWVudjpwYXZzSwiY3JlYXR1X3RpbWUiOiIyMDI0LTA3LTI2IDE3OjMwOjE1LjY0NTI1NiIsImV4cCI6MTcyMTk4NjUxNX0.orcOpCn1IW-kFks5YD7w70DXNmQQmf__FmjiytKwvI'
```

Response

Example:

```
LOG20231009.txt
```

3.3 Download Log File

API URL

```
/api/cube/v2/log/download
```

Request

```
Method: GET
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description

```
curl -X 'GET' \  
  'http://192.168.40.114/api/cube/v2/log/download' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1Iiwic2NyZWVudjpwYXZzSwiY3JlYXR1X3RpbWUiOiIyMDI0LTA3LTI2IDE3OjM0OjAzLjk4ODc0NiIsImV4cCI6MTcyMTk4NjUxNX0.u0WE0V14kv3zc17Q96So95YJxybPbY0Jr0N4sr1x39Q'
```

Response

Example:

```
allcubexLog.tar.gz
```

4 Service Management

4.1 Restart Service

API URL

```
/api/cube/v2/server/reboot
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description

```
curl -X 'POST' \  
  'http://192.168.40.111/api/cube/v2/server/reboot' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImwibmFtZSI6ImNoZW5xIiwic2NyZWVudjpmYXZzSwiY3JlYXRlX3RpbWUiOiIyMDIzLTUwLTUwIiwiaWF0IjoiMjAxMzA5MDUuMjQ1u1W6ZKTYDn0_EAH6s' \  
  -d ''
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": null  
}
```



```
]
}
```

Field	Value	Description
id	[INT]	Input source ID
name	[STRING]	Name
alias	[STRING]	Alias
c_name	[STRING]	Channel name
g_name	[STRING]	Group name
d_ip	[STRING]	Device IP
d_port	[INT]	Device port
dis_method	[INT]	Discovery method (0: Manual discovery, 1: Automatic discovery, 2: Server discovery)
label_id	[INT]	Input label ID
available	[BOOL]	true: available, false: unstable
conn_type	[INT]	Connection method 0: Unicast 1: Unicast, Multicast

5.2 Add Manual Discovery

API URL

```
/api/cube/v2/resource/input/manual/add
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
manuals	[LIST], Required	Manual discovery list

Details of manuals:

Field	Value	Description
dis_g_name	[STRING], Required	Discovery group name
dis_d_ip	[STRING], Required	Discovery device IP

```
curl -X 'POST' \  
  'http://192.168.40.114/api/cube/v2/resource/input/manual/add' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwibmFtZSI6ImFkbWl1Iiwic2NyZWVudjpmYXZzZSwiY3JlYXR1X3RpbWUiOiIyMDI0LTA3LTI2IDE4OjI3OjI3LjU5MzU5MSIsImV4cCI6MTcyMTk4OTk0N30.EsOihNZ6dm_8ikfGpsdGNfm7cfEHPnc9Nn8ljWP2zdQ' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "manuals": [  
      {  
        "dis_g_name": "public",  
        "dis_d_ip": "192.168.35.19"  
      }  
    ]  
  }'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": ""  
}
```

5.3 Add Automatic Discovery

API URL

```
/api/cube/v2/resource/input/auto/add
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English

Field	Value	Description
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
dis_g_name	[STRING], Required	Discovery group name

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/resource/input/auto/add' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwiImFkbWw1uIiwic2NyZWVudjpmYXxzZSwiY3JlYXRlX3RpbWUiaWYMDI0LTA3LTI2IDE4OjI3OjI3LjU5MzU5MSIsImV4cCI6MTcyMTk4OTk0N30.EsOihNZ6dm_8ikfGpsdGNfm7cfEHPnc9Nn8ljWP2zdQ' \
  -H 'Content-Type: application/json' \
  -d '{
  "dis_g_name": "test"
}'
```

Response

Example:

```
{
  "result": "ok",
  "msg": ""
}
```

5.4 Add Discovery Server

API URL

```
/api/cube/v2/resource/input/server/add
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
dis_g_name	[STRING], Required	Discovery group name
dis_s_ip	[STRING], Required	Discovery server IP

```
curl -X 'POST' \  
  'http://192.168.40.114/api/cube/v2/resource/input/server/add' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwiYmFtZSI6ImFkbWw1Iiwic2NyZWVudjpmYXxzZSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI2IDE4OjI3OjI3LjU5MzU5MSIsImV4cCI6MTcyMTk4OTk0N30.EsoihNZ6dm_8ikfGpsdGNfm7cfEHPnc9Nn81jWP2zdQ' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "dis_g_name": "public",  
    "dis_s_ip": "192.168.36.80"  
  }'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": ""  
}
```

5.5 Delete Input Source Discovery Method

API URL

```
/api/cube/v2/resource/input/discovery/del
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
-------	-------	-------------

Field	Value	Description
dis_id	[INT], Required	Input source discovery ID

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/resource/input/discovery/delete' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwibmFtZSI6ImFkbW1uIiwic2NyZWVudjpmYXxzZSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI2IDE0OjI3OjI3LjU5MzU5MSIsImV4cCI6MTcyMTk4OTk0N30.Es0ihNZ6dm_8ikfGpsdGNfm7cfEHPnc9Nn81jWP2zdQ' \
  -H 'Content-Type: application/json' \
  -d '{
    "dis_id": 1
  }'
```

Response

Example:

