

NDI CORE & CORE MAX HTTP API

Instructions

Welcome to Use Kiloview Product

The NDICORE HTTP API is a software development programming interface. The NDICORE HTTP API aims to achieve various functional controls of devices through a simple HTTP request/response mechanism. Software developers can use the NDICORE HTTP API to achieve the purpose of remote management and control of devices.

For each function of the API, there is a corresponding 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 functional 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.

The 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 instructions. The response of the API is in JSON format. For the meaning of each parameter in the JSON object, please refer to the documentation instructions of each API.

We try our best to maintain the consistency of the product API interfaces, but it cannot be ruled out 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.

Instructions for Calling Interfaces

The return format of all interfaces is uniformly:

Normal return

```
{
  "result": "ok",
  "msg": {} // "Data Type such as strings & numbers & arrays & dictionaries,
etc., and this field may not exist."
}
```

Error return

```
{
  "result": "error",
  "error": {
    "code": "10002",
    "info": "Username 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
authorize	Authorization 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

Parameter

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

Example:

```
curl -X 'POST' \  
  'http://192.168.40.111/api/cube/v2/user/logout' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwidmFtZSI6ImFkbWw1uIiwic2NyZWVudjpwYXZzSWiY3JlYXRlX3RpbWUiOiIyMDIzLTUwLTA5IDEwOjQ2OjI0Ljg4OTI2NiIsImV4cCI6MTY5Njg4OTg4NH0.IEpcJ50tBxrpYdyBQzP4rWwo4qKHLHaZ0jx7Wn7vss' \  
  -d ''
```

Response

Example:

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

1.3 Add User

Note: Adding a user requires administrator privileges.

API URL

```
/api/cube/v2/user/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
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.eyJpZCI6ImwiYmFtZSI6ImNoZW5xIiwic2NybWVudjpmYXZzZW50Ij3JlYXRlX3RpbWUiOiIyMDIzLTEwLTA5IDExOjA1OjI1LjgzNzEXNCIsImV4cCI6MTY5Njg5MTAYnX0.30iWafBwYmlTKovKIVn08lTvtHLHcb-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.eyJpZCI6MiwibmFtZSI6ImNoZW5xIiwic2NybWVudjpmYXZzZW50IiwiaWF0Ij0iYMDiZlTEwLTA5IDExOjA1OjI1LjgzNzEXNCIsImV4cCI6MTY5Njg5MTA5NX0.30iWAFBwYmITKovKIVn081TvtHLHcb-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.eyJpZCI6ImwibmFtZSI6ImNoZW5xIiwic2N5ZWVudjpwYXZzSWwiY3JlYXRlX3RpbWUiaWYMDiZlTEwLTA5IDExOjE0OjAzLjE5NjM4NSIsImV4cCI6MTY5Njg5MTU0M30. -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: 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 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.eyJpZCI6ImwibmFtZSI6ImNoZW5xIiwic2N5ZWVudjpwYXZzSwiY3JlYXRlX3RpbWUoIyMDIzLTEwLTA5IDExOjE4OjU2Ljk3OTAyMCI6ImV4cCI6MTY5Njg5MTgzNn0.BYv2-XMYPx25Jk6RuRmsmt8lEspJSGC8GK0uaU7U0i0'
```

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

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 in minutes. 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.eyJpZCI6ImwibmFtZSI6ImNoZW5xIiwic2NyZWVuc2NyaWxzZSwiY3JlYXRlX3RpbWUiOiIyMDIzLTEwLTA5IDExOjM1OjIwLjg0Nzg0SIsImV4cCI6MTY5NjgyMjgyMH0.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

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, 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, 22, 23, 23, 23,
22, 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, 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_recv_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_recv": 0,
        "bytes_sent_total": 0,
        "bytes_recv_total": 0,
        "is_up": false,
        "speed": 0,
        "type": "Fiber",

```


Field	Value	Description
mem	[INT, NULL]	Memory utilization
cpu_record	[LIST[INT]]	CPU utilization record (60s)
mem_record	[LIST[INT]]	Memory utilization record (60s)
net_card	[DICT]	Network card information
sys_recv_total_record	[LIST[INT]]	System total uplink traffic record (60s)
sys_sent_total_record	[LIST[INT]]	System total downlink 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
ip	[STRING]	IP address
bytes_recv	[INT]	Real-time uplink traffic
bytes_sent	[INT]	Real-time downlink traffic
bytes_recv_total	[INT]	Cumulative uplink traffic
bytes_sent_total	[INT]	Cumulative downlink 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]]	Uplink traffic record (60s)
bytes_send_record	[LIST[INT]]	Downlink 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.eyJpZCI6ImwibmFtZSI6ImNoZW5xIiwic2NyZWVudjpp  
mYwzZSwiY3JlYXRlX3RpbWUiOiIyMDIzLTEwLTA5IDEzOjE5OjUwLjU0NmM0MCIsImV4cCI6ImY5Njg  
yOTA5MH0.eAKiags9ohSte5LoYMPUYfqQSnGmz4edQ1x-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.

