ZowieTek API v1.0 Documentation

This document outlines the commands that are available to all Zowietek devices, allowing users to remotely interact with devices to automate and script control.

The API mainly uses POST commands to allow users to set parameters of Zowietek devices and view current parameter settings.

Please ensure syntax and values are valid to ensure proper operation of Zowietek device.

The meaning of the status code of the return parameter is as follows.

1、 status

Value	Description
000000	The modification is successful
00002	Program is not ready
00003	Missing required parameters
00004	Product not supported
00005	Switch opening failed
00006	Switch not open
00007	Enable not open
00008	Verification code error
00009	The operation is too fast, please wait
00010	Restarting, please wait
50001	NDI activation failed
50002	NDI has been activated and does not need to be activated again
60001	Stream URL already exists
60002	Failed to start streaming
60003	Failed to close streaming
60004	Invalid URL
60005	Stream protocol is not supported
60006	protocol mismatch
60007	The stream is open and needs to be closed before operation
60008	Invalid IP
60009	Invalid port
60010	Protocol selectId mismatch

Value	Description
60011	The number of streams reaches the maximum value
60012	Push type is not supported
60013	Invalid index
70001	Failed to connect to WiFi
70002	Wrong IP address
70003	IP address is occupied
70004	The data is the same and no modification is required
70005	Password length must be more than eight characters
70006	Account cannot be empty
70007	HTTP port is occupied
70008	RTMP port is occupied
70009	RTSP port is occupied
70010	VISCA TCP port is occupied
70011	VISCA UDP port is occupied
70012	WebSocket port is occupied
70013	RTP port is occupied
70014	Onvif port is occupied
70015	Onvif soap port is occupied
70016	No WiFi module
80001	User not found
80002	User already exists
80003	User is not logged in
80004	Non-admin account
80005	Wrong password
80006	File format error
80007	Upgrading firmware is illegal
80008	Log saving was not turned off before clearing the logs.
80009	Log reading failed
90001	Please plug in the signal source before modifying the audio configuration
100001	disk full

Value	Description
100002	Invalid storage medium
100003	Photo format is wrong
100004	Photo format is wrong
100005	Photo format is wrong
100006	Uninstall failed
100007	Disk not mounted
100008	Mount failed
100009	NAS service is busy
100010	Disk information has reached the maximum limit
100011	There is an open NAS device, please close it first
100012	Modification is not allowed when open
100013	NAS is not open
100014	Format failed
100015	Storage device is occupied
110001	The task has been started and cannot be modified
110002	Invalid index
110003	Task name already exists
110004	The mission has started. cannot be deleted
110005	Task startup failed
110006	Task exceeds maximum limit
110007	Recording in progress and cannot be modified
110008	Operating too fast
120001	Maximum value reached
120003	Startup failed
120004	Close failed
120005	The video module is not started and the layout cannot be started
130001	No signal source
130002	Not allowed to change output resolution
130003	Quality out of range
130004	Output loopout switching mode failed

Value	Description
140001	Decoded URL already exists
140002	Decoding address is full
140003	Invalid decoding index
140004	Decoding type is not supported
140005	Please close it before operating
140006	Decoding startup failed

2、rsp

rsp is the explanation of status code. Different values will be displayed according to the interface and status code. When an error occurs, the meaning of each status code can be obtained through the value of rsp.

1、Input/Output

Input signal detection

Signal input detection can directly detect the resolution of the input signal and the sampling rate of the audio.

Device Supported：ZowieBox

http://x.x.x.x/video?option=getinfo&login_check_flag=1

Body（example）:

```
{
  "group": "hdmi",
  "opt": "get_input_info"
}
```

Response(example):

```
{
  "status": "00000",
  "rsp": "succeed",
  "data": {
    "hdmi_signal": 1,
    "audio_signal": 48000,
    "width": 1920,
    "height": 1080,
    "framerate": 60.0,
    "desc": "1080p60"
  }
}
```

Parameter	Value	Description
hdmi_signal	0/1	0：no HDMI signal 1：HDMI signal detected
audio_signal	0/32000/44100/48000	0：no audio 32000: audio sample rate 44100: audio sample rate 48000: audio sample rate
width		signal resolution width
height		signal resolution height
framerate		signal frame rate
desc		The resolution displayed on the web page

Output information settings

Output information settings can set the output resolution, output loop-out mode, and output mute.

Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/video?option=setinfo&login_check_flag=1

Body(example)：

```json
{
  "group": "hdmi",
  "opt": "set_output_info",
  "data": {
    "format": "2160p30",
    "audio_switch": 1,
    "loop_out_switch": 0
  }
}
```

Parameter	Value	Description
format	2160p30/2160p25/2160p24/1080p60/ 1080p50/1080p30/1080p25/1080p24/ 1080i60/1080i50/720p60/720p50	Output resolution
audio_switch	0/1	0:mute 1:unmute
loop_out_switch	0/1	Supported by ZowieBox 0:output 1:loop out

Response(example):

```json
{
  "rsp": "succeed",
  "status": "00000"
}
```

Get output information

This interface can obtain information about the currently set output.

Device Supported: ZowieBox,ZowiePTZ,ZowieCam

http://x.x.x.x/video?option=getinfo&login_check_flag=1

Body(example):

```json
{
    "group": "hdmi",
    "opt": "get_output_info"
}
```

Response(example):

```json
{
    "status": "00000",
    "rsp": "succeed",
    "data": {
        "switch": 1,
```

```
        "vo_chnid": 0,
        "disp_dev": {
            "selected_id": 1,
            "disp_dev_list": [
                "LCD",
                "HDMI",
                "SDI"
            ]
        },
        "format": "2160p30",
        "audio_switch": 1,
        "loop_out_switch": 0,
        "bufnum": 0,
        "auto_follow": 0
    }
}
```

Parameter	Value	Description
format	2160p30/2160p25/2160p24/1080p60/ 1080p50/1080p30/1080p25/1080p24/ 1080i60/1080i50/720p60/720p50	Output resolution
audio_switch	0/1	0:mute 1:unmute
loop_out_switch	0/1	Supported by ZowieBox 0:output 1:loop out

2、PTZ camera control

Get configuration information

Get configuration information to get all the configuration information about how to control the camera.

 Device Supported：ZowieBox,ZowiePTZ

http://x.x.x.x/ptz?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "ptz",
    "opt":"get_ptz_info"
}
```

Response(example):

```
{
    "rsp": "succeed",
```

```json
    "status": "00000",
    "data": {
        "protocol": 1,
        "protocol_list": [
            {
                "index": 0,
                "lable": "AUTO"
            },
            {
                "index": 1,
                "lable": "VISCA over IP",
                "type": 0,
                "ip": "192.168.1.167",
                "port": 1259,
                "addr": 1,
                "addr_fix": 0
            },
            {
                "index": 2,
                "lable": "ONVIF",
                "ip": "192.168.1.10",
                "onvif_port": 1259,
                "soap_port": 1259
            },
            {
                "index": 3,
                "lable": "VISCA",
                "baudrate_id": 2,
                "addr": 1,
                "addr_fix": 0
            },
            {
                "index": 4,
                "lable": "PELOCO D",
                "baudrate_id": 2,
                "addr": 1
            },
            {
                "index": 5,
                "lable": "PELOCO P",
                "baudrate_id": 2,
                "addr": 0
            }
        ],
        "usb2serial": 0
    }
}
```

Parameter	Value	Description
protocol	0~5	The currently set protocol 0:auto;Can only be applied to ZowiePTZ 1:VISCA over IP 3:Visca 4:Peclo-D 5:Peclo-P
type	0/1	Transfer Protocol 0:TCP 1:UDP
ip	x.x.x.x	The IP of the controlled camera
port	1025~65535	Transmission port number
addr	1~7 0~255	Visca over IP/Visca:1~7 Peclo_D/P:0~255
addr_fix	0/1	Fixed address 0:On 1:Off
baudrate_id	0~4	0:2400 1:4800 2:9600 3:11920 4:38400
usb2serial	0/1	0:USB serial port detected 1:USB serial port not detected

Set configuration information

You can set configuration information about controlling the camera for camera control.

 Device Supported：ZowieBox

http://x.x.x.x/ptz?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "ptz",
    "opt":"set_ptz_info",
    "data":{
        "protocol":1,
        "type":1,
        "ip":"192.168.1.167",
        "baudrate_id":1,
        "port":1259,
        "addr":1,
        "addr_fix":0
    }
}
```

