

Pro Convert IP to USB

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Introduction

A rich set of APIs are provided for developers to interact with Pro Convert IP to USB, such as obtaining basic device information including device name, firmware version and etc., modifying device configurations and upgrading firmware. These APIs are HTTP-based, lightweight, and connectionless services that return JSON data. With this document, you can get a thorough understanding of each API's functions and request method.

APIs in this document apply to:

- Pro Convert IP to USB

Common Error Codes

Status	Definition	Code	Description
0	MW_STATUS_SUCCESS	Success	Successful operation
1	MW_STATUS_PENDING	Pending	Operation is pending
2	MW_STATUS_TIMEOUT	Timeout	Operation timed out
3	MW_STATUS_INTERRUPTED	Interrupted	Operation was interrupted
4	MW_STATUS_TRY_AGAIN	TryAgain	Operation should be retried
5	MW_STATUS_NOT_IMPLEMENTED	NotImplemented	The operation is not implemented
6	MW_STATUS_UNKNOWN_ERROR	UnknownError	An unknown error occurred
7	MW_STATUS_INVALID_ARG	InvalidArgument	Invalid argument provided
8	MW_STATUS_NO_MEMORY	OutOfmemory	Insufficient memory
9	MW_STATUS_UNSUPPORTED	Unsupported	The operation is not supported
10	MW_STATUS_FILE_BUSY	FileBusy	File system is busy
11	MW_STATUS_DEVICE_BUSY	DeviceBusy	Device is busy
12	MW_STATUS_DEVICE_LOST	DeviceLost	Device is lost
13	MW_STATUS_IO_FAILED	IOError	An IO error occurred
14	MW_STATUS_READ_FAILED	ReadError	IO read failed
15	MW_STATUS_WRITE_FAILED	WriteError	IO write failed
16	MW_STATUS_NOT_EXIST	NotExist	The content does not exist
17	MW_STATUS_TOO_MANY	TooMany	Exceeded the limit of count
18	MW_STATUS_TOO_LARGE	TooLarge	Exceeded the size limit
19	MW_STATUS_OVERFLOW	Overflow	Overflow (up)
20	MW_STATUS_UNDERFLOW	Underflow	Overflow (down)
21	MW_STATUS_FORMAT_ERROR	FormatError	Format error occurred
22	MW_STATUS_FILE_EXISTS	FileExists	File already exists
23	MW_STATUS_FILE_TYPE_ERROR	FileTypeError	Incorrect file type
24	MW_STATUS_DEVICE_TYPE_ERROR	DeviceTypeError	Incorrect device type
25	MW_STATUS_IS_DIRECTORY	IsDirectory	The content is a directory
26	MW_STATUS_READ_ONLY	ReadOnly	Read-only restriction
27	MW_STATUS_RANGE_ERROR	OutOfRange	Range error occurred
28	MW_STATUS_BROKEN_PIPE	BrokenPipe	Pipe connection was interrupted
29	MW_STATUS_NO_SPACE	NoSpace	Insufficient space
30	MW_STATUS_NOT_DIRECTORY	NotDirectory	Not a directory
31	MW_STATUS_NOT_PERMITTED	NotPermitted	Forbidden operation
32	MW_STATUS_BAD_ADDRESS	BadAddress	Invalid address
33	MW_STATUS_SEEK_ERROR	SeekError	Seek error occurred
34	MW_STATUS_CROSS_DEVICE_LINK	CrossDeviceLink	Cross-device link error
35	MW_STATUS_NOT_INITIALIED	NotIntialized	Not initialized