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

Parameter

Field	Value	Description
page_index	[INT], Required	Page index.
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.eyJpZCI6ImFkbWw1IiwiaWF0IjoiYmV4ZWVudjpmYXZzZW50YXZzY3JlYXRlX3RpbWUiOiYyMDI0LTA3LTI2IDE3OjMwOjE1LjY0NTI1NiIsImV4cCI6MTcyMTk4NjUxNX0.orcOpCn1IW-kFkS5YD7w70DXNmQQkmf__FmjytkwvI'
```

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
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
-------	-------	-------------

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.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpp
mYXNzZSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTUyIDE3OjMwOjE1LjY0NTI1NiIsImV4cCI6MTcyMTk
4NjUxNX0.orcOpCn1IW-kFks5YD7w7ODXNmQQmf__FmjytkwvI'
```

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


```
{
  "result": "ok",
  "msg": {
    "sn": "0000000000000",
    "version": "1.10.0084"
  }
}
```

Field	Value	Description
sn	[STRING]	Serial number.
version	[STRING]	Version number.

5 Resource Management

5.1 Add Input Source

API URL

```
/api/cube/v2/resource/input/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
inputs	[LIST], Required	Input source list.

Detailed description of inputs:

Field	Value	Description
name	[STRING], Required	Name.
alias	[STRING], Required	Alias.


```
1,  
2,  
3  
]  
'}
```

Response

Example:

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

5.3 Modify Input Source

API URL

```
/api/cube/v2/resource/input/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	Input ID.
alias	[STRING], Required	Alias.
conn_type	[INT], Required	Connection type. 0: unicast. 1: unicast and multicast. This version only supports unicast.

Note:

- In this version, conn_type = 0.

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/resource/input/modify' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImiwibmFtZSI6ImEiLCJzY3JlZW4iOiOmZhbHN1LCJjcmVhdGVfdGltZSI6IjIwMjQ1MDctMDctMjYyMTc6NTA6MTIuNTUxNjU0IiwiaXNjaXNzIjoxOTg3NzE5fQ.hij8Suu5V6eOGun1nqy53_x5sPOEdCA9ehwIXmGm6eM' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1,
  "alias": "alias",
  "conn_type": 0
}'
```

Response

Example:

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

5.4 Query All Inputs

API URL

```
/api/cube/v2/resource/input/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/all' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImSwbmFtZSI6ImFkbWl1Iiwic2NyZWVudjpmYXZzZW53Y3JlYXRlX3RpbWUyMDI0MTA3LTl2IDE0OjI3OjI3LjU5MzU5MSIsImV4cCI6MTcyMTk4OTk0N30.EsOihNZ6dm_8iKfGpsdGNfm7cfEHPnc9Nn8ljWP2zdQ'
```

Response

Example:

```
{
  "result": "ok",
  "msg": [
    {
      "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,
      "available": false,
      "label_id": null,
      "conn_type": 0,
      "dis_method": 1
    }
  ]
}
```

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, NULL]	Invalid field.
available	[BOOL]	True: available, false: unstable.


```
}  
]  
'}
```

Response

Example:

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

5.6 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.
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.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzZWwiY3JlYXRlX3RpbWUiaWoiYmDI0LTA3LTI2IDE4OjI3OjI3LjU5MzU5MSIsImV4cCI6MTcyMTk4OTk0N30.EsoihNZ6dm_8iKfGpsdGNfm7cfEHPnc9Nn8ljWP2zdQ' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "dis_g_name": "test"  
  }'
```

Response

Example:

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

5.7 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	Discovered 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.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzSwiY3JlYXRlX3RpbWU0IiwiaWF0IjoiYmDIOLTA3LTI2IDE4OjI3OjI3LjU5MzU5MSIsImV4cCI6IjE2MTcyMTk4OTk0N30.Es0ihNz6dm_8ikFgpsdGNfm7cfeHPnc9Nn81jWP2zdQ' \
  -H 'Content-Type: application/json' \
  -d '{
  "dis_g_name": "public",
  "dis_s_ip": "192.168.36.80"
}'
```

Response


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

5.9 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.eyJpZCI6ImFkbWw1IiwiaWF0IjoiYjIyZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI2IDE0OjI3OjI3LjU5MzU5MSIsImV4cCI6MTcyMTk4OTk0N30.Es0ihNZ6dm_8iKfGpsdGNfm7cfEHPnc9Nn81jWP2zdQ
```

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 and through servers).