Parameter	Value	Description
protocol	1	0:auto;Can only be applied to ZowiePTZ 1:VISCA over I;Can only be applied to ZowieBox 3:Visca 4:Peclo-D 5:Peclo-P
type	0/1	Transfer Protocol,it takes effect when protocol is 1 0:TCP 1:UDP
ip	x.x.x.x	It takes effect when protocol is 1 The IP of the controlled camera
baudrate_id	0~4	It takes effect when protocol is 3 or 4 or 5 0:2400 1:4800 2:9600 3:11920 4:38400
port	1025~65535	It takes effect when protocol is 1 Transmission port number
addr	1~7 0~255	Visca over IP/Visca:1~7 Peclo_D/P:0~255
addr_fix	0/1	Fixed address 0:On 1:Off

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed"
}
```

3、Encoding

Get encoding parameters can get all set encoding parameters.

Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/video?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "all"
}
```

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed",
    "all": {
        "resolution_list": [
            {
                "desc": "3840*2160",
                "width": 3840,
                "height": 2160
            },
            {
                "desc": "2560*1440",
                "width": 2560,
                "height": 1440
            },
            {
                "desc": "1920*1080",
                "width": 1920,
                "height": 1080
            },
            {
                "desc": "1280*720",
                "width": 1280,
                "height": 720
            },
            {
                "desc": "1080*1920",
                "width": 1080,
                "height": 1920
            },
            {
                "desc": "720*1280",
                "width": 720,
                "height": 1280
            },
```

```json
        {
            "desc": "640*360",
            "width": 640,
            "height": 360
        },
        {
            "desc": "320*180",
            "width": 320,
            "height": 180
        }
    ],
    "output_list": [
        "2160p30",
        "2160p29.97",
        "2160p25",
        "2160p24",
        "1080p60",
        "1080p59.94",
        "1080p50",
        "1080p30",
        "1080i60",
        "1080i59.94",
        "1080p29.97",
        "1080p25",
        "1080p24",
        "1080i50",
        "720p60",
        "720p59.94",
        "720p50"
    ],
    "vi": [
        {
            "vi_devid": 0,
            "vi_chnid": [
                0,
                1,
                2,
                3
            ],
            "width": 1920,
            "height": 1080,
            "framerate": 60,
            "transform": 0,
            "stream_id": 0,
            "desc": "main + display + snapshot"
        },
        {
            "vi_devid": 1,
            "vi_chnid": [
                0,
                1,
                2,
                3
            ],
            "width": 640,
            "height": 360,
```

```json
                    "framerate": 60,
                    "transform": 0,
                    "stream_id": 1,
                    "desc": "sub + auto focus"
            }
        ],
        "venc": [
            {
                    "followVI": 0,
                    "venc_chnid": 0,
                    "codec": {
                        "selected_id": 0,
                        "codec_list": [
                            "H.264",
                            "H.265",
                            "MJPEG"
                        ]
                    },
                    "profile": {
                        "selected_id": 0,
                        "profile_list": [
                            "BP",
                            "MP",
                            "HP"
                        ]
                    },
                    "ratecontrol": {
                        "selected_id": 0,
                        "mode_list": [
                            "CBR",
                            "VBR"
                        ]
                    },
                    "bitrate": 5000000,
                    "ndi_bitrate_pre": 50,
                    "width": 1920,
                    "height": 1080,
                    "framerate": 30,
                    "keyinterval": 50,
                    "gop": 50,
                    "MaxQP": 45,
                    "MinQP": 20,
                    "keyMinQP": 10,
                    "QPlevel": 1,
                    "rotate": {
                        "selected_id": 1,
                        "rotate_list": [
                            "0",
                            "90",
                            "180",
                            "270"
                        ]
                    },
                    "stream_id": 0,
                    "desc": "main"
            },
```

```json
        {
            "followVI": 0,
            "venc_chnid": 1,
            "codec": {
                "selected_id": 0,
                "codec_list": [
                    "H.264",
                    "H.265",
                    "MJPEG"
                ]
            },
            "profile": {
                "selected_id": 0,
                "profile_list": [
                    "BP",
                    "MP",
                    "HP"
                ]
            },
            "ratecontrol": {
                "selected_id": 0,
                "mode_list": [
                    "CBR",
                    "VBR"
                ]
            },
            "bitrate": 2000000,
            "ndi_bitrate_pre": 100,
            "width": 640,
            "height": 360,
            "framerate": 30,
            "keyinterval": 60,
            "gop": 60,
            "MaxQP": 45,
            "MinQP": 20,
            "keyMinQP": 10,
            "QPlevel": 1,
            "rotate": {
                "selected_id": 0,
                "rotate_list": [
                    "0",
                    "90",
                    "180",
                    "270"
                ]
            },
            "stream_id": 1,
            "desc": "sub"
        },
        {
            "followVI": 0,
            "venc_chnid": 2,
            "codec": {
                "selected_id": 2,
                "codec_list": [
                    "H.264",
```

```
                    "H.265",
                    "MJPEG"
                ]
            },
            "profile": {
                "selected_id": 1,
                "profile_list": [
                    "BP",
                    "MP",
                    "HP"
                ]
            },
            "ratecontrol": {
                "selected_id": 0,
                "mode_list": [
                    "CBR",
                    "VBR"
                ]
            },
            "bitrate": 18000000,
            "ndi_bitrate_pre": 100,
            "width": 1920,
            "height": 1080,
            "framerate": 60,
            "keyinterval": 60,
            "gop": 60,
            "MaxQP": 45,
            "MinQP": 20,
            "keyMinQP": 10,
            "QPlevel": 10,
            "rotate": {
                "selected_id": 0,
                "rotate_list": [
                    "0",
                    "90",
                    "180",
                    "270"
                ]
            },
            "stream_id": 2,
            "desc": "snapshot"
        }
    ],
    "vdec": [
        {
            "vdec_chnid": 0
        }
    ],
    "vo": [
        {
            "switch": 1,
            "vo_chnid": 0,
            "disp_dev": {
                "selected_id": 1,
                "disp_dev_list": [
                    "LCD",
```

```
                "HDMI",
                "SDI"
            ]
        },
        "format": "2160p30",
        "audio_switch": 1,
        "loop_out_switch": 1,
        "bufnum": 0,
        "auto_follow": 0
        }
    ]
    }
}
```

Parameter	Value	Description
codec.selected_id	0/1	0:264 1:265
profile.selected_id	0/1/2	0:BP 1:MP 2:HP
ratecontrol.selected_id	0/1	0:CBR 1:VBR
bitrate	64~51200	Main stream supports 64~51200 Sub stream supports 64~25600
ndi_bitrate_pre	50~125	When the device is in NDI mode, set the NDI percentage code rate
width	3840/1920/1280/720	Resolution width, please keep it corresponding to height
height	2160/1080/1980/1280	Resolution height, please keep it corresponding to weight
framerate	60/50/30/25/15	Encoding frame rate
keyinterval	20~240	I frame interval
rotate.selected_id	0/1/2/3	clockwise rotation angle 0:0 1:90 2:180 3:270
stream_id	0/1	0:main stream 1:sub stream

Modify encoding parameters

Modifying encoding parameters can modify various data such as encoding resolution, frame rate, code rate, etc.

 Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/video?option=setinfo&login_check_flag=1

Body(example):