Status	Definition	Code	Description
36	MW_STATUS_AUTH_FAILED	AuthFailed	Authentication failed
37	MW_STATUS_NOT_LOGGED_IN	NotLoggedIn	Not logged in
38	MW_STATUS_WRONG_STATE	WrongState	Incorrect state
39	MW_STATUS_MISMATCH	Mismatch	Mismatch
40	MW_STATUS_VERIFY_FAILED	VerifyFailed	Verification failed
41	MW_STATUS_CONSTRAINT_VIOLATION	ConstraintViolatin	Constraint violation
42	MW_STATUS_CANCELED	Canceled	Operation was canceled
43	MW_STATUS_IN_PROGRESS	InProgress	Operation is in progress
44	MW_STATUS_CONN_REFUSED	ConnectionRefused	Connection refused
45	MW_STATUS_CONN_RESET	ConnectionReset	Connection reset
46	MW_STATUS_ADDR_IN_USE	AddressInUse	Address is in use
47	MW_STATUS_NO_RESPONSE	NoResponse	No response
48	MW_STATUS_INFO_CHANGED	InfoChanged	Information has changed
49	MW_STATUS_INVALID_DATA	InvalidData	Invalid data
50	MW_STATUS_NEED_MORE_DATA	NeedMoreData	More data is needed
51	MW_STATUS_NO_BUFFER	NoBuffer	Buffer is exhausted
52	MW_STATUS_BUFFER_TOO_SMALL	BufferTooSmall	Buffer is too small
53	MW_STATUS_BUFFER_IS_EMPTY	BufferIsEmpty	Buffer is empty
54	MW_STATUS_BUFFER_IS_FULL	BufferIsFull	Buffer is full

Ping test

1. API Description

This API is used to detect whether the device is accessible.

This function is used to ensure that the device has restarted completely after `firmware update` , `reset all settings` or `change IP address` .

Request mode: GET/POST [ip]/api/ping

Administrator Rights	Logged-in
No	No

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Detecting your device.

Input Example

None

Output Example

<pre>{ "status": 0, "code": "Success" }</pre>

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Reboot device

1. API Description

This API is used to reboot the device. After rebooting, you need to log in again. You can use [Ping Test](#) to check whether the device is rebooted.

Request mode: GET/POST [ip]/api/reboot

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description
delay	Int	Delay time before rebooting, in seconds.
estimate-sec	Int	Estimated time for a restart, in seconds.

4. Example

Rebooting your device.

Input Example

None

Output Example

<pre>{ "status": 0, "code": "Success", "delay": 5, "estimate-sec": 15 }</pre>

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Check factory reset permission

1. API Description

This API is used to check whether the device is allowed to be reset.

Request mode: GET/POST [ip]/api/factory-reset-permission

Administrator Rights	Logged-in
No	No

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description
reset-enable	Boolean	Whether it is allowed to reset your device. true: Yes; false: No

4. Example

Checking whether the device is allowed to be reset.

Input Example

None

Output Example

<pre>{ "status": 0, "code": "Success", "reset-enable": true }</pre>

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Reset device

1. API Description

This API is used to reset your device to default settings.

API request: GET/POST [ip]/api/factory-reset

Administrator Rights	Logged-in
No	No

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description
estimated-duration	Int	Estimated duration

4. Example

Resetting device.

Input Example

None

Output Example

<pre>{ "estimated-duration":30, "status": 0, "code": "Success" }</pre>
--

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
31	MW_STATUS_NOT_PERMITTED	No permission

Schedule automatic reboots

1. API Description

This API is used to schedule automatic reboots for your device.

Request mode: POST [ip]/api/system/auto-reboot

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
enable	Yes	Boolean	Whether to enable auto-reboot true: Yes; false: No
hour	Yes	Int	Time to auto-reboot, hour
min	Yes	Int	Time to auto-reboot, minute
week	Yes	[Array]	Weekly repeat 1: Monday; 2: Tuesday; 3: Wednesday; 4: Thursday; 5: Friday; 6: Saturday; 7: Sunday

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Scheduling automatic reboots for your device.

Input Example

```
{
  "enable":true,
  "hour":23,
  "min":59,
  "week":[1,2]
}
```

Output Example

```
{
  "status": 0,
  "code": "Success"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	The parameters are missing or incorrect

Get device info

1. API Description

This API is used to get the device information. Please check whether each sub-item of capability is true, and only when it is true, the corresponding API can be accessed.

Request mode: POST [ip]/api/system/device-info

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description
device-name	String	The device's name
product-id	String	The device's ID
product-name	String	The product family name
hardware-rev	String	The hardware version
serial-number	String	The device's serial number
firmware-ver	String	The device's firmware version
firmware-name	String	The device's firmware name
build-time	String	The device's firmware build time
capability	CapabilityInfo	The device's capability list.

CapabilityInfo

Name	Type	Description
support-timezone	Boolean	Whether the device supports time zone true: Yes; false: No
support-ntp	Boolean	Whether the device supports NTP true: Yes; false: No
support-station	Boolean	Whether the device supports Wi-Fi mode true: Yes; false: No
support-ap	Boolean	Whether the device supports AP mode true: Yes; false: No
support-online-upgrade	Boolean	Whether the device supports online upgrade. true: Yes; false: No
support-sc-control	Boolean	Whether the device supports Control Hub true: Yes; false: No
support-if-prio	Boolean	Whether the device supports network card priority setting true: Yes; false: No
support-usb-ncm	Boolean	Whether the device supports enabling or disabling USB NET, which taking effect after rebooting device . true: Enabled; false: Disabled
support-wifi-mutex	Boolean	The WiFi supports working in AP and STA modes simultaneously (only applicable to USB Fusion) true: Yes; false: No
support-ipv6	Boolean	Whether the device supports IPv6. true: Yes; false: No

4. Example

Getting the device information.

Input Example

None

Output Example