Details of manual and auto_server:

Field	Value	Description
id	[INT]	ID of input source discovery method.
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]	Discovered device IP.


```

    "d_ip": "192.168.40.7",
    "d_port": 5970,
    "url": "192.168.40.7:5970",
    "available": true,
    "dis_method": 0,
    "dis_g_name": "public",
    "dis_d_ip": "192.168.40.7",
    "dis_s_ip": null
  },
  {
    "name": "CUBEX1 (dst-ttttOutput4)",
    "alias": "CUBEX1 (dst-ttttOutput4)",
    "c_name": "dst-ttttOutput4",
    "g_name": "*manual*",
    "d_ip": "192.168.40.7",
    "d_port": 5971,
    "url": "192.168.40.7:5971",
    "available": true,
    "dis_method": 0,
    "dis_g_name": "public",
    "dis_d_ip": "192.168.40.7",
    "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]	Discovered device IP.
dis_s_ip	[STRING, NULL]	Discovered server IP.

5.11 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.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzZW50IiwiaWF0IjoiYyMDI0LTA3LTI5IDA5OjM5OjU2LjY5NDc0OClzImV4cCI6MTcyMjI1NzQ5Nn0.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
},
{
  "name": "GCA00NG (VLC)",
  "alias": "GCA00NG (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.

Field	Value	Description
dis_d_ip	[STRING, NULL]	Discovered device IP.
dis_s_ip	[STRING, NULL]	Discovered server IP.

5.12 Input Source Discovery 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	Discovered 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.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpp
mYXZzZW50IiwiaWF0IjoiYm90LTA3LTI5IDA5OjM5OjU2LjY5NDc0OClzImV4cCI6MTcyMjI
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]	Discovered device IP.

Field	Value	Description
dis_s_ip	[STRING, NULL]	Discovered server IP.

5.13 Add Output

API URL

```
/api/cube/v2/resource/output/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
outputs	[LIST], Required	Output list.

Detailed description of outputs:

Field	Value	Description
name	[STRING], Optional	Name [optional].
alias	[STRING], Optional	Alias [optional].
c_name	[STRING], Required	Channel name.
g_name	[STRING], Required	Group name.
router	[BOOL], Required	Whether to route and distribute.
codec_k	[INT], Required	0: maintain connection, 1: reset client connection.
dis_s_ip	[STRING], Required	Discovered server IP.
smooth	[INT], Required	Smoothness, in milliseconds.

```
curl -x 'POST' \
  'http://192.168.40.114/api/cube/v2/resource/output/add' \
```

```

-H 'accept: application/json' \
-H 'language: cn' \
-H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwibmFtZSI6ImFkbWl1Iiwic2NyZWVudjpwYXZzSWi3J1YXR1X3RpbWUiOiIyMDI0LTA3LTI5IDA5OjM5OjU2LjY5NDc0OCIsImV4cCI6MTcyMjI5NzQ5Nn0.m03Qeins4CaSasDMBaFTV2HK8pHS3QZr5CTtNg0jq5U' \
-H 'Content-Type: application/json' \
-d '{
  "outputs": [
    {
      "c_name": "output2-channel",
      "g_name": "public",
      "router": false,
      "codec_k": 0,
      "dis_s_ip": "",
      "smooth":1000
    }
  ]
}'

```

Response

Example:

```

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

```

5.14 Delete Output

API URL

```
/api/cube/v2/resource/output/delete
```

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
ids	[LIST[INT]], Required	Output ID list.

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/resource/output/delete' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDA5OjM5OjU2LjY5NDc0O0IsImV4cCI6MTcyMjI1NzQ5Nn0.m03Qeins4CaSasDMBaFTV2HK8pHS3QZr5CTtNg0jq5U' \
  -H 'Content-Type: application/json' \
  -d '{
  "ids": [
    1,
    2,
    3
  ]
}'
```

Response

Example:

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

5.15 Modify Output

API URL

```
/api/cube/v2/resource/output/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	Output ID.
alias	[STRING], Required	Alias.
codec_k	[INT], Required	0: maintain connection, 1: reset client connection.