```
{
  "result": "ok",
  "msg": ""
}
```

5.6 Query Discovery Methods (Manual Discovery, Automatic Discovery, Discovery Server)

Description: Query all discovery methods, including manual discovery, automatic discovery, and discovery server.

API URL

```
/api/cube/v2/resource/input/discovery/all
```

Request

```
Method: GET
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description

```
curl -X 'GET' \
'http://192.168.40.114/api/cube/v2/resource/input/discovery/all' \
-H 'accept: application/json' \
-H 'language: cn' \
-H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwibmFtZSI6ImFkbWl1Iiwic2NyZWVudjpwYXxzZSwiY3JlYXRlX3RpbWUiaWYMDI0LTA3LTI2IDE0jI3OjI3LjU5MzU5MSIsImV4cCI6MTcyMTk4OTk0N30.EsoihNZ6dm_8ikFgPsdGNfm7cfEHPnc9Nn8ljWP2zdQ
```

Response

Example:

```
{
  "result": "ok",
  "msg": {
    "manual": [
      {
        "id": 2,
        "dis_method": 0,
        "dis_g_name": "public",
        "dis_d_ip": "192.168.35.19",
        "dis_s_ip": ""
      }
    ],
    "auto_server": [
      {
        "id": 1,
        "dis_method": 1,
        "dis_g_name": "public",
        "dis_d_ip": "",
        "dis_s_ip": ""
      },
      {
        "id": 3,
        "dis_method": 1,
        "dis_g_name": "test",
        "dis_d_ip": null,
        "dis_s_ip": ""
      },
      {
        "id": 4,
        "dis_method": 2,
        "dis_g_name": "public",
        "dis_d_ip": null,
        "dis_s_ip": "192.168.36.80"
      }
    ]
  }
}
```


Field	Value	Description
manual	[LIST]	Manual discovery methods
auto_server	[LIST]	Automatic discovery methods (automatic discovery through groups, automatic discovery through servers)

Details of manual and auto_server:

Field	Value	Description
id	[INT]	Input source discovery method ID
dis_method	[INT]	Discovery method (0: Manual discovery, 1: Automatic discovery, 2: Server discovery)
dis_g_name	[STRING]	Discovery group name
dis_d_ip	[STRING, NULL]	Discovery device IP
dis_s_ip	[STRING, NULL]	Discovery server IP

5.7 Manual Discovery of Input Sources

API URL

```
/api/cube/v2/resource/input/manual/discovery
```

Request

```
Method: GET
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description

Field	Value	Description
g_name	[STRING]	Group name
d_ip	[STRING]	Device IP
d_port	[INT]	Device port
url	[STRING]	Source URL
available	[BOOL]	true: available, false: unstable
dis_method	[INT]	Discovery method (0: Manual discovery, 1: Automatic discovery, 2: Server discovery)
dis_g_name	[STRING]	Discovery group name
dis_d_ip	[STRING, NULL]	Discovery device IP
dis_s_ip	[STRING, NULL]	Discovery server IP

5.8 Automatic Discovery of Input Sources

API URL

```
/api/cube/v2/resource/input/auto/discovery
```

Request

```
Method: GET
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
dis_g_name	[STRING], Required	Discovery group name

```
curl -X 'GET' \  
  'http://192.168.40.114/api/cube/v2/resource/input/auto/discovery?  
dis_g_name=public' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwibmFtZSI6ImFkbWl1Iiwic2NyZWVudjpwYXZzSwiY3JlYXRlX3RpbWUioiIyMDI0LTA3LTI5IDA5OjM5OjU2LjY5NDc0O0IsImV4cCI6MTcyMjI  
xNzQ5Nn0.m03Qeins4CaSasDMBaFTV2HK8pHS3QZr5CTtNg0jq5U'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": [  
    {  
      "name": "DESKTOP-D6EGTFP (obs-ndi Preview Mix)",  
      "alias": "DESKTOP-D6EGTFP (obs-ndi Preview Mix)",  
      "c_name": "obs-ndi Preview Mix",  
      "g_name": "public",  
      "d_ip": "192.168.40.148",  
      "d_port": 5962,  
      "url": "192.168.40.148:5962",  
      "available": true,  
      "dis_method": 1,  
      "dis_g_name": "public",  
      "dis_d_ip": null,  
      "dis_s_ip": null  
    },  
    {  
      "name": "DESKTOP-D6EGTFP (obs-ndi Program Mix)",  
      "alias": "DESKTOP-D6EGTFP (obs-ndi Program Mix)",  
      "c_name": "obs-ndi Program Mix",  
      "g_name": "public",  
      "d_ip": "192.168.40.148",  
      "d_port": 5961,  
      "url": "192.168.40.148:5961",  
      "available": true,  
      "dis_method": 1,  
      "dis_g_name": "public",  
      "dis_d_ip": null,  
      "dis_s_ip": null  
    },  
    {  
      "name": "DESKTOP-VV0505H (VLC)",  
      "alias": "DESKTOP-VV0505H (VLC)",  
      "c_name": "VLC",  
      "g_name": "public",  
      "d_ip": "192.168.40.5",  
      "d_port": 5961,  
      "url": "192.168.40.5:5961",  
      "available": true,  
      "dis_method": 1,  
      "dis_g_name": "public",  
      "dis_d_ip": null,  
      "dis_s_ip": null  
    }  
  ]  
}
```

```
"dis_g_name": "public",
"dis_d_ip": null,
"dis_s_ip": null
},
{
  "name": "GCAOONG (VLC)",
  "alias": "GCAOONG (VLC)",
  "c_name": "VLC",
  "g_name": "public",
  "d_ip": "192.168.40.116",
  "d_port": 5961,
  "url": "192.168.40.116:5961",
  "available": true,
  "dis_method": 1,
  "dis_g_name": "public",
  "dis_d_ip": null,
  "dis_s_ip": null
},
{
  "name": "N60-123456751 (Chan1)",
  "alias": "N60-123456751 (Chan1)",
  "c_name": "Chan1",
  "g_name": "public",
  "d_ip": "192.168.40.38",
  "d_port": 5962,
  "url": "192.168.40.38:5962",
  "available": true,
  "dis_method": 1,
  "dis_g_name": "public",
  "dis_d_ip": null,
  "dis_s_ip": null
},
{
  "name": "N60-123456751 (FULL)",
  "alias": "N60-123456751 (FULL)",
  "c_name": "FULL",
  "g_name": "public",
  "d_ip": "192.168.40.38",
  "d_port": 5961,
  "url": "192.168.40.38:5961",
  "available": true,
  "dis_method": 1,
  "dis_g_name": "public",
  "dis_d_ip": null,
  "dis_s_ip": null
},
{
  "name": "NDICORE-MAX (dst-OnlyTest-Output1)",
  "alias": "NDICORE-MAX (dst-OnlyTest-Output1)",
  "c_name": "dst-OnlyTest-Output1",
  "g_name": "public",
  "d_ip": "192.168.40.19",
  "d_port": 5961,
  "url": "192.168.40.19:5961",
  "available": true,
```

```

    "dis_method": 1,
    "dis_g_name": "public",
    "dis_d_ip": null,
    "dis_s_ip": null
  }
]
}