```
{
  "device-name": "Pro Router ONE",
  "product-id": "0x601",
  "product-name": "Pro Router ONE",
  "hardware-rev": "B",
  "serial-number": "0123456789",
  "firmware-ver": "0.9.210",
  "firmware-name": "Development",
  "build-time": "2023-04-14 06:48:13",
  "capability": {
    "support-usbc-name": false,
    "support-timezone": true,
    "support-ntp": true,
    "support-station": true,
    "support-ap": true,
    "support-online-upgrade": false,
    "support-sc-control": false,
    "support-if-prio": false,
    "support-usb-ncm": false,
    "support-wifi-mutex": false,
    "support-ipv6": true
  },
  "status": 0,
  "code": "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Get basic info

1. API Description

This API is used to get the device's basic information, including CPU, memory, up time, etc.

Request mode: POST [ip]/api/system/info

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description
device-name	String	The device's name
mdns-url	String	mDNS URL
uptime	Int	The uptime, in seconds
cpu	CPUInfo	CPU information
mem	MemInfo	Memory information
datetime	DateTimeInfo	The system time
auto-reboot	AutoRebootInfo	The auto-reboot information

CPUInfo

Name	Type	Description
total	Int	The total time of CPU
idle	Int	The idle time of CPU
usage	Int	The CPU usage x 100

MemInfo

Name	Type	Description
total	Int	The system's total memory, in KB
avail	Int	The system's available memory, in KB

DateTimeInfo

Name	Type	Description
cur-time	String	The system time Time format: yyyy-MM-dd HH:mm:ss
zonename	String	The time zone name
ntp-enable	Boolean	Whether NTP is enabled true: Yes; false: No
ntp-server1	String	The NTP server 1
ntp-server2	String	The NTP server 2

AutoRebootInfo

Name	Type	Description
enable	Boolean	Enable auto-reboot true: Enabled; false: Disabled
hour	Int	Time to auto-reboot, hour
min	Int	Time to auto-reboot, minute
week	[Array]	Weekly repeat 1: Monday; 2: Tuesday; 3: Wednesday; 4: Thursday; 5: Friday; 6: Saturday; 7: Sunday

4. Example

Getting the device's basic information.

Input Example

None

Output Example

```
{
  "device-name": "USB Fusion",
  "mdns-url": "xxxxx.local",
  "uptime": 8410,
  "cpu": {
    "total": 1624896,
    "idle": 1281701,
    "usage": 2110
  },
  "mem": {
    "total": 8069612,
    "avail": 7171768
  },
  "datetime": {
    "cur-time": "2021-12-20 13:25:57",
    "zonename": "Asia/Shanghai",
    "ntp-enable": true,
    "ntp-server1": "0.pool.ntp.org",
    "ntp-server2": "1.pool.ntp.org"
  },
  "auto-reboot": {
    "enable": true,
    "hour": 23,
    "min": 59,
    "week": [
      1,
      2
    ]
  },
  "status": 0,
  "code": "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Set device name

1. API Description

This API is used to set the device name.

Request mode: POST [ip]/api/system/set-device-name

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
name	Yes	String	The device name

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description
ext-need-reboot	Boolean	Whether a reboot is required. true: Yes; false: No

4. Example

Setting the device name to Magewell-1.

Input Example

```
{
  "name": "Magewell-1"
}
```

Output Example

```
{
  "status": 0,
  "code": "SUCCESS",
  "ext-need-reboot": true
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	The parameters are missing or incorrect

Set date and time

1. API Description

This API is used to set the date and time.