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/resource/output/modify' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwibmFtZSI6ImFkbW1uIiwic2NyZWVudjpmYXZzZW50IiwiaWF0Ij0iYMDI0LTA3LTI5IDA5OjM5OjU2LjY5NDc0OClzImV4cCI6MTcyMjI1NzQ5Nn0.m03Qeins4CaSasDMBaFTV2HK8pHS3QZr5CTtNg0jq5U' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 3,
  "alias": "alias",
  "codec_k": 0
}'
```

Response

Example:

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

5.16 Query All Outputs

API URL

```
/api/cube/v2/resource/output/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/output/all' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwiImFkbWw1uIiwic2NyZWVudjpp
mYXZzZW50IiwiaWF0IjoiYyMDI0LTA3LTI5IDA5OjM5OjU2LjY5NDc0OClzImV4cCI6MTcyMjI
xNzQ5Nn0.m03Qeins4CaSasDMBaFTV2HK8pHS3QZr5CTtNg0jq5U'
```

Response

Example:

```
{
  "result": "ok",
  "msg": [
    {
      "id": 1,
      "name": "Output1",
      "alias": "Output1",
      "c_name": "Output1",
      "g_name": "public",
      "smooth": 0,
      "router": false,
      "dis_s_ip": "",
      "codec_k": 0,
      "label_id": 1,
      "link_num": 2,
      "enable": true,
      "conn_type": 0,
      "mult_add": null,
      "mult_mask": null,
      "ttl_time": null
    },
    {
      "id": 2,
      "name": "Output2",
      "alias": "Output2",
      "c_name": "Output2",
      "g_name": "public",
      "smooth": 0,
      "router": false,
      "dis_s_ip": "",
      "codec_k": 0,
      "label_id": 2,
      "link_num": 0,
      "enable": true,
      "conn_type": 0,
      "mult_add": null,
      "mult_mask": null,
    }
  ]
}
```

```
"ttl_time": null
}
]
}
```

Field	Value	Description
id	[INT]	Output ID.
name	[STRING]	Output name.
alias	[STRING]	Alias.
c_name	[STRING]	Channel name.
g_name	[STRING]	Group name.
smooth	[INT, NULL]	Smoothness.
router	[BOOL]	Whether to route and distribute.
dis_s_ip	[STRING]	Discovered server IP.
codec_k	[INT]	0: maintain connection, 1: reset client connection.
link_num	[INT]	Number of output connections.
enable	[BOOL]	Whether the output is available.
conn_type	[INT]	Connection method. 0: unicast, 1: unicast and multicast.
mult_add	[STRING, NULL]	Multicast address.
mult_mask	[STRING, NULL]	Multicast mask.
ttl_time	[INT, NULL]	TTL time.

5.17 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
name	[STRING], Required	Name of the rotation list.
rotation_srcs	[LIST], Required	List of input sources.

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.eyJpZCI6ImFkbWw1Iiwic2N5ZWV4IjpmYXZzZWwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDUwOjE5OjE1LjYzMjIyOSIsImV4cCI6MTcyMjIyOTg1NX0.u6q1l0wQbWDFowtrDSOXRbGieqGe-gdBD1Bf4-ts88' \
  -H 'Content-Type: application/json' \
  -d '{
  "name": "Rotation List 1",
  "rotation_srcs": [
    {
      "input_id": 1,
      "play_duration": 10
    },
    {
      "input_id": 2,
      "play_duration": 10
    }
  ]
}'
```

Response

Example:

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

5.18 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.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDEwOjE1LjYzMjIyOSIsImV4cCI6MTcyMjIyOTg1NX0.u6q1l0wQbwDFowtrDSOXRbgiIeqGe-gdBD1Bf4-ts88' \  
  -H 'Content-Type: application/json' \  
  -d '{  
  "id": 1  
}'
```

Response

Example:

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

5.19 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	Name of the rotation list.
rotation_srcs	[LIST], Required	List of input sources.

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.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpmYXZzZWwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDEwOjE5OjE1LjYzMjIyOSIsImV4cCI6MTcyMjIyOTg1NX0.u6q1l0wQbWDFowtrDSOXRbgiIeqGe-gdBD1Bf4-ts88' \
  -H 'Content-Type: application/json' \
  -d '{
```

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

Response

Example:

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

5.20 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

```
curl -X 'GET' \
  'http://192.168.40.114/api/cube/v2/resource/rotation-list/all' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImSwibmFtZSI6ImFkbWl1Iiwic2NyZWVudjpp
mYXZzSwiy3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI1IDUwOjMyOjQwLjEwMDUwOCIsImV4cCI6MTcyMjI
yMDY2MH0.rtv4mp5PhpCOP2XFMUMHIAWSoyVEG_I4a2YH7equmYI'
```

Response

Example:

```
{
  "result": "ok",
  "msg": [
    {
      "id": 1,
      "name": "aaa",
      "src_num": 2,
      "play_duration": 20
    }
  ],
  "error": null
}
```

Field	Value	Description
id	[INT]	Rotation source ID.
name	[STRING]	Name of the rotation list.
src_num	[INT]	Number of input sources.
play_duration	[INT]	Play duration in seconds.