```

Field	Value	Description
name	[STRING]	Source name
alias	[STRING]	Alias
c_name	[STRING]	Channel name
g_name	[STRING]	Group name
d_ip	[STRING]	Device IP
d_port	[INT]	Device port
url	[STRING]	Source URL
available	[BOOL]	true: available, false: unstable
dis_method	[INT]	Discovery method (0: Manual discovery, 1: Automatic discovery, 2: Server discovery)
dis_g_name	[STRING]	Discovery group name
dis_d_ip	[STRING, NULL]	Discovery device IP
dis_s_ip	[STRING, NULL]	Discovery server IP

5.9 Discovery of Input Sources by Discovery Server

API URL

```
/api/cube/v2/resource/input/server/discovery
```

Request

```
Method: GET
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
dis_g_name	[STRING], Required	Discovery group name
dis_s_ip	[STRING], Required	Discovery device IP

```
curl -X 'GET' \  
  'http://192.168.40.114/api/cube/v2/resource/input/server/discovery?  
dis_g_name=public&dis_s_ip=192.168.40.11' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzSwiY3JlYXRlX3RpbWUoIyYMDIOLTA3LTI5IDA5OjM5OjU2LjY5NDc0OCIsImV4cCI6MTcyMjI  
xNzQ5Nn0.m03Qeins4CaSasDMBaFTV2HK8pHS3QZr5CTtNg0jq5U'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": [  
    {  
      "name": "CUBEX1 (dst-Output114444)",  
      "alias": "CUBEX1 (dst-Output114444)",  
      "c_name": "dst-Output114444",  
      "g_name": "public",  
      "d_ip": "192.168.40.7",  
      "d_port": 5961,  
      "url": "192.168.40.7:5961",  
      "available": true,  
      "dis_method": 2,  
      "dis_g_name": "public",  
      "dis_d_ip": null,  
      "dis_s_ip": "192.168.40.7"  
    },  
    {  
      "name": "CUBEX1 (dst-Output114445)",  
      "alias": "CUBEX1 (dst-Output114445)",  
      "c_name": "dst-Output114445",  
      "g_name": "public",  
      "d_ip": "192.168.40.7",  
      "d_port": 5962,  
      "url": "192.168.40.7:5962",  
      "available": true,  
      "dis_method": 2,  
      "dis_g_name": "public",  
      "dis_d_ip": null,  
      "dis_s_ip": "192.168.40.7"  
    }  
  ]  
}
```

```
}
```

Field	Value	Description
name	[STRING]	Source name
alias	[STRING]	Alias
c_name	[STRING]	Channel name
g_name	[STRING]	Group name
d_ip	[STRING]	Device IP
d_port	[INT]	Device port
url	[STRING]	Source URL
available	[BOOL]	true: available, false: unstable
dis_method	[INT]	Discovery method (0: Manual discovery, 1: Automatic discovery, 2: Server discovery)
dis_g_name	[STRING]	Discovery group name
dis_d_ip	[STRING, NULL]	Discovery device IP
dis_s_ip	[STRING, NULL]	Discovery server IP

5.10 Add Rotation List

API URL

```
/api/cube/v2/resource/rotation-list/add
```

Request

Method: POST

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
-------	-------	-------------

Field	Value	Description
name	[STRING], Required	Rotation list name
rotation_srcs	[LIST], Required	Input source list

Details of rotation_srcs:

Field	Value	Description
input_id	[INT], Required	Input source ID
play_duration	[INT], Required	Play duration in seconds

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/resource/rotation-list/add' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDUwOjE5OjE1LjYzMjIyOSIsImV4cCI6MTcyMjIyOTg1NX0.u6q1l0wQbWDFowtrDSOXRbgiIeqGe-gdBD1Bf4-ts88' \
  -H 'Content-Type: application/json' \
  -d '{
  "name": "aaa",
  "rotation_srcs": [
    {
      "input_id": 1,
      "play_duration": 10
    },
    {
      "input_id": 2,
      "play_duration": 10
    }
  ]
}'
```