Request mode: POST [ip]/api/system/set-date-time

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
ntp-enable	Yes	Boolean	Whether to enable NTP true: Yes; false: No
ntp-server1	Yes	String	The NTP server 1
ntp-server2	Yes	String	The NTP server 2
time	No	String	The system time, required when ntp-enable = false. Time format: yyyy-MM-dd HH:mm:ss

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Setting the date and time manually.

Input Example

```
{
  "ntp-enable": false,
  "ntp-server1": "0.pool.ntp.org",
  "ntp-server2": "1.pool.ntp.org",
  "time": "2024-04-11 09:50:18"
}
```

Output Example

```
{
  "status": 0,
  "code": "Success"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	The parameters are missing or incorrect

Set time zone

1. API Description

This API is used to set time zone.

Request mode: POST [ip]/api/system/timezone-set

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
zonename	Yes	String	The time zone name

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Setting time zone.

Input Example

```
{
  "zonename": "Asia/Shanghai"
}
```

Output Example

```
{
  "status": 0,
  "code": "Success"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	Missing required parameters
16	MW_STATUS_NOT_EXIST	Time zone does not exist

Obtain summary information

1. API Description

This API is used to obtain summary information.

Request mode: POST [ip]/api/system/summary/get

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Integer	Status code.
code	String	Status description.
data	struct	Refer to summary.

Summary

Name	Type	Description
cpu-temp	Integer	CPU temperature.

4. Example

Obtaining summary information.

Input Example

None

Output Example

```
{
  "status": 0,
  "code": "Success",
  "data": {
    "cpu_temp": 54
  }
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Obtain USB mode

1. API Description

This API is used to obtain current USB mode.

Request mode: GET/POST [ip]/api/system/usb-mode/get

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Integer	Status code
code	String	Status discription.
data	struct	Refer to USB mode.

USB Mode

Name	Type	Description
mode	String	Options are "Normal mode" (Video conferencing) or "Content mode" (Content sharing).

4. Example

Obtaining current USB mode.

Input Example

None

Output Example

```
{
  "data": {
    "mode": "Normal mode"
  },
  "status": 0,
  "code": "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Set USB mode

1. API Description

This API is used to set usb mode. Only the parameters that need to be modified are required; unchanged parameters can be omitted.

Request mode: POST [ip]/api/system/usb-mode/update

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

Name	Required	Type	Description
mode	Yes	String	"Normal mode": Video conferencing mode. "Content mode": Content sharing mode.

3. Output Parameters

Name	Type	Description
status	Int	Status code.
code	String	Status description.

4. Example

Modifying the USB mode.

Input Example

```
{
  "mode": "Content mode"
}
```

Output Example

```
{
  "status": 0,
  "code" : "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Export the device configurations

1.API Description

This API is used to export the device configurations.

Request mode: POST [ip]/api/report/html/export

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
filename	Yes	String	File name of the exported file.

3. Output Parameters

An HTML file is exported.

4. Example

Exporting the device configurations.

Input Example

```
{
  "filename": "Report_2025_02_27_18_26_05.html"
}
```

Output Example

```
Report_2025_02_27_18_26_05.html
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Obtain video settings

1.API Description

This API is used to obtain video settings.

Request mode: GET/POST [ip]/api/video/config/get

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

None.

3. Output Parameters

Name	Type	Description
status	Integer	Status code
code	String	Status description.
data	struct	Refer to video settings.

Video Settings

Name	Type	Description
h_flip	Boolean	Whether to mirror.
v_flip	Boolean	Whether to flip.
ar_convert_mode	String	Aspect ratio conversion modes include "Windowbox": minimum proportion conversion, fill the unfilled part with black edges; "Crop": maximum proportion conversion, cut off the excess part; "Stretch": tile.

4. Example

Obtaining the video settings.

Input Example

None

Output Example

```
{
  "status": 0,
  "code" : "Success",
  "data" : {
    "h_flip": true,
    "v_flip": false,
    "ar_convert_mode": "Windowbox"
  }
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Update video settings

1.API Description

This API is used to update video settings. Only the parameters to be modified are required, and the unchanged ones can be omitted.

Request mode: POST [ip]/api/video/config/update

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

Name	Type	Description
data	struct	Refer to video settings.

Video Settings

Name	Required	Type	Description
h_flip	No	Boolean	Whether to mirror.
v_flip	No	Boolean	Whether to flip.
ar_convert_mode	No	String	Aspect ratio conversion modes include "Windowbox": minimum proportion conversion, fill the unfilled part with black edges; "Crop": maximum proportion conversion, cut off the excess part; "Stretch": tile.

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description.

4. Example

Updating the video settings.

Input Example

```
{
  "data" : {
    "h_flip": true,
    "v_flip": false,
    "ar_convert_mode": "Windowbox"
  }
}
```

Output Example

```
{
  "status": 0,
  "code" : "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Obtain NDI settings

1. API Description

This API is used to obtain NDI discovery settings.