5.21 Get Rotation List

Description: Get specific rotation list information.

API URL

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

Request

```
Method: GET
```

Header

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

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?id=1' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwidmFtZSI6ImFkbWw1uIiwic2N5ZWVudjpmYXxzZSwiY3JlYXRlX3RpbWUiaWYMDi0LTA3LTI5IDEvOjMyOjQwLjEwMDUwOCIsImV4cCI6MTcyMjIyMDY2MH0.rtV4mp5PhpCOP2XFMUMHIAWSoyVEG_I4a2YH7equmYI'
```

Response

Example:

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

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

Field	Value	Description
id	[INT]	Rotation list ID.
name	[STRING]	Name of the rotation list.
rotation_srcs	[LIST]	List of input sources.

Details of rotation_srcs:

Field	Value	Description
id	[INT]	Rotation source ID.
input_id	[INT]	Input source ID.
input_name	[STRING]	Name of the input source.
input_alias	[STRING]	Alias of the input source.
input_c_name	[STRING]	Channel name of the input source.
play_duration	[INT]	Play duration in seconds.

5.22 Query Whether Rotation List is Used

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.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpp  
mYXZzZW53JlYXR1X3RpbWUiOiIyMDI0LTA3LTI5IDEwOjMyOjQwLjEwMDUwOCIsImV4cCI6MTcyMjI  
yMDY2MH0.rtv4mp5PhpCOP2XFMUMHIAWSoyVEG_I4a2YH7equmYI'
```

Response

Example:

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

Field	Value	Description
status	[BOOL]	Whether the rotation list is used.

6 Panel Management

6.1 Add Panel

API URL

```
/api/cube/v2/panel/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
name	[STRING], Required	Name.
icon	[INT], Required	Icon ID.

Field	Value	Description
users	[LIST], Required	User information list.

Details of users:

Field	Value	Description
id	[INT], Required	User ID.
view_per	[BOOL], Required	View panel permission.
switch_per	[BOOL], Required	Switch panel permission.
modify_per	[BOOL], Required	Modify panel permission.

Note:

- users is for all current users.
- For administrative users: view_per=true, switch_per=true, modify_per=true.
- For ordinary users: view_per=false, switch_per=false, modify_per=false.

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/panel/add' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImSwibmFtZSI6ImFkbWw1uiwiIiwiaWF0IjoiYjpmYXZzZW50Y3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI1IDUwOjM5QzljEWNjg0MiIsImV4cCI6MTcyMjIyMTA4M30.MQudP_7ZGrk8Ef8ru9mM402Dn3vzrLsIm4EcnPPq_s' \
  -H 'Content-Type: application/json' \
  -d '{
  "name": "new panel name",
  "icon": 0,
  "users": [
    {
      "id": 1,
      "view_per": true,
      "switch_per": true,
      "modify_per": true
    }
  ]
}'
```

Response

Example:

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


6.3 Modify Panel

API URL

```
/api/cube/v2/panel/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.
name	[STRING], Required	Name.
users	[LIST], Required	User information list.

Details of users:

Field	Value	Description
id	[INT], Required	User ID.
view_per	[BOOL], Required	View panel permission.
switch_per	[BOOL], Required	Switch panel permission.
modify_per	[BOOL], Required	Modify panel permission.

Note:

- users is for all current users.
- For administrative users: view_per=true, switch_per=true, modify_per=true.
- For ordinary users: view_per=false, switch_per=false, modify_per=false.

```
curl -X 'POST' \  
  'http://192.168.40.114/api/cube/v2/panel/modify' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1IiwiaWF0IjoiYmYwZzZSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDEwOjM5OjQzLjEwNjg0MiIsImV4cCI6MTcyMjIyMTA4M30.MQuDP_7ZGrk8Ef8ru9mM402Dn3vzrLsIiM4EcnPPq_s' \  
  \
```

```
-H 'Content-Type: application/json' \  
-d '{  
  "id": 1,  
  "name": "panel name",  
  "users": [  
    {  
      "id": 1,  
      "view_per": true,  
      "switch_per": true,  
      "modify_per": true  
    }  
  ]  
}'
```

Response

Example:

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

6.4 Modify Panel Name

API URL

```
/api/cube/v2/panel/name
```

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.
name	[STRING], Required	Name.