Response

Example:

```
{
  "result": "ok",
  "msg": ""
}
```

5.11 Delete Rotation List

API URL

```
/api/cube/v2/resource/rotation-list/de1
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Rotation list ID

```
curl -X 'POST' \  
  'http://192.168.40.114/api/cube/v2/resource/rotation-list/de1' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImSwibmFtZSI6ImFkbWl1Iiwic2NyZWVudjpmYXxzZSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDEwOjE1LjYzMjIyOSIsImV4cCI6MTcyMjIyOTg1NX0.u6q1l0wQbwDFowtrDSOXRbgiIeqGe-gdBD1Bf4-ts88' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "id": 1  
  }'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": ""  
}
```

5.12 Modify Rotation List

Description: Modify the name and rotation sources of the rotation list.

API URL

```
/api/cube/v2/resource/rotation-list/modify
```

Request

Method: POST

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Rotation list ID
name	[STRING], Required	Rotation list name
rotation_srcs	[LIST], Required	Input source list

Details of rotation_srcs:

Field	Value	Description
id	[INT, NULL], Optional	Rotation source ID [Optional]
input_id	[INT], Required	Input source ID
play_duration	[INT], Required	Play duration in seconds

Note:

- For newly added rotation sources, the id is null.

```
curl -x 'POST' \
  'http://192.168.40.114/api/cube/v2/resource/rotation-list/modify' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1IiwiaWF0IjoiYyM5ZDQ0LTA3LTI5IDEwOjE5OjE1LjYzMjIyOSIsImV4cCI6MTcyMjIyOjE1LjYzMjIyOSIu6q1l0wQbWDFowtrDSOXRbGieqGe-gdBD1Bf4-ts88' \
  -H 'Content-Type: application/json' \
  -d '{
```

```
"id": 1,
"name": "aaa",
"rotation_srcs": [
  {
    "input_id": 1,
    "play_duration": 10
  },
  {
    "id": 1,
    "input_id": 1,
    "play_duration": 10
  }
]
```

Response

Example:

```
{
  "result": "ok",
  "msg": ""
}
```

5.13 Get Rotation List List

Description: Get all rotation list information.

API URL

```
/api/cube/v2/resource/rotation-list/all
```

Request

Method: GET

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description

Field	Value	Description
id	[INT]	Rotation list ID
name	[STRING]	Rotation list name
rotation_srcs	[LIST]	Input source list

Details of rotation_srcs:

Field	Value	Description
id	[INT]	Rotation source ID
input_id	[INT]	Input source ID
input_name	[STRING]	Input source name
input_alias	[STRING]	Input source alias
input_c_name	[STRING]	Input source channel name
play_duration	[INT]	Play duration in seconds

5.15 Query Whether Rotation List is in Use

API URL

```
/api/cube/v2/resource/rotation-list/status
```

Request

Method: GET

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Rotation list ID

```
curl -X 'GET' \
  'http://192.168.40.114/api/cube/v2/resource/rotation-list/status?id=1' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpmYXZzSwiY3JlYXR1X3RpbWUiOiIyMDI0LTA3LTI1IDUwOjMyOjQwLjEwMDUwOCIsImV4cCI6MTcyMjIyMDY2MH0.rtv4mp5PhpCOP2XFMUMHIAWSoyVEG_I4a2YH7equmYI'
```

Response

Example:

```
{
  "result": "ok",
  "msg": {
    "status": true
  }
}
```

Field	Value	Description
status	[BOOL]	Whether the rotation list is in use

6 Panel Management

6.1 Query All Panels

API URL

```
/api/cube/v2/panel/all
```

Request

Method: GET

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description


```
curl -X 'GET' \
  'http://192.168.40.114/api/cube/v2/panel/all' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImSwibmFtZSI6ImFkbWl1Iiwic2NyZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDEwOjM5OjQzLjEwNjg0MiIsImV4cCI6MTcyMjIyMTA4M30.MQudP_7ZGrk8Ef8ru9mM402Dn3vzrLsIm4EcnPPq_s'
```

Response

Example:

```
{
  "result": "ok",
  "msg": {
    "num": 2,
    "panels": [
      {
        "id": 1,
        "name": "aaaa",
        "input_n": 2,
        "output_n": 5,
        "icon": 0,
        "enable": true
      },
      {
        "id": 2,
        "name": "bbbb",
        "input_n": 2,
        "output_n": 0,
        "icon": 0,
        "enable": true
      }
    ]
  }
}
```

Field	Value	Description
num	[INT]	Number of panels
panels	[LIST]	Panel list

Detailed description of panels:

Field	Value	Description
id	[INT]	Panel ID
name	[STRING]	Panel name
input_n	[INT]	Number of inputs in the panel