```json
{
    "group": "venc",
    "venc": [
        {
            "venc_chnid": 0,
            "codec": {
                "selected_id": 0,
                "codec_list": [
                    "H.264",
                    "H.265",
                    "MJPEG"
                ]
            },
            "profile": {
                "selected_id": 0,
                "profile_list": [
                    "BP",
                    "MP",
                    "HP"
                ]
            },
            "ratecontrol": {
                "selected_id": 0,
                "mode_list": [
                    "CBR",
                    "VBR"
                ]
            },
            "bitrate": 5000000,
            "ndi_bitrate_pre": 50,
            "width": 1920,
            "height": 1080,
            "framerate": 30,
            "gop": 60,
            "MaxQP": 69,
            "MinQP": 40,
            "keyinterval": 60,
            "keyMinQP": 10,
            "QPlevel": 1,
            "rotate": {
                "selected_id": 0,
                "rotate_list": [
                    "0",
                    "90",
                    "180",
```

```
                    "270"
                ]
            },
            "stream_id": 0,
            "desc": "main"
        },
        {
            "venc_chnid": 1,
            "codec": {
                "selected_id": 0,
                "codec_list": [
                    "H.264",
                    "H.265",
                    "MJPEG"
                ]
            },
            "profile": {
                "selected_id": 0,
                "profile_list": [
                    "BP",
                    "MP",
                    "HP"
                ]
            },
            "ratecontrol": {
                "selected_id": 0,
                "mode_list": [
                    "CBR",
                    "VBR"
                ]
            },
            "bitrate": 2000000,
            "ndi_bitrate_pre": 100,
            "width": 1280,
            "height": 720,
            "framerate": 30,
            "gop": 60,
            "MaxQP": 69,
            "MinQP": 20,
            "keyinterval": 60,
            "keyMinQP": 10,
            "QPlevel": 1,
            "rotate": {
                "selected_id": 0,
                "rotate_list": [
                    "0",
                    "90",
                    "180",
                    "270"
                ]
            },
            "stream_id": 1,
            "desc": "sub"
        },
        {
            "venc_chnid": 2,
```

```
            "codec": {
                "selected_id": 2,
                "codec_list": [
                    "H.264",
                    "H.265",
                    "MJPEG"
                ]
            },
            "profile": {
                "selected_id": 0,
                "profile_list": [
                    "BP",
                    "MP",
                    "HP"
                ]
            },
            "ratecontrol": {
                "selected_id": 0,
                "mode_list": [
                    "CBR",
                    "VBR"
                ]
            },
            "bitrate": 8000000,
            "ndi_bitrate_pre": 100,
            "width": 3840,
            "height": 2160,
            "framerate": 1,
            "gop": 60,
            "MaxQP": 69,
            "MinQP": 40,
            "keyinterval": 60,
            "keyMinQP": 10,
            "QPlevel": 1,
            "rotate": {
                "selected_id": 0,
                "rotate_list": [
                    "0",
                    "90",
                    "180",
                    "270"
                ]
            },
            "stream_id": 2,
            "desc": "snapshot"
        }
    ]
}
```

Parameter	Value	Description
codec.selected_id	0/1	0:264 1:265

Parameter	Value	Description
profile.selected_id	0/1/2	0:BP 1:MP 2:HP
ratecontrol.selected_id	0/1	0:CBR 1:VBR
bitrate	64~51200	Main stream supports 64~51200 Sub stream supports 64~25600
ndi_bitrate_pre	50~125	When the device is in NDI mode, set the NDI percentage code rate
width	3840/1920/1280/720	Resolution width, please keep it corresponding to height
height	2160/1080/1980/1280	Resolution height, please keep it corresponding to weight
framerate	60/50/30/25/15	Encoding frame rate
keyinterval	20~240	I frame interval
rotate.selected_id	0/1/2/3	clockwise rotation angle 0:0 1:90 2:180 3:270
stream_id	0/1	0:main stream 1:sub stream

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000"
}
```

4、 Decoding

Add decoding URL

Enter the decoding URL of the RTSP, SRT, or RTMP protocol and use this URL for decoding.

 Device Supported： ZowieBox

http://x.x.x.x/streamplay?option=setinfo&login_check_flag=1

Body(example):

```
{
"group": "streamplay",
"opt": "streamplay_add",
"data":{
    "switch":0,
    "name": "test",
    "streamtype":0,
    "url": "rtsp://192.168.1.164/live/av012"
}
}
```

Parameter	Value	Description
switch	0/1	0:off 1:on
name		URL alias
streamtype	0/1	0:local 1:live Display streams in different categories based on different streamtypes
url		Decoding URL

Response(example):

```
{
    "rsp": "success",
    "status": "00000"
}
```

Get decoding information

Get information of state, index、 decoding URLs and etc.

Device Supported：ZowieBox

http://x.x.x.x/streamplay?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "streamplay",
    "opt": "streamplay_get_all"
}
```

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000",
```

```
    "streamplay": [
        {
            "index": 0,
            "switch": 0,
            "name": "111",
            "streamtype": 0,
            "url": "rtsp://192.168.1.205/1",
            "streamplay_status": 0,
            "bandwidth": 0,
            "framerate": 0.0,
            "width": 0,
            "height": 0
        },
        {
            "index": 1,
            "switch": 0,
            "name": "22",
            "streamtype": 1,
            "url": "rtmp://live.livevbond.com/test4/zowietek?auth_key=1629073289-0-0-d9bb438e37df25c2a008c739cfaacc9c",
            "streamplay_status": 0,
            "bandwidth": 0,
            "framerate": 0.0,
            "width": 0,
            "height": 0
        },
        {
            "index": 2,
            "switch": 0,
            "name": "lalala",
            "streamtype": 0,
            "url": "rtsp://192.168.1.164/live/av012",
            "streamplay_status": 0,
            "bandwidth": 0,
            "framerate": 0.0,
            "width": 0,
            "height": 0
        }
    ]
}
```

Parameter	Value	Description
index		Open/close decoding URL or delete decoding URL based on index
switch	0/1	0:off 1:on
name		URL alias
streamtype		0:local 1:live Display streams in different categories based on different streamtypes

Parameter	Value	Description
url		Decoding URL
streamplay_status	0~6	0:Not turned on 1:Pulling stream 2:Pulling stream stopped 3:Pulling stream (no video) 4:Pulling stream (video format unsupported) 5:Pulling stream (no audio) 6:Pulling stream (audio format unsupported)
bandwidth		Bitrate of decoding
framerate		Frame rate of decoding
width		Video width of decoding
height		Video height of decoding

Delete decoding URL

Remove the corresponding decoded URL.

 Device Supported： ZowieBox

http://x.x.x.x/streamplay?option=setinfo&login_check_flag=1

Body(example):

```
{
"group": "streamplay",
"opt": "streamplay_del",
"data":{
    "index":0
}
}
```

Parameter	Value	Description
index		The index of the decoding URL, which can be obtained using the API for getting decoding information

Response(example):

```
{
    "rsp": "success",
    "status": "00000"
}
```

Modify decoding information

Use this interface to modify the state, alias, URL, and other information of the decoding URL.