```
curl -X 'POST' \  
  'http://192.168.40.114/api/cube/v2/panel/icon' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImSwibmFtZSI6ImFkbWl1Iiwic2NyZWVudjpp  
mYwzZSwiY3JlYXR1X3RpbWUiOiIyMDI0LTA3LTI5IDUwOjM5OjQzLjEwNjg0MiIsImV4cCI6MTcyMjI  
yMTA4M30uMQudP_7ZGrk8Ef8ru9mM402Dn3vzrLsIim4EcnPPq_s' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "id": 1,  
    "icon": 0  
  }'
```

Response

Example:

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

6.6 Panel Enable Setting

API URL

```
/api/cube/v2/panel/enable
```

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.
enable	[BOOL], Required	Panel enable.

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/panel/enable' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6Im5wIiwiaWF0IjoiYmYwZzZSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDEwOjM5OjQzLjEwNjg0MiIsImV4cCI6MTcyMjIyMTA4M30uMQudP_7ZGrk8Ef8ru9mM402Dn3vzrLsIm4EcnPPq_s' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1,
  "enable": false
}'
```

Response

Example:

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

6.7 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": 3,
    "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	[LIST]	Panel name.
input_n	[INT]	Number of inputs in the panel.

Field	Value	Description
output_n	[INT]	Number of outputs in the panel.
icon	[INT]	Panel icon ID.
enable	[BOOL]	Panel enable.

6.8 Modify Panel Permissions

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.

Details of users:

Field	Value	Description
id	[INT], Required	User ID.
view_per	[BOOL], Required	View panel permission.
switch_per	[BOOL], Required	Switch panel permission.
modify_per	[BOOL], Required	Modify panel permission.

Note:

- users is for all current users.
- For administrative users: view_per=true, switch_per=true, modify_per=true.
- For ordinary users: view_per=false, switch_per=false, modify_per=false.

```
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.eyJpZCI6MSwibmFtZSI6ImFkbWw1uIiwic2NyZWVudjpwYXZzS2wiY3JlYXRlX3RpbWUiaWYMDI0LTA3LTI5IDEwOjM5OjQzLjEwNjg0MiIsImV4cCI6MTcyMjIyMTA4M30uMQudP_7ZGrk8Ef8ru9mM4O2Dn3vzrLsIiM4EcnPPq_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": ""  
}
```

6.9 Query Panel Permissions

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.

6.10 Query Panel Details

Description: Get the details of the current panel, including panel input, output, rotation list, panel, and other information.

API URL

```
/api/cube/v2/panel/detail
```

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/detail?id=1' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwidmFtZSI6ImFkbWw1Iiwic2NyZWVudjpwYXZzZWwiY3JlYXRlX3RpbWUiaWYMDI0LTA3LTI5IDExOjE1OjA2LjA0NTcyMCI6ImV4cCI6MTcyMjIyZiI6bnN0LjYybnBuY1hXJGZPMf49iIKtFRPwjwrhn8zaeOH71jtA'
```

Response

Example:

```
{  
  "result": "ok",  
  "msg": {  
    "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: enabled, false: disabled.
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.

Field	Value	Description
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, NULL]	Discovery method (0: manual discovery, 1: automatic discovery, 2: server discovery).
dis_g_name	[STRING, NULL]	Discovery group name.
dis_d_ip	[STRING, NULL]	Discovered device IP.
dis_s_ip	[STRING, NULL]	Discovered server IP.
conn_type	[INT]	0: unicast, 1: unicast and multicast.
label_id	[INT, NULL]	Invalid field.
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.
g_name	[STRING]	Group name.
d_ip	[STRING]	Device IP.
d_port	[INT]	Device port.
url	[STRING]	Input source URL.

Field	Value	Description
available	[BOOL]	True: available, false: unstable.
dis_method	[INT, NULL]	Discovery method (0: manual discovery, 1: automatic discovery, 2: server discovery).
dis_g_name	[STRING, NULL]	Discovery group name.
dis_d_ip	[STRING, NULL]	Discovered device IP.
dis_s_ip	[STRING, NULL]	Discovered server IP.
conn_type	[INT]	0: unicast, 1: unicast and multicast.
label_id	[INT, NULL]	Invalid field.
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]	Discovered server IP.
conn_type	[INT]	0: unicast, 1: unicast and multicast.
mult_add	[STRING, NULL]	Multicast address.
mult_mask	[STRING, NULL]	Multicast mask.