```
"id": 1,
"name": "aaaa",
"audio_status": false,
"other_inputs": [
  {
    "id": 2,
    "name": "CUBEX1 (dst-Output1)",
    "alias": "CUBEX1 (dst-Output1)",
    "c_name": "dst-Output1",
    "g_name": "public",
    "d_ip": "192.168.40.153",
    "d_port": 5961,
    "url": "192.168.40.153:5961",
    "available": false,
    "dis_method": 1,
    "dis_g_name": "public",
    "dis_d_ip": null,
    "dis_s_ip": null,
    "conn_type": 0,
    "label_id": null,
    "resolution": "1920x1080@50HZ",
    "v_b": 0,
    "a_b": 0
  }
],
"panel_inputs": [
  {
    "id": 1,
    "name": "CUBEX1 (dst-1211Output1)",
    "alias": "CUBEX1 (dst-1211Output1)",
    "c_name": "dst-1211Output1",
    "g_name": "public",
    "d_ip": "192.168.40.205",
    "d_port": 5961,
    "url": "192.168.40.205:5961",
    "available": false,
    "dis_method": 1,
    "dis_g_name": "public",
    "dis_d_ip": null,
    "dis_s_ip": null,
    "conn_type": 0,
    "label_id": null,
    "resolution": "0x0@0HZ",
    "v_b": 0,
    "a_b": 0
  }
],
"panel_outputs": [
  {
    "id": 1,
    "name": "Output1",
    "alias": "Output1",
    "c_name": "Output1",
    "g_name": "public",
    "smooth": 0,
```

```
"router": false,
"dis_s_ip": "",
"conn_type": 0,
"mult_add": null,
"mult_mask": null,
"ttl_time": null,
"codec_k": 0,
"lock": false,
"collect": false,
"input_id": 2,
"r_id": null,
"r_loop": null,
"cri_id": null,
"cri_index": null,
"cr_progress": null,
"label_id": 1,
"link_num": 2,
"resolution": "1920x1080@50HZ",
"v_b": 0,
"a_b": 0
},
{
  "id": 2,
  "name": "Output2",
  "alias": "Output2",
  "c_name": "Output2",
  "g_name": "public",
  "smooth": 0,
  "router": false,
  "dis_s_ip": "",
  "conn_type": 0,
  "mult_add": null,
  "mult_mask": null,
  "ttl_time": null,
  "codec_k": 0,
  "lock": false,
  "collect": false,
  "input_id": 1,
  "r_id": null,
  "r_loop": null,
  "cri_id": null,
  "cri_index": null,
  "cr_progress": null,
  "label_id": 2,
  "link_num": 0,
  "resolution": "0x0@0HZ",
  "v_b": 0,
  "a_b": 0
}
],
"panel_templates": [
  {
    "id": 1,
    "name": "default",
    "start": false
  }
]
```

```

    },
    {
      "id": 3,
      "name": "1111",
      "start": true
    }
  ],
  "rotation_lists": [
    {
      "id": 1,
      "name": "aaa",
      "rotation_srcs": [
        {
          "id": 1,
          "input_id": 1,
          "input_name": "CUBEX1 (dst-1211Output1)",
          "input_alias": "CUBEX1 (dst-1211Output1)",
          "input_c_name": "dst-1211Output1",
          "play_duration": 10
        },
        {
          "id": 2,
          "input_id": 2,
          "input_name": "CUBEX1 (dst-Output1)",
          "input_alias": "CUBEX1 (dst-Output1)",
          "input_c_name": "dst-Output1",
          "play_duration": 10
        }
      ]
    }
  ],
  "cancel_num": 5
},
"error": null
}

```

Field	Value	Description
id	[INT]	Panel ID
name	[STRING]	Panel name
audio_status	[BOOL]	Audio column status. true: on, false: off. (Deprecated)
other_inputs	[LIST]	Non-panel inputs
panel_inputs	[LIST]	Panel inputs
panel_outputs	[LIST]	Panel outputs
panel_templates	[LIST]	Panel templates
rotation_lists	[LIST]	Rotation lists
cancel_num	[INT]	Number of cancellations

Details of other_inputs:

Field	Value	Description
id	[INT]	Input source ID
name	[STRING]	Name
alias	[STRING, NULL]	Alias
c_name	[STRING]	Channel name
g_name	[STRING]	Group name
d_ip	[STRING]	Device IP
d_port	[INT]	Device port
url	[STRING]	Input source URL
available	[BOOL]	true: available, false: unstable
dis_method	[INT]	Discovery method (0: manual discovery, 1: automatic discovery, 2: server discovery)
dis_g_name	[STRING, NULL]	Discovery group name
dis_d_ip	[STRING, NULL]	Discovery device IP
dis_s_ip	[STRING, NULL]	Discovery server IP
conn_type	[INT]	0: unicast, 1: unicast and multicast
label_id	[INT]	Input source label ID
resolution	[STRING]	Resolution
v_b	[INT]	Video bitrate
a_b	[INT]	Audio bitrate

Details of panel_inputs:

Field	Value	Description
id	[INT]	Input source ID
name	[STRING]	Name
alias	[STRING, NULL]	Alias
c_name	[STRING]	Channel name

Field	Value	Description
g_name	[STRING]	Group name
d_ip	[STRING]	Device IP
d_port	[INT]	Device port
url	[STRING]	Input source URL
available	[BOOL]	true: available, false: unstable
dis_method	[INT]	Discovery method (0: manual discovery, 1: automatic discovery, 2: server discovery)
dis_g_name	[STRING, NULL]	Discovery group name
dis_d_ip	[STRING, NULL]	Discovery device IP
dis_s_ip	[STRING, NULL]	Discovery server IP
conn_type	[INT]	0: unicast, 1: unicast and multicast
label_id	[INT]	Input source label ID
resolution	[STRING]	Resolution
v_b	[INT]	Video bitrate
a_b	[INT]	Audio bitrate

Details of panel_outputs:

Field	Value	Description
id	[INT]	Output ID
name	[STRING, NULL]	Name
alias	[STRING, NULL]	Alias
c_name	[STRING]	Channel name
g_name	[STRING]	Group name
smooth	[INT]	Smoothness in milliseconds (deprecated)
router	[BOOL]	Whether it is routed
dis_s_ip	[STRING]	Discovery server IP
conn_type	[INT]	0: unicast, 1: unicast and multicast

Field	Value	Description
mult_add	[STRING, NULL]	Multicast address
mult_mask	[STRING, NULL]	Multicast mask
tvl_time	[INT, NULL]	TTL time
codec_k	[INT]	0: maintain connection, 1: reset client connection
lock	[BOOL]	Whether to lock the output
collect	[BOOL]	Whether to collect the output
input_id	[INT, NULL]	Input source ID
r_id	[INT, NULL]	Rotation list ID
r_loop	[BOOL, NULL]	Whether the rotation list is looped
cri_id	[INT, NULL]	Input source ID currently playing in the rotation list
cri_index	[INT, NULL]	Sequence number currently playing in the rotation list
cr_progress	[INT, NULL]	Progress of the input source currently playing in the rotation list
label_id	[INT, NULL]	Output label ID
link_num	[INT]	Number of output connections
resolution	[STRING]	Resolution
v_b	[INT]	Video bitrate
a_b	[INT]	Audio bitrate

Details of panel_templates:

Field	Value	Description
id	[INT]	Template ID
name	[STRING]	Name
start	[BOOL]	Whether it is started

Details of rotation_lists:

Field	Value	Description
id	[INT]	Rotation list ID
name	[STRING]	Name

Field	Value	Description
rotation_srcs	[LIST]	Input source list

Details of rotation_srcs in rotation_lists:

Field	Value	Description
id	[INT]	Rotation source ID
input_id	[INT]	Input source ID
input_name	[STRING, NULL]	Input source name
input_alias	[STRING, NULL]	Input source nickname
input_c_name	[STRING, NULL]	Input source channel name
play_duration	[INT]	Play duration of the input source in seconds

6.3 Manage Panel Input Sources

Description: Add, remove, and modify panel input sources.

API URL