 Device Supported：ZowieBox

http://x.x.x.x/streamplay?option=setinfo&login_check_flag=1

Body(example):

```
{
"group": "streamplay",
"opt": "streamplay_modify",
"data":{
    "index":5,
    "switch":0,
    "name": "",
    "streamtype":0,
    "url": "rtsp://192.168.1.164/live/av012"
}
}
```

Parameter	Value	Description
index		The index of the decoding URL, which can be obtained using the API for getting all decoding URL information
switch	0/1	0:off 1:on
name		URL alias
streamtype	0/1	0:local 1:live Display streams in different categories based on different streamtypes
url		Decoding URL

Response(example):

```
{
    "rsp": "success",
    "status": "00000"
}
```

Get decoding status

Get whether decoding streaming is enabled.

 Device Supported：ZowieBox

http://x.x.x.x/streamplay?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "streamplay",
    "opt": "get_decoder_state"
}
```

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000",
    "data": {
        "decoder_state": 0
    }
}
```

Parameter	Value	Description
decoder_state	0/1	0:No decoding streaming is enabled 1:With decoding streaming on

5、NDI decoding

NDI find

Search for all discoverable NDI sources currently on the LAN and use with the next interface to obtain NDI sources on the LAN.

 Device Supported：ZowieBox

http://x.x.x.x/streamplay?option=setinfo&login_check_flag=1

Body(example):

```
{
  "group": "streamplay_ndi",
  "opt": "ndi_find"
}
```

Response(example):

```
{
    "rsp": "succeed!!!",
    "status": "00000"
}
```

Get NDI source

Obtain all searched NDI source information. Before using this interface to obtain NDI source, please use the previous NDI find interface to ensure that the obtained NDI source information is the latest.

Device Supported: ZowieBox

Body(example):

```
{
  "group": "streamplay_ndi",
  "opt": "ndi_get_all"
}
```

Response(example):

```
{
    "rsp": "succeed!!!",
    "status": "00000",
    "data": [
        {
            "index": 0,
            "name": "HD CAMERA (NDI HB HX,192.168.1.205)",
            "url": "192.168.1.205:5961",
            "streamplay_status": 0,
            "bandwidth": 0,
            "framerate": 0,
            "width": 0,
            "height": 0
        },
        {
            "index": 1,
            "name": "NDI_HX (NDI-901233)",
            "url": "192.168.1.233:5961",
            "streamplay_status": 0,
            "bandwidth": 0,
            "framerate": 0,
            "width": 0,
            "height": 0
        }

    ]
}
```

Parameter	Value	Description
index		NDI decoding index
name		NDI name
url		NDI URL

Parameter	Value	Description
streamplay_status	0~6	0:Not turned on 1:Pulling stream 2:Pulling stream stopped 3:Pulling stream (no video) 4:Pulling stream (video format unsupported) 5:Pulling stream (no audio) 6:Pulling stream (audio format unsupported)
bandwidth		Bitrate of decoding
framerate		Frame rate of decoding
width		Video width of decoding
height		Video height of decoding

Enable NDI decoding

Open NDI decoding according to the name of the NDI source. It is recommended that only one decoding be enabled at the same time.

 Device Supported：ZowieBox

http://x.x.x.x/streamplay?option=setinfo&login_check_flag=1

Body(example):

```json
{
  "group": "streamplay_ndi",
  "opt": "ndi_recv",
  "data": {
    "ndi_name": "HD CAMERA (NDI HB HX,192.168.1.205)"
  }
}
```

Parameter	Value	Description
ndi_name		Please enter the name of the NDI source correctly to open the NDI decoding. Open up to one decoding streaming

Response(example):

```json
{
    "rsp": "succeed!!!",
    "status": "00000"
}
```

Disable NDI decoding

Turn off the NDI decoding streaming.

 Device Supported : ZowieBox

http://x.x.x.x/streamplay?option=setinfo&login_check_flag=1

Body(example):

```
{
  "group": "streamplay_ndi",
  "opt": "ndi_close"
}
```

Response(example):

```
{
    "rsp": "succeed!!!",
    "status": "00000"
}
```

Getting NDI group information

Query the group of NDI in the decoded state of zowieBox

Device Supported : ZowieBox

http://x.x.x.x/streamplay?option=getinfo&login_check_flag=1

Body(example):

```
{
  "group": "streamplay_ndi",
  "opt": "ndi_get_recv_config"
}
```

Response(example):

```
{
    "rsp": "succeed!!!",
    "status": "00000",
    "data": {
        "groups": "Public"
    }
}
```

Parameter	Value	Description
groups		The NDI group in ZowieBox decoding mode

Setting the NDI group in decoder mode.

Device Supported：ZowieBox

http://x.x.x.x/streamplay?option=setinfo&login_check_flag=1

Body(example):

```
{
  "group": "streamplay_ndi",
  "opt": "ndi_set_recv_config",
  "data": {
    "groups": "Public"
  }
}
```

Parameter	Value	Description
groups		The NDI group in ZowieBox decoding mode

Response(example):

```
{
    "rsp": "succeed!!!",
    "status": "00000"
}
```

6、NDI

Active NDI

After NDI is authorized and activated, the device can use NDI-related functions, including NDI encoding and decoding.

 Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/video?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "ndi",
    "opt":"ndi_activate",
    "data":
    {
"license_key":"SW50aGJtVnRPaUp2SW1sYWRIZHJaVVZsWlNCMGJHOWphWEp6alpDQXVkQ3dpYVNJaV
pDSTZPRzFPTW1SQ1dIZElOMHA0UkdWUMVdObWgwTlcwNVRVOWhTR3BRYW5Ga04zWk5hRWR1V2taM2N6MH
NJbTBpWTJFNklqQWlOVEtyujtyE2T21ZNE1qYzZPbVl4TUdNeE9pd2lVeUlpVGlJNk1USXdNQ0kzZlE9P
Q=="
    }
}
```

Parameter	Value	Description
license_key		NDI activation code

Response(example):

```
{
    "rsp": "success",
    "status": "00000"
}
```

Get saved authorization code

Obtain the NDI activation code after successfully activating NDI.

Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/video?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "ndi",
    "opt":"get_license_key"
}
```

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000",
    "data": {
        "license_key": "",
        "factory_activate": 1
    }
}
```

Parameter	Value	Description
license_key		You can obtain the NDI activation code that activates NDI after leaving the factory.
factory_activate	0/1	0:Not activated before leaving the factory 1:Activated before shipment

Get NDI configuration parameters

Get NDI device name, group, multicast, quality and other information.

Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/video?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "ndi",
    "opt":"get_ndi_info"
}
```

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed",
    "data": {
        "activate": 1,
        "switch": 0,
        "mode_id": 3,
        "machinename": "ZowieBox-12343",
        "groups": "Public",
        "multicast": {
            "ttl": 1,
            "enable": 0,
            "netmask": "255.255.0.0",
            "netprefix": "239.255.0.0"
        }
    }
}
```

Parameter	Value	Description
activate	0/1	0:inactivated 1:activated
switch	0/1	0:NDI off 1:NDI on

Parameter	Value	Description
mode_id	1/2/3	1:NDI|HX 2:NDI|HX2 3:NDI|HX3
machinename		NDI device name
groups		NDI group
ttl	1~5	NDI multicast TTL
enable	0/1	0:Multicast off 1:Multicast on
netmask	x.x.x.x	Multicast IP
netprifix	x.x.x.x	Subnet Mask

Set NDI configuration parameters

Set NDI device name, group, multicast, quality and other information.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/video?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "ndi",
    "opt":"set_ndi_info",
    "data":
    {
        "switch":1,
        "mode_id":0,
        "machinename":"Zowietek-12343",
        "groups":"Public,A",
        "multicast":
        {
            "enable":1,
            "netmask": "255.255.0.0",
            "netprefix": "239.255.0.0",
            "ttl":1
        }
    }
}
```