Field	Value	Description
ttl_time	[INT, NULL]	TTL time.
codec_k	[INT]	0: keep connection, 1: reset client connection.
lock	[BOOL]	Whether the output is locked.
collect	[BOOL]	Whether the output is collected.
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]	Invalid field.
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.
rotation_srcs	[LIST]	Input source list.

Details of rotation_lists rotation_srcs:

Field	Value	Description
id	[INT]	Rotation source ID.
input_id	[INT]	ID of the input source.
input_name	[STRING, NULL]	Name of the input source.
input_alias	[STRING, NULL]	Nickname of the input source.
input_c_name	[STRING, NULL]	Channel name of the input source.
play_duration	[INT]	Play duration of the input source in seconds.

6.11 Manage Panel Input Sources

Description: Add, remove, or 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
id	[INT], Required	Input source ID.
alias	[STRING], Required	Alias.

```

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.eyJpZCI6MSwibmFtZSI6ImFkbWl1Iiwic2N5ZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyNH0.NkCUpEMiIna8QIteQumFT6ckBddTRlDwsPP1fG89kp8' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1,
  "inputs": [
    {
      "id": 1,
      "alias": "alias"
    }
  ]
}'

```

Response

Example:

```

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

```

6.12 Manage Panel Outputs

Description: Add, remove, or 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
-------	-------	-------------

Field	Value	Description
id	[INT], Required	Panel ID.
outputs	[LIST], Required	Output list.

Details of outputs:

Field	Value	Description
id	[INT], Required	Output ID.
name	[STRING], Required	Name. Remains unchanged.
alias	[STRING], Required	Alias.
codec_k	[INT], Required	0: keep connection, 1: reset client connection.

Note:

- The name of the output (name) remains unchanged.

```
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.eyJpZCI6ImFkbWw1Iiwic2NyZWVudjpp
mYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDExOjIwOjI0LjM3NTcwMyIsImV4
cCI6MTcyMjIyMzUyNH0.NkCUPEMiIna8QIteQumFT6ckBddTRlDwsPP1fG89kp8' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1,
  "outputs": [
    {
      "id": 1,
      "name": "name",
      "alias": "alias",
      "codec_k": 0
    }
  ]
}'
```

Response

Example:

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

6.13 Set the Input Source of 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], Required	Input source ID. When it is NULL, disconnect the output from the input source.

```
curl -X 'POST' \  
  'http://192.168.40.114/api/cube/v2/panel/output/input' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImswbWVtZSI6ImFkbWw1uIiwic2NyZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI1IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyYmZuYm90LmNkCUpEMiIna8QIteQUMFT6ckBddTRlDwsPP1fG89kp8' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "id": 1,  
    "output_id": 1,  
    "input_id": 1  
  }'
```

Response

Example:

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

6.14 Set the Rotation List of Output in Panel

Description: Set the rotation list playback and looping of the output in the panel.

API URL

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

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, NULL], Required	Rotation list ID. When it is NULL, disconnect the output from the rotation source.
loop	[BOOL, NULL], Required	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.eyJpZCI6ImSwbmFtZSI6ImFkbWl1Iiwic2NyZWVudjpmYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyNH0.NkCUPEMiIna8QIteQumFT6ckBddTRlDwsPP1fG89kp8' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "id": 1,  
    "output_id": 1,  
    "r_id": 1,  
    "loop": true  
  }'
```

Response

Example:

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

6.15 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.

Field	Value	Description
input_id	[INT], Required	Input source ID.
select	[BOOL], Required	Whether it is fully selected. True: fully selected, 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.eyJpZCI6MSwibmFtZSI6ImFkbWw1uIiwic2NyZWVudjpmYXxzZSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyNH0.NkCUPeMiIna8QIteQUmFT6ckBddTRlDwsPP1fG89kp8' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1,
  "input_id": 1,
  "select": true
}'
```

Response

Example:

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

6.16 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

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.
lock	[BOOL], Required	Whether it is locked. True: locked, false: unlocked.

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/panel/output/lock' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwidmFtZSI6ImFkbW1uIiwic2NyZWVudjpp
mYXxzZSwiY3JlYXRlX3RpbWUiaWoiYm90LTA3LTU5IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjI
yMzUyNH0.NkCUPeMiIna8QIteQumFT6ckBddTRlDwsPP1fG89kp8' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1,
  "output_id": 1,
  "lock": true
}'
```

Response

Example:

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

6.17 Set Rotation List Loop of 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: looped, false: not looped.

```
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.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjpmYXZzZWwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDEXOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyNH0.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

7.1 Add Template

API URL

```
/api/cube/v2/template/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
id	[INT], Required	Panel ID.
name	[STRING], Required	Template name.