```
/api/cube/v2/panel/input/manage
```

Request

Method: POST

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Panel ID
inputs	[LIST], Required	Input source list

Details of inputs:

Field	Value	Description
-------	-------	-------------

Field	Value	Description
id	[INT, NULL], Optional	Input source ID
name	[STRING], Required	Name
alias	[STRING], Required	Alias
c_name	[STRING], Required	Channel name
g_name	[STRING], Required	Group name
d_ip	[STRING], Required	Device IP
d_port	[INT], Required	Device port
url	[STRING], Required	Input source URL
available	[BOOL], Required	Whether it is available
dis_method	[INT], Required	Discovery method (0: manual discovery, 1: automatic discovery, 2: server discovery)
dis_g_name	[STRING], Required	Discovery group name
dis_d_ip	[STRING, NULL], Optional	Discovery device IP
dis_s_ip	[STRING, NULL], Optional	Discovery server IP
label_id	[INT], Required	Input label ID

Note:

- When id is null, it indicates a new input source.
- When discovery_method is 0, the input source is manually discovered. The discovery_dev_ip is not null and the discovery_server_ip is null.
- When discovery_method is 1, the input source is automatically discovered. The discovery_dev_ip is not null and the discovery_server_ip is null.
- When discovery_method is 3, the input source is discovered by the server. The discovery_dev_ip is null and the discovery_server_ip is not null.
- label_id is the actual position of the input source on the small screen (1-16).

```
curl -X 'POST' \
'http://192.168.40.114/api/cube/v2/panel/input/manage' \
```

```
-H 'accept: application/json' \  
-H 'language: cn' \  
-H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwibmFtZSI6ImFkbWl1Iiwic2NyZWVudjpwYXZzZWwiY3JlYXR1X3RpbWUiOiIyMDI0LTA3LTI5IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyNH0.NkCUpEMiIna8QIteQUmFT6ckBddTRlDwsPP1fG89kp8' \  
-H 'Content-Type: application/json' \  
-d '{  
  "id": 1,  
  "inputs": [  
    {  
      "id": 1,  
      "alias": "alias"  
    }  
  ]  
}'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": ""  
}
```

6.4 Manage Panel Outputs

Description: Add, remove, and modify panel outputs.

API URL

```
/api/cube/v2/panel/output/manage
```

Request

Method: POST

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Panel ID

Field	Value	Description
outputs	[LIST], Required	Output list

Details of outputs:

Field	Value	Description
id	[INT, NULL], Optional	Output ID
name	[STRING], Required	Name
alias	[STRING], Required	Alias
c_name	[STRING], Required	Channel name
g_name	[STRING], Required	Group name
smooth	[INT], Required	Smoothness in milliseconds
router	[BOOL], Required	Whether it is routed
dis_s_ip	[STRING], Required	Discovery server IP
lock	[BOOL], Required	Whether to lock the output
collect	[BOOL], Required	Whether to collect the output
label_id	[INT], Required	Output label ID
codec_k	[INT], Required	0: maintain connection, 1: reset client connection

Note:

- When id is null, it indicates a new output.

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/panel/output/manage' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyYnN0LmNkCUpEMiIna8QIteQUmFT6ckBddTRlDwsPP1fG89kp8' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1,
  "outputs": [
    {
      "id": 1,
      "name": "Output1",
      "alias": "Output1",
      "c_name": "Output1",
      "smooth": 100,
      "g_name": "public",
      "router": false,
```

```
"dis_s_ip": "192.168.20.3",
"lock": false,
"collect": false,
"label_id": 1,
"codec_k": 0
}
]
}'
```

Response

Example:

```
{
  "result": "ok",
  "msg": ""
}
```

6.5 Modify Panel Permissions

Description: Modify the operation permissions of users on the panel.