Parameter	Value	Description
switch	0/1	0:NDI off 1:NDI on

Parameter	Value	Description
mode_id	1/2/3	1:NDI|HX 2:NDI|HX2 3:NDI|HX3
machinename		NDI device name
groups		NDI group
ttl	1~5	NDI multicast TTL
enable	0/1	0:Multicast off 1:Multicast on
netmask	x.x.x.x	Multicast IP
netprifix	x.x.x.x	Subnet Mask

Response(example):

```
{
    "rsp": "succeed",
    "status": "000000"
}
```

NDI switch

NDI switch
Turn on or off NDI encoding function

Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/video?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "ndi",
    "opt":"ndi_switch",
    "data":
    {
        "switch":1
    }
}
```

Parameter	Value	Description
switch	0/1	0:NDI off 1:NDI on

Response(example):

```
{
    "rsp": "succeed",
    "status": "000000"
}
```

7、Audio

Get audio configuration information

Get all information about audio settings, including audio format, sampling rate, audio source, bit rate and other information.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/audio?option=getinfo&login_check_flag=1

Body(example):

```
{

  "group": "all"

}
```

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed",
    "all": {
        "switch": 1,
        "ai_devid": 0,
        "ai_chnid": [
            0,
            1,
            2
        ],
        "ai_type": {
            "selected_id": 2,
            "ai_type_list": [
                "LINE IN",
                "Internal MIC",
                "HDMI IN"
            ]
        },
        "adec_chnid": 0,
        "aenc_chnnum": 1,
        "stream_id": [
            0,
            1,
            2
        ],
```

```json
        "aenc_chnid": [
            0,
            1
        ],
        "ao_devnum": 2,
        "ao_devid": [
            0,
            1
        ],
        "ao_chnid": [
            0,
            0
        ],
        "ao_devtype": [
            1,
            0
        ],
        "codec": {
            "selected_id": 0,
            "codec_list": [
                "AAC",
                "MP3",
                "G.711A"
            ]
        },
        "bitrate": {
            "selected_id": 4,
            "bitrate_list": [
                32000,
                48000,
                64000,
                96000,
                128000
            ]
        },
        "sample_rate": {
            "selected_id": 4,
            "sample_rate_list": [
                8000,
                16000,
                32000,
                44100,
                48000
            ]
        },
        "bit_width": 16,
        "channel": 2,
        "volume": 100
    }
}
```

Parameter	Value	Description
switch	0/1	0:Audio off 1:Audio on

Parameter	Value	Description
ai_type.selected_id	0/1/2	0:Line In 1:Internal MIC;supported by ZowieCam,ZowiePTZ 2:HDMI IN;support by ZowieBox
codec.selected_id	0/1/2	0:AAC 1:MP3 2:G.711A;Not currently supported
bitrate.selected_id	0/1/2/3/4	Audio bitrate 0:32000 1:48000 2:64000 3:96000 4:128000
sample_rate.selected_id	0/1/2/3/4	Audio sample rate 0:8000 1:16000 2:32000 3:44100 4:48000
bit_width	16	Number of sampling digits, fixed value, please do not modify it
channel	1/2	Audio channel 1:Mono 2:Stereo
volume	0~100	Sound volume

Set audio configuration information

Set all information about audio settings, including audio format, sampling rate, audio source, bit rate and other information.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/audio?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "audio",
    "audio": {
        "stream_id": 0,
        "ai_devid": 0,
        "ai_chnid": [
            0,
            1
        ],
```

```json
        "adec_chnid": 0,
        "aenc_chnid": 0,
        "ai_type": {
            "selected_id": 0,
            "ai_type_list": [
                "LINE IN",
                "Internal MIC" ,
                "HDMI IN"
            ]
        },
        "ao_devid": 0,
        "ao_chnid": 0,
        "ao_devtype": {
            "selected_id": 1,
            "ao_devtype_list": [
                "LINEOUT",
                "HDMI"
            ]
        },
        "switch": 0,
        "codec": {
            "selected_id": 0,
            "codec_list": [
                "AAC",
                "MP3",
                "G.711A"
            ]
        },
        "bitrate": {
            "selected_id": 0,
            "bitrate_list": [
                32000,
                48000,
                64000,
                96000,
                128000
            ]
        },
        "sample_rate": {
            "selected_id": 3,
            "sample_rate_list": [
                8000,
                16000,
                32000,
                44100,
                48000
            ]
        },
        "bit_width": 16,
        "channel": 2,
        "volume": 2
    }
}
```

Parameter	Value	Description
ai_type.selected_id	0/1	0:Line In 1:Internal MIC ;Supported by ZowiePTZ and ZowieCam 2:HDMI ;suppported by ZowieBox
switch	0/1	0:Audio off 1:Audio on
codec.selected_id	0/1/2	0:AAC 1:MP3 2:G.711A;Not currently supported
bitrate.selected_id	0/1/2/3/4	Audio bitrate 0:32000 1:48000 2:64000 3:96000 4:128000
sample_rate.selected_id	0/1/2/3/4	Audio sample rate 0:8000 1:16000 2:32000 3:44100 4:48000
bit_width	16	Number of sampling digits, fixed value, please do not modify it
channel	1/2	Audio channel 1:Mono 2:Stereo
volume	0~100	Sound volume

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000"
}
```

Audio switch

Turn audio on or off.

 Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/audio?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "audio_switch",
    "switch": 1
}
```

Parameter	Value	Description
switch	0/1	0:Audio off 1:Audio on

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000"
}
```

8、Streaming

Publish stream information

Publishing stream information saves stream information settings to the device.

 Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/stream?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "publish",
    "opt": "add_publish_info",
    "data": {
        "service":"custom",
        "protocol": "RTMP",
        "url": "rtmp://127.0.0.1/live/4",
        "key":"111",
        "switch": 1,
        "desc": "youtube",
        "name":"youtube"
    }
}
```

Parameter	Value	Description
protocol	RTMP/SRT	stream protocol
url		stream url
key		stream key

Parameter	Value	Description
desc		Make notes about the stream information
name		The name of the stream displayed on the web page

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000"
}
```

Get stream information

Call this interface to obtain the stream index, push address, push name, push key and other information.
 Device Supported: ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/stream?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "getStreamStatus"
}
```

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000",
    "publish_status": [
        {
            "switch": 0,
            "index": 1,
            "show_index": 1,
            "protocol": "RTMP",
            "venctype": 0,
            "aenctype": 0,
            "stream_id": 0,
            "url": "rtmp://127.0.0.1/live/4",
            "name": "youtube",
            "desc": "youtube",
            "key": "111",
            "status": 2,
            "bandwidth": 0
        },
        {
            "switch": 0,
            "index": 2,
            "show_index": 2,
            "protocol": "RTMP",
```

```
            "venctype": 0,
            "aenctype": 0,
            "stream_id": 0,
            "url": "rtmp://127.0.0.1/livekj/4",
            "name": "facebook",
            "desc": "facebook",
            "key": "111",
            "status": 2,
            "bandwidth": 0
        }
    ]
}
```

Parameter	Value	Description
switch	0/1	Push stream switch 0: off 1:on
index		Stream index, users need to operate the stream based on the index
show_index		The stream sequence displayed on the web page, the first five can be displayed in the shortcut operation of the preview interface
protocol	RTMP/SRT	stream protocol
url		stream url
key		stream key
desc		Make notes about the stream information
name		The name of the stream displayed on the web page
bandwidth		Bit rate when push is successful
status	1/2/3	Push status 1:online 2:offline 3:Failed to connect url

Start/stop streaming

 Start/stop streaming based on the index of the stream.
Device Supported: ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/stream?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "publish",
    "opt": "update_publish_switch",
    "data": {
        "index": 0,
        "switch": 1
    }
}
```

Parameter	Value	Description
index		Stream index, users need to operate the stream based on the index
switch	0/1	0:off 1:on

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000"
}
```

Delete stream information

Delete the stream address already saved in the device based on the index.

 Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/stream?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "publish",
    "opt": "del_publish_info",
    "data": {
        "index": 1
    }
}
```

Parameter	Value	Description
index		Stream index, users need to operate the stream based on the index

Response(example):

```json
{
    "rsp": "succeed",
    "status": "00000"
}
```

Modify stream display order

Modify the stream display order on the web page to ensure that the required stream can be displayed in the shortcut button of the preview interface.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/stream?option=setinfo&login_check_flag=1

Body(example):

```json
{
    "group": "publish",
    "opt": "update_streams_index",
    "data": [
        {
            "index": 1,
            "show_index": 3
        },
        {
            "index": 2,
            "show_index": 2
        },
        {
            "index": 3,
            "show_index": 1
        }
    ]
}
```

Parameter	Value	Description
index		Stream index, users need to operate the stream based on the index The index can be obtained by querying the stream list command
show_index		The order in which you want it to appear on the web page

Response(example):

```json
{
    "rsp": "succeed",
    "status": "00000"
}
```

9、AP

Get AP configuration information

Use this interface to obtain the name, password and opening status of the AP.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=getinfo&login_check_flag=1

Body(example):

```
{
  "group": "ap",
  "opt":"get_ap_info"
}
```

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed",
    "data": {
        "switch": 1,
        "ssid": "ZowieBox-12343",
        "psk": "12345678"
    }
}
```

Parameter	Value	Description
switch	0/1	0:off 1:on
ssid		AP service set identifier
psk		AP password

Modify AP configuration information

Modify the AP's SSID and password.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "ap",
    "opt": "update_ap_info",
    "data": {
        "psk": "1234567891",
        "ssid": "BOX_0012"
    }
}
```

Parameter	Value	Description
switch	0/1	0:off 1:on
ssid		AP service set identifier
psk		AP password

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed"
}
```

AP switch

Turn AP on or off.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "ap",
    "opt":"ap_switch",
    "data": {
        "switch": 1
    }
}
```

Parameter	Value	Description
switch	0/1	0:off 1:on

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed"
}
```

10、LAN

Get all the information about LAN

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "lan",
    "opt":"get_lan_info"
}
```

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed",
    "data": {
        "ip": "192.168.1.76",
        "gateway": "192.168.1.1",
        "dns1": "114.114.114.114",
        "dns2": "",
        "mac": "00:54:89:25:4f:01",
        "subnetmask": "255.255.255.0",
        "name": "eth0",
        "ip_dhcp_switch": 1
    }
}
```

Parameter	Value	Description
ip		LAN IP address
gateway		Default gateway
dns1		Preferred DNS
dns2		Alternate DNS
mac		MAC address
subnetmask		subnet mask

Parameter	Value	Description
name		lan name
ip_dhcp_switch	0/1	0:DHCP off 1:DHCP enabled

Modify LAN configuration information

When DHCP is closed, the LAN information can be modified manually, and the DNS data can be empty, but it must be passed. After successfully modifying the LAN information, the device will automatically restart.

Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=getinfo&login_check_flag=1

Body(example):

```json
{
    "group": "lan",
    "opt": "set_lan_info",
    "data": {
        "ip_dhcp_switch": 0,
        "ip": "192.168.1.76",
        "gateway": "192.168.1.1",
        "subnetmask": "255.255.255.0",
        "dns_dhcp_switch": 0,
        "dns1": "8.8.8.8",
        "dns2": ""
    }
}
```

Parameter	Value	Description
ip		LAN IP address
gateway		Default gateway
dns1		Preferred DNS
dns2		Alternate DNS
mac		MAC address
subnetmask		subnet mask
name		lan name
ip_dhcp_switch	0/1	0:DHCP off 1:DHCP enabled

Response(example):

After successfully setting the LAN information, the device will automatically restart, so there is no return value.

Check LAN connectivity

Use this interface to check if the device can communicate with other devices on the same LAN.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "lan",
    "opt":"get_local_ping"
}
```

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed",
    "data": {
        "lan_local_status": 1
    }
}
```

Parameter	Value	Description
lan_local_status	0/1	0:Unable to communicate with LAN 1:Successfully communicated with LAN

Detecting connectivity with the Internet

Check whether the device can connect to the Internet to ensure normal streaming.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "lan",
    "opt":"get_lan_ping"
}
```

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed",
    "data": {
        "lan_net_status": 1
    }
}
```

Parameter	Value	Description
lan_local_status	0/1	0:Can't connect to the internet 1:Successfully connected to the Internet

To obtain the IP displayed on the LCD screen, first obtain the LAN IP. If the LAN IP cannot be obtained, obtain the WiFi IP.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://192.168.1.31/network?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "get_main_ip"
}
```

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed",
    "data": {
        "ip": "192.168.1.76"
    }
}
```

11、 WIFI

WiFi switch

Turn WiFi on/off.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "wifi",
    "opt": "wifi_switch",
    "data": {
        "switch": 1
    }
}
```

Parameter	Value	Description
switch	0/1	0:WiFi off 1:WiFi on

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed"
}
```

Get WiFi list

Get all connectable WiFi information, including SSID, signal strength and other information.

Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "wifi",
    "opt":"get_wifi_list"
}
```

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed",
    "data": [
        {
            "connect_status": 1,
            "ssid": "Zowietek",
            "bssid": "e2:5f:75:36:be:72",
            "frequency": 2437.0,
            "signalLevel": 3,
            "signal_level": -62,
            "flags": "[WPA-PSK-CCMP+TKIP][WPA2-PSK-CCMP+TKIP][WPS][ESS][UTF-8]"
        },
        {
            "connect_status": 0,
```

```
            "ssid": "ZowiePTZ-12709",
            "bssid": "ba:13:32:98:df:52",
            "frequency": 2437.0,
            "signalLevel": 4,
            "signal_level": -53,
            "flags": "[WPA2-PSK-CCMP+TKIP][ESS]"
        },
        {
            "connect_status": 0,
            "ssid": "ZowiePTZ-12701",
            "bssid": "ba:13:32:98:d0:16",
            "frequency": 2437.0,
            "signalLevel": 4,
            "signal_level": -59,
            "flags": "[WPA2-PSK-CCMP+TKIP][ESS]"
        },
        {
            "connect_status": 0,
            "ssid": "Zowietek_Wi-Fi5",
            "bssid": "e2:5f:75:36:be:80",
            "frequency": 2437.0,
            "signalLevel": 3,
            "signal_level": -61,
            "flags": "[WPA-PSK-CCMP+TKIP][WPA2-PSK-CCMP+TKIP][ESS][UTF-8]"
        },
        {
            "connect_status": 0,
            "ssid": "DIRECT-d8-HP M130 LaserJet",
            "bssid": "9e:30:5b:a2:29:d8",
            "frequency": 2437.0,
            "signalLevel": 3,
            "signal_level": -65,
            "flags": "[WPA2-PSK-CCMP][WPS][ESS][P2P]"
        },
        {
            "connect_status": 0,
            "ssid": "ZowiePTZ-12265",
            "bssid": "ba:13:32:98:df:dc",
            "frequency": 2437.0,
            "signalLevel": 3,
            "signal_level": -65,
            "flags": "[WPA2-PSK-CCMP+TKIP][ESS]"
        }
    ]
}
```

Parameter	Value	Description
connect_status	0/1	0:Not connected to this WiFi 1:Already connected to this WiFi
ssid		WiFi SSID
signalLevel		WiFi signal strength