```
curl -X 'POST' \  
  'http://192.168.40.114/api/cube/v2/template/add' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwiImFkbWw1Iiwic2NyZWVudjpmYXxzZSwiY3JlYXRlX3RpbWUiaWYyMDI0LTA3LTI5IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyYm90LmNkCUpEMiIna8QIteQumFT6ckBddTRlDwsPP1fg89kp8' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "id": 1,  
    "name": "template name"  
  }'
```

Response

Example:

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

7.2 Delete Template

API URL

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

Request

```
Method: POST
```

Header

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

Parameter

Field	Value	Description
id	[INT], Required	Template ID.
name	[STRING], Required	Template name.

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/template/name' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImswbWVtZSI6ImFkbW1uIiwic2NyZWVudjpmYXZzZSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDExOjIwOjI0LjM3NTcwMyIsImV4cCI6MTcyMjIyMzUyNH0.NkCUPeMiIna8QIteQumFT6ckBddTRlDwsPP1fG89kp8' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1,
  "name": "template name"
}'
```

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.

Field	Value	Description
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.eyJpZCI6MSwidmFtZSI6ImFkbWw1Iiwic2NyZWVudjpp
mYXxzZSwiY3JlYXRlX3RpbWUiaWYMDI0LTA3LTI5IDEzOjQ0OjU2LjAyMzYzMyIsImV4cCI6MTcyMjI
zMjE5Nn0.b4QPooAgxhCd-h8kGZnbZM_CmZIPvkFJysYkr1CY00w'
```

Response

Example:

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

Field	Value	Description
id	[INT]	Template ID.
name	[STRING]	Template name.
start	[BOOL]	Whether the template is started. True: started, false: not started.

7.5 Save Current Template

API URL

```
/api/cube/v2/template/save
```

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/save' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer  
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImSwibmFtZSI6ImFkbWl1Iiwic2NyZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDEzOjQ0OjU2LjAyMzYzMyIsImV4cCI6MTcyMjIzMTUyE5Nn0.b4QPooAgxhCd-h8kGZnbZM_CmZIPvkFJysYkr1CY00w' \  
  -H 'Content-Type: application/json' \  
  -d '{  
  "id": 1  
}'
```

Response

Example:

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


7.6 Save Template As

API URL

```
/api/cube/v2/template/save-as
```

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.
name	[STRING], Required	New template name.

```
curl -X 'POST' \
  'http://192.168.40.114/api/cube/v2/template/save-as' \
  -H 'accept: application/json' \
  -H 'language: cn' \
  -H 'Authorization: Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwibmFtZSI6ImFkbWw1Iiwic2N5ZWVudjpwYXZzSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDEzOjQ0OjU2LjAyMzYzMyIsImV4cCI6MTcyMjIzMTUyE5Nn0.b4QPooAgxhCd-h8kGZnbZM_CmZIPvkFjysYkr1CY00w' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 1,
  "name": "new template name"
}'
```

Response

Example:

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

7.7 Switch Template

API URL

```
/api/cube/v2/template/switch
```

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
switch_id	[INT], Required	Switch template ID.
save	[BOOL], Required	Whether to save the current template. True: save, false: not save.

```
curl -X 'POST' \  
  'http://192.168.40.114/api/cube/v2/template/switch' \  
  -H 'accept: application/json' \  
  -H 'language: cn' \  
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFkbWw1Iiwic2N5ZWVudjppmYXZzZWwiY3JlYXRlX3RpbWUoIyYMDI0LTA3LTI1IDEzOjQ0OjU2LjAyMzYzMyIsImV4cCI6MTcyMjIzZmJE5Nn0.b4QPooAgxhCd-h8kGZnbZM_CmZIPvkFJysYkr1CY00w' \  
  -H 'Content-Type: application/json' \  
  -d '{  
    "id": 1,  
    "switch_id": 2,  
    "save": true  
  }'
```

Response

Example:

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



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

9 WebSocket Messages

9.1 Subscribe to WebSocket Messages

Parameter

Field	Value	Description
token	[STRING], Required	Token value.

```
ws://192.168.40.114/api_event/cube/ws/info?
token=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MSwibmFtZSI6ImFkbWluIiwic2N5Z
WVudCI6pmYwzZSwiY3JlYXRlX3RpbWUiOiIyMDI0LTA3LTI5IDE0OjA3OjAxLjYyNjQzOSIsImV4cCI6M
TcyMjIzMX0.5zPSju-b1xmD7oyXIYzTY5KKJAW5E0dLPKArOfnzEx8
```