API URL

```
/api/cube/v2/panel/permission/modify
```

Request

Method: POST

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Panel ID
users	[LIST], Required	User information list

Detailed description of users:

Field	Value	Description
id	[INT], Required	Panel ID

Field	Value	Description
view_per	[BOOL], Required	View panel permission
switch_per	[BOOL], Required	Switch panel permission
modify_per	[BOOL], Required	Modify panel permission

Note:

- users are all current users.
- Administrator user: view_per=true, switch_per=true, modify_per=true.

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/panel/permission/modify' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6Im5wIiwiaWF0IjoiYmYwZzZSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDEwOjM5OjQzLjEwNjg0MiIsImV4cCI6MTcyMjIyMTA4M30.MQuDP_7ZGrk8Ef8ru9mM402Dn3vzrLsIm4EcnPPq_s' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1,
  "users": [
    {
      "id": 1,
      "view_per": true,
      "switch_per": true,
      "modify_per": true
    }
  ]
}'
```

Response

Example:

```
{
  "result": "ok",
  "msg": ""
}
```

6.6 Query Panel Permissions

Description: Query the operation permissions of all users on the panel.

API URL

```
/api/cube/v2/panel/permission
```

Request

Method: GET

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Panel ID

```
curl -X 'GET' \  
  'http://192.168.40.114/api/cube/v2/panel/permission?id=1' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwidmFtZSI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiaWYMDI0LTA3LTI5IDExOjE1OjA2LjA0NTcyMCI6ImV4cCI6MTcyMjIyMzIwNn0.6tyNBUYlhXJJgZPMf49iIKtFRPWjwrhn8zaeoH71jtA
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": [  
    {  
      "id": 1,  
      "name": "admin",  
      "alias": "admin",  
      "role": 0,  
      "view_per": true,  
      "switch_per": true,  
      "modify_per": true  
    },  
    {  
      "id": 2,  
      "name": "a",  
      "alias": "a",  
      "role": 2,  
      "view_per": false,  
      "switch_per": false,  
      "modify_per": false  
    }  
  ]  
}
```

Field	Value	Description
id	[INT]	User ID
name	[STRING]	Name
alias	[STRING]	Alias
role	[INT]	User role. 0: admin administrator, 1: administrator, 2: ordinary user
view_per	[BOOL]	View panel permission
switch_per	[BOOL]	Switch panel permission
modify_per	[BOOL]	Modify panel permission

6.7 Set the Input Source for Output in Panel

Description: Set the connection between input and output in the panel.

API URL

```
/api/cube/v2/panel/output/input
```

Request

Method: POST

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Panel ID
output_id	[INT], Required	Output ID
input_id	[INT, NULL], Optional	Input source ID. When it is NULL, disconnect the output from the input source.

Field	Value	Description
r_id	[INT, NULL], Optional	Rotation list ID. When it is NULL, disconnect the output from the rotation source.
loop	[BOOL, NULL], Optional	Whether the rotation list is looped.

Note:

- When starting the rotation list, r_id is not equal to null and loop is not equal to null.
- When stopping the rotation list, r_id is equal to null and loop is equal to null.

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/panel/output/rotation-list' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImSwibmFtZSI6ImFkbWl1Iiwic2NyZWVudjpmYXZzZW50IiwiaWF0IjoiYmDIOLTA3LTI5IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyNH0.NkCUPEMiIna8QIteQumFT6ckBddTRlDwsPP1fG89kp8' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1,
  "output_id": 1,
  "r_id": 1,
  "loop": true
}'
```

Response

Example:

```
{
  "result": "ok",
  "msg": ""
}
```

6.9 Set Full Selection of Inputs in Panel

Description: Set full selection or deselection of inputs in the panel. If the output has already enabled the rotation list, skip this output.

API URL

```
/api/cube/v2/panel/input/select
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Panel ID
input_id	[INT], Required	Input source ID
select	[BOOL], Required	Whether it is full selection. true: full selection, false: deselect.

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/panel/input/select' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwidmFtZSI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzZSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyNH0.NkCUPeMiIna8QIteQumFT6ckBddTRlDwsPP1fG89kp8' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1,
  "input_id": 1,
  "select": true
}'
```

Response

Example:

```
{
  "result": "ok",
  "msg": ""
}
```

6.10 Set Locking of Output in Panel

Description: Set locking or unlocking of the output in the panel.