Parameter	Value	Description
signal_level		WiFi signal strength

Get wifi connection information/status

If the WiFi connection is successful, you can query the connected WiFi information, or you can query whether the WiFi connection failed or is connecting.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "wifi",
    "opt":"get_wifi_info"
}
```

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed",
    "data": {
        "networkId": 0,
        "ssid": "Zowietek_Wi-Fi5",
        "bssid": "e2:5f:75:36:be:81",
        "freq": 5220,
        "mode": "station",
        "pairwise_cipher": "CCMP",
        "group_cipher": "TKIP",
        "key_mgmt": "WPA2-PSK",
        "wpa_state": "COMPLETED",
        "p2p_device_address": "",
        "address": "b8:13:32:98:a0:54",
        "uuid": "0b370209-9d69-5b92-9c1d-23e51237b977",
        "wifi_connect_status": 4,
        "signalLevel": 4,
        "switch": 1,
        "ip": "192.168.1.137",
        "gateway": "192.168.1.1",
        "dns1": "114.114.114.114",
        "dns2": "",
        "mac": "b8:13:32:98:a0:54",
        "subnetmask": "255.255.255.0"
    }
}
```

Parameter	Value	Description
ssid		WiFi ssdi

Parameter	Value	Description
wifi_connect_status	1/2/3/4	1:not connected 2:Connecting 3:Connection failed 4:Connection successful
signal_Level		WiFi signal strength
switch	0/1	0：WiFi off 1：WiFi on
ip		WiFi IP address
gateway		Default Gateway
dns1		Preferred DNS
dns2		Alternate DNS
mac		WiFi MAC address
subnetmask		Subnet mask

Connect to WiFi

Enter the WiFi ssid and password to connect to WiFi.

 Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "wifi",
    "opt": "wifi_connect",
    "data": {
        "password": "Zowietek",
        "ssid": "Zowietek_Wi-Fi",
        "signalLevel": 3
    }
}
```

Parameter	Value	Description
password		WiFi password
ssid		WiFi ssid
signalLevel		WiFi signal strength

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed"
}
```

12、Port

Get port information

Get the port information of http, websocket, rtmp,rtsp, rtp, NDI and visca.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "ports",
    "opt":"get_ports_info"
}
```

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed",
    "data": {
        "http": 80,
        "https": 443,
        "websocket": 8088,
        "rtmp": 1935,
        "onvif": 2000,
        "soap": 1936,
        "rtsp": 8554,
        "rtp": 1234,
        "ndi": 5961,
        "visca_tcp": 5230,
        "visca_udp": 5231
    }
}
```

Parameter	Value	Description
http	80/1025~8079/8081~65530	Web port
websocket	1025~65530	Websocket port
rtmp	1025~65530	RTMP port
rtsp	554/1025~65530	RTSP port

Parameter	Value	Description
rtp	1025~65530	RTP port
visca_tcp	1025~65530	VISCA TCP port
visca_udp	1025~65530	VISCA UDP port

Set port information

Set the port information of http, websocket, rtmp,rtsp, rtp, NDI and visca.Please restart the device after modification.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "ports",
    "opt": "set_ports_info",
    "data": {
        "http": 80,
        "rtmp": 1935,
        "rtsp": 8554,
        "visca_tcp": 5232,
        "visca_udp": 5231,
        "rtp":1234,
        "websocket": 8088
    }
}
```

Parameter	Value	Description
http	80/1025~8079/8081~65530	Web port
websocket	1025~65530	Websocket port
rtmp	1025~65530	RTMP port
rtsp	554/1025~65530	RTSP port
rtp	1025~65530	RTP port
visca_tcp	1025~65530	VISCA TCP port
visca_udp	1025~65530	VISCA UDP port

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed"
}
```

13、mDNS

Get mDNS information

Get the hostname and domain name of mDNS.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/network?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "mdns",
    "opt":"get_mdns_info"
}
```

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed",
    "data": {
        "host_name": "ZowieBox-12021",
        "domain_name": "local"
    }
}
```

Set mDNS information

Modify mDNS hostname.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

Body(example):

```
{
    "group": "mdns",
    "opt":"set_mdns_info",
    "data": {
        "host_name": "ZowieBox-12022",
        "domain_name": "local"
    }
}
```

Response(example):

```
After the modification is successful, the device will automatically restart with
no return value.
```

14、 User Management

Get all added user accounts.

 Device Supported: ZowieBox,ZowieCam,ZowiePTZhttp://x.x.x.x/system?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "account",
    "opt": "get_accounts_info",
    "data": {
        "loginUserName": "admin"
    }
}
```

Parameter	Value	Description
loginUserName		Please enter an existing user name. Administrator rights can query all user information. Otherwise, you can only query your own user information.

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000",
    "data": [
        {
            "username": "admin",
            "type": 0,
            "index": 0
        },
        {
            "username": "super",
            "type": 1,
            "index": 1
        },
        {
            "username": "basic",
            "type": 2,
```

```
        "index": 2
      }
    ]
  }
}
```

Parameter	Value	Description
username		Account name
type	0/1/2	0:Administrator rights 1:Super permission 2:Basic permissions
index		Account index

Delete users

Delete accounts based on account index.Please do not delete the administrator account at will.

Device Supported: ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/system?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group":"account",
    "opt":"del_account_by_id",
    "data":
    {
        "index":2
    }
}
```

Parameter	Value	Description
index		Account index

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000"
}
```

Add user

Use this interface to add users with three permissions.

Device Supported: ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/system?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "account",
    "opt": "add_account_info",
    "data": {
        "type": 1,
        "username": "account_1",
        "password": "account_1"
    }
}
```

Parameter	Value	Description
username		Account name
type	0/1/2	0:Administrator rights 1:Super permission 2:Basic permissions
password		Account password

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000"
}
```

Modify user information

Use this interface to modify the user's username, password, and permissions.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/system?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "account",
    "opt": "update_account_by_id",
    "data": {
        "type": 1,
        "username": "admin1",
        "password": "admin",
        "index": 1
    }
}
```

Parameter	Value	Description
username		Account name
type	0/1/2	0:Administrator rights 1:Super permission 2:Basic permissions
password		Account password
index		Account index

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000"
}
```

Log in

Log in to the device using an existing account

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/system?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "account",
    "opt": "login_account",
    "data": {
        "username": "admin",
        "password": "admin"
    }
}
```

Parameter	Value	Description
username		Account name
password		Account password

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000",
    "data": {
        "uuid": "749d72a7-a9c6-48fb-b137-b00223250203",
        "type": 0
    }
}
```

Parameter	Value	Description
uuid		Login identification code, required when logging out
type	0/1/2	0:Administrator rights 1:Super permission 2:Basic permissions

Log out

Log out to log in with another account.

 Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/system?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group":"account",
    "opt":"logout_account",
    "data":
    {
        "uuid":"22e81ed1-7e50-4182-9115-67443814e490",
        "username":"admin"
    }
}
```

Parameter	Value	Description
uuid		Login identification code, please enter the uuid returned when logging in
username		Account name

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000"
}
```

Verify whether this account exists, whether the account's password is correct, and whether this account has administrator rights.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/system?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "account",
    "opt": "verify_account",
    "data": {
        "username": "tyui",
        "password": "super"
    }
}
```

Parameter	Value	Description
username		Account name
password		Account password

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000"
}
```

15、 Device time

Get the current time of the device, device time setting method and other information.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/system?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group":"systime",
    "opt":"get_systime_info"
}
```

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000",
    "data": {
        "time": {
            "year": 2023,
            "month": 9,
            "day": 27,
            "hour": 16,
            "minute": 56,
            "second": 32
        },
        "setting_mode_id": 0,
        "time_zone_id": "GMT-5",
        "time_type_id": 0,
        "ntp_enable": 0,
        "ntp_server": "ntp.ntsc.ac.cn",
        "ntp_port": 123
    }
}
```

Parameter	Value	Description
year		Device current year
month		Device current month
day		Device current day
hour		Device current hour
minute		Device current minute
second		Device current second
setting_mode_id	0/1/2	0:Synchronize with computer time 1:Set manually 2:Synchronize with NTP server
time_zone_id		The currently set time zone
ntp_server		NTP server
ntp_port		NTP server port

Set device time

Set the device's current time and how to get it.

 Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://x.x.x.x/system?option=setinfo&login_check_flag=1

Body(example):

```
{
```

```
    "group":"systime",
    "opt":"set_systime_info",
    "data":{
        "ntp_enable": 0,
        "ntp_port": 123,
        "ntp_server": "ntp.ntsc.ac.cn",
        "setting_mode_id": 0,
        "time": {
            "day": 30,
            "hour": 16,
            "minute": 1,
            "month": 6,
            "second": 54,
            "year": 2022
        },
        "time_type_id": 0,
        "time_zone_id": "GMT-8"
    }
}
```

Parameter	Value	Description
year		Device current year
month		Device current month
day		Device current day
hour		Device current hour
minute		Device current minute
second		Device current second
setting_mode_id	0/1/2	0:Synchronize with computer time 1:Set manually 2:Synchronize with NTP server
time_zone_id	GMT11/GMT10/GMT9/GMT8/GMT7/GMT6/ GMT5/GMT4/GMT3/GMT2/GMT1/GMT0/ GMT-1/GMT-2/GMT-3/GMT-4/GMT-5/GMT-6/ GMT-7/GMT-8/GMT-9/GMT-10/GMT-11/GMT-12/ GMT-13	The currently set time zone
ntp_server		NTP server
ntp_port		NTP server port

Response(example):

```
{
    "status": "00000",
    "rsp": "succeed"
}
```

16、 Recording

Obtain the storage device's mounting status, file format, storage capacity and other information.

Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://xxx.xxx.xxx.xxx/storage?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "storage_status"
}
```

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000",
    "data": [
        {
            "name": "sdcard",
            "index": 0,
            "mount_path": "/mnt/sdcard",
            "status": 0,
            "totalspace": 0,
            "freespace": 0,
            "usagespace": 0,
            "file_system": 0
        },
        {
            "name": "USB1",
            "index": 1,
            "mount_path": "/mnt/USB1",
            "status": 1,
            "totalspace": 29323,
            "freespace": 28553,
            "usagespace": 770,
            "file_system": 1
        },
        {
            "name": "nas1",
            "index": 3,
            "mount_path": "/tmp/nas1",
            "status": 0,
```

```
            "totalspace": 0,
            "freespace": 0,
            "usagespace": 0,
            "file_system": 0
        }
    ]
}
```

Parameter	Value	Description
name		Storage device type
index		Storage device index
mount_path		Mount path
status	0/1/2	0:Not mounted 1:Mounted 2:Storage device is full 3:Storage device read-only 4:Failed to mount storage device
totalspace		
freespace		Storage device remaining capacity
usagespace		Storage device used capacity
file_system	0/1/2	0:Unknown format 1:FAT32 2:exFAT 3:NTFS 4:CIFS 5:NFS

Get recording task list

Get a list of all recording tasks

Device Supported： ZowieBox,ZowieCam,ZowiePTZ

http://xxx.xxx.xxx.xxx/record?option=getinfo&login_check_flag=1

Body(example):

```
{
    "group": "record",
    "opt" : "get_task_list"
}
```

Response(example):

```
{
    "rsp": "succeed",
```

```json
    "status": "00000",
    "data": [
        {
            "index": "usb1_0",
            "file_name_prefix": "usb1_0",
            "name": "usb1",
            "record_format": 0,
            "record_mode": 0,
            "record_loop_mode": 0,
            "limit_type": 0,
            "size_limit": 0,
            "time_limit": 0,
            "enable": 0,
            "storage_id": 1,
            "stream_id": 0,
            "audio_stream_id": 0,
            "status": 5,
            "storageInfo": {
                "name": "USB1",
                "index": 1,
                "mount_path": "/mnt/USB1",
                "status": 1,
                "totalspace": 29323,
                "freespace": 28553,
                "usagespace": 770,
                "file_system": 1
            },
            "curr_file_name": "",
            "duration": 0
        },
        {
            "index": "sdcard_0",
            "file_name_prefix": "sdcard_0",
            "name": "sdcard",
            "record_format": 0,
            "record_mode": 0,
            "record_loop_mode": 0,
            "limit_type": 0,
            "size_limit": 0,
            "time_limit": 0,
            "enable": 0,
            "storage_id": 0,
            "stream_id": 0,
            "audio_stream_id": 0,
            "status": 5,
            "restart_record": 1,
            "storageInfo": {
                "name": "sdcard",
                "index": 0,
                "mount_path": "/mnt/sdcard",
                "status": 1,
                "totalspace": 30417,
                "freespace": 8182,
                "usagespace": 22235,
                "file_system": 1
            },
```

```
            "curr_file_name": "",
            "duration": 0
        }
    ]
}
```

Parameter	Value	Description
index		Modify subsequent task information based on the index
file_name_prefix		Video file name
record_format	0/1/2	0:mp4 1:ts 2:mov
record_mode	0/1	0:Disable automatic recording 1:Auto record after starting
record_loop_mode	0/1	0:Close loop recording 1:Start loop recording
limit_type	0/1/2	0:Size split 1:Time split
enable	0/1	0:Record on 1:Record off
status	0/1/2/3/4/5	0:Not recorded 1:Recording 2:Recording paused 3:The storage device is full and cannot record. 4:Storage device is invalid/not mounted 5:No signal source

Modify recording task information

Modify the name of the video file, video format, loop recording and other status.

Device Supported: ZowieBox,ZowieCam,ZowiePTZ

http://xxx.xxx.xxx.xxx/record?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "record",
    "opt" : "set_task_info",
    "data":{
        "index": "usb1_0",
        "name":"test",
        "record_format": 0,
        "record_mode": 0,
```

```
        "file_name_prefix":"stage",
        "record_loop_mode": 0,
        "size_limit":0,
        "time_limit":0,
        "limit_type": 0,
        "storage_id":1,
        "stream_id": 0
    }
}
```

Parameter	Value	Description
index		Get the index through the previous interface
name		Recording task name
file_name_prefix		Video file name
record_format	0/1/2	0:mp4 1:ts 2:mov
record_mode	0/1	0:Disable automatic recording 1:Auto record after starting
record_loop_mode	0/1	0:Close loop recording 1:Start loop recording
limit_type	0/1/2	0:Size split 1:Time split
size_limit	0/1/2/3	0:Auto 1:1.5G 2:3G 3:4G
time_limit	0/1/2/3	0:Auto 1:15min 2:30min 3:45min
enable	0/1	0:Record on 1:Record off

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000"
}
```

Start/stop recording

Start or stop recording. Currently, the device only supports recording to one storage device. Recording to multiple storage devices may cause file corruption, device crash, etc.!

Device Supported：ZowieBox,ZowieCam,ZowiePTZ

http://xxx.xxx.xxx.xxx/record?option=setinfo&login_check_flag=1

Body(example):

```
{
    "group": "record",
    "opt" : "set_task_enable",
    "data":{
        "index": "usb1_0",
        "enable": 1
    }
}
```

Parameter	Value	Description
index		Get the index through the previous interface
enable	0/1	0:Record on 1:Record off

Response(example):

```
{
    "rsp": "succeed",
    "status": "00000"
}
```