API URL

```
/api/cube/v2/panel/output/lock
```

Request

Request

Method: POST

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Panel ID
output_id	[INT], Required	Output ID
collect	[BOOL], Required	Whether to collect the output. true: collect, false: uncollect.

```
curl -x 'POST' \  
  'http://192.168.36.165/api/cube/v2/panel/output/collect' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "id": 1,  
    "output_id": 1,  
    "collect": true  
  }'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": ""  
}
```

6.12 Set Rotation List Looping for Output in Panel

API URL

/api/cube/v2/panel/output/rotation-list/loop

Request

Method: POST

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Panel ID
output_id	[INT], Required	Output ID
r_id	[INT], Required	Rotation list ID
loop	[BOOL], Required	Whether the rotation list is looped. true: loop, false: unloop.

```
curl -X 'POST' \  
  'http://192.168.40.114/api/cube/v2/panel/output/rotation-list/loop' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpmYXZzZSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI1IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyNH0.NkCUPeMiIna8QIteQumFT6ckBddTRlDwsPP1fG89kp8' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "id": 1,  
    "output_id": 1,  
    "r_id": 1,  
    "loop": true  
  }'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": ""  
}
```

7 Template Management

7.2 Delete Template

API URL

```
/api/cube/v2/template/de1
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Template ID

```
curl -X 'POST' \  
  'http://192.168.40.114/api/cube/v2/template/de1' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyYm90LmNkCUpEMiIna8QIteQumFT6ckBddTRlDwsPP1fG89kp8' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "id": 1  
  }'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": ""  
}
```


7.4 Get Template

API URL

```
/api/cube/v2/template/query
```

Request

```
Method: GET
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Panel ID

```
curl -X 'GET' \
  'http://192.168.40.114/api/cube/v2/template/query?id=1' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwibmFtZSI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDEzOjQ0OjU2LjAyMzYzMyIsImV4cCI6MTcyMjIzZmJlE5Nn0.b4QPooAgxhCd-h8kGZnbZM_CmZIPvkFJysYkr1CY00w'
```

Response

Example:

```
{
  "result": "ok",
  "msg": [
    {
      "id": 1,
      "name": "default",
      "start": false
    },
    {
      "id": 3,
      "name": "1111",
      "start": true
    }
  ]
}
```



```
{
  "result": "ok",
  "msg": ""
}
```

7.8 Undo Operation

API URL

```
/api/cube/v2/template/cancel
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
id	[INT], Required	Panel ID

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/template/cancel' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImSwibmFtZSI6ImFkbWw1uIiwic2NyZWVudjpwYXZzSwiY3JlYXR1X3RpbWUiOiIyMDI0LTA3LTI5IDE5IDR5ZjQ0OjU2LjAyMzYzMyIsImV4cCI6MTcyMjIzZmJlE5Nn0.b4QPooAgxhCd-h8kGZnbZM_CmZIPvkFJysYkr1CY00w' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1
}'
```

Response

Example:

```
{
  "result": "ok",
  "msg": ""
}
```

8 Message Management

8.1 Query the WebRTC SDP of the input source.

API URL

```
/api/cube/CubeServer/ws/querywebrtcSdp
```

Request

```
Method: POST
```

Header

Field	Value	Description
language	[STRING], Required	Language type. "cn": Chinese, "en": English
Authorization	[STRING], Required	Authorization. Format: Bearer + space + token

Parameter

Field	Value	Description
input_src_name_list	[LIST[STRING]], Required	Input source name list
server_ip	[STRING], Required	Server IP address

```
curl -X 'POST' \  
  'http://192.168.36.165/api/cube/CubeServer/ws/querywebrtcSdp' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6NiwiYmFtZSI6ImFkbWw1Iiwic2NyZWVudjpwYXZzZWwiY3JlYXRlX3RpbWUiOiIyMDIzLTEwLTEwIDA5OjUyOjIzLjg3NDI5MyIsImV4cCI6MTY5Njk3MzA0M30uOKTXUt014DbU-aa6KeJQ8ezSw7CmKArNWqXNVbksDzo' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "input_src_name_list": [  
      "N60-ABC (Chan1)"  
    ],  
    "server_ip": "192.168.40.238"  
  }'
```

Response

Example:

```
{
  "result": "ok",
  "msg": [
    {
      "input_src_name": "CUBEX1 (dst-Output114444)",
      "sdp": "v=0\r\no=- 1495799811084970 2 IN IP4 192.168.36.165\r\ns=-\r\nm=0
0\r\na=group:BUNDLE video\r\na=msid-semantic: WMS janus\r\na=ice-lite \r\nm=video
9 UDP/TLS/RTP/SAVPF 126\r\nnc=IN IP4 0.0.0.0\r\na=ice-ufrag:32s3\r\na=ice-
pwd:qc1vhnazk1gs8f54f7mkmo38\r\na=ice-options:trickle\r\na=fingerprint:sha-256
84:50:ED:BC:5C:CB:30:7F:6B:A5:A1:4B:DE:B4:8F:61:C3:BF:E2:B0:84:AF:B7:86:25:60:95
:A8:62:C6:CF:42\r\na=setup:actpass\r\na=mid:video\r\na=sendonly\r\na=rtcp-
mux\r\na=rtpmap:126 H264/90000\r\na=fmtp:126 level-asymmetry-
allowed=1;packetization-mode=1;profile-level-id=42e01f\r\na=candidate:1 1 udp
12345678 192.168.36.165 54128 typ host\r\na=end-of-candidate\r\n"
    }
  ]
}
```

Field	Value	Description
input_src_name	[STRING], Required	Input source name
sdp	[INT], Required	sdp value

9 Websocket Messages

9.1 Subscribe to websocket messages.

WS URL

```
ws://ip/api_event/cube/ws/info
```

Parameter

Field	Value	Description
token	[STRING], Required	token value

```
ws://192.168.40.114/api_event/cube/ws/info?
token=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImSwibmFtZSI6ImFkbWluIiwic2NyZ
WVuIjpmYXZzZWwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDE0OjA3OjAxLjYyNjQzOSIsImV4cCI6Im
TcyMjIzZmZuMX0.5zP5ju-b7xmD7oyXIYZTY5KKJAW5E0dLPKArOfnzEx8
```