Request mode: GET/POST [ip]/api/ndi/config/get

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Integer	Status code
code	String	Status description.
data	struct	Refer to NDI settings.

NDI Settings

Name	Type	Description
enable	Boolean	Whether to enable NDI discovery.
discovery_server	String	For example, sever1, server2...
groups	String	NDI group information

4. Example

Obtaining NDI discovery settings.

Input Example

None

Output Example

```
{
  "status": 0,
  "code" : "Success",
  "data" : {
    "enable": true,
    "discovery_server": "192.168.66.1,192.168.66.2",
    "groups": "public"
  }
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Set NDI discovery

1. API Description

This API is used to set NDI discovery.

Request mode: POST [ip]/api/ndi/config/update

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

Name	Type	Description
data	struct	Refer to NDI settings.

NDI Settings

Name	Required	Type	Description
enable	Yes	Boolean	Whether to enable NDI discovery.
discovery_server	No	String	For example, server1, server2...
groups	No	String	NDI group information.

3. Output Parameters

Name	Type	Description
status	Integer	Status code.
code	String	Status description.

4. Example

Setting NDI discovery parameters.

Input Example

```
{
  "data" : {
    "enable": true,
    "discovery_server": "192.168.66.1,192.168.66.2",
    "groups": "public"
  }
}
```

Output Example

```
{
  "status": 0,
  "code" : "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Upload the no-signal images

1.API Description

This API is used to upload a no-signal image, which will be displayed when there is no input signal.

- The file format must be *.png
- The file must be uploaded using POST multipart/form-data
- Existing image will be automatically overwritten.
- If no image is uploaded, the system default image will be used; the default image cannot be deleted.

Request mode: POST [ip]/api/resource/image/upload

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

Name	Type	Description
id	String	Image ID
type	String	Reserved.

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description.

4. Example

Uploading an image for no-signal display.

Input Example

```
-----WebKitFormBoundaryIQYf0LWb1KdjY6f3
Content-Disposition: form-data; name="file"; filename="no_signal.png"
Content-Type: application/octet-stream

-----WebKitFormBoundaryIQYf0LWb1KdjY6f3--
```

Output Example

```
{
  "status": 0,
  "code" : "Success"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
18	MW_STATUS_TOO_LARGE	The file is too large.
23	MW_STATUS_FILE_TYPE_ERROR	The file format is not correct.

Delete the no-signal images

1.API Description

This API is used to delete the no-signal image(s).

Request mode: POST [ip]/api/resource/image/delete

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

Name	Type	Description
id	String	Image ID
type	String	Reserved.

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description.

4. Example

Deleting a no-signal image.

Input Example

```
{
  "id": "no_signal_1"
}
```

Output Example

```
{
  "status": 0,
  "code": "success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Obtain the no-signal images

1.API Description

This API is used to obtain the information of no signal images.

- id is unique and is a preset constant value, which cannot be modified. For example, if there are 3 no-signal images in the device, the id can be defined as no_signal_1, no_signal_2, and no_signal_3.
- type is reserved for extension. For no-signal images, the type is "simple".

Request mode: GET/POST [ip]/api/resource/image/get

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

Name	Type	Description
id	String	Image ID
type	String	Reserved.

3. Output Parameters

Name	Type	Description
status	Integer	Status code
code	String	Status description.
data	struct	Refer to the image information.

Image Information

Name	Type	Description
id	String	Image ID
type	String	Type, optional, reserved for future extension.
path	String	Image path.
is_default	Boolean	Whether it is the default image, valid values: true/false.

4. Example

Obtaining the information of the no-signal screen image.

Input Example

```
{
  "id": "no_signal_1",
  "type": "simple"
}
```


Output Example

```
{
  "status": 0,
  "code": "Success",
  "data": {
    "id": "no_signal_1",
    "type": "simple",
    "path": "/static/img/no_signal.png",
    "is_default": true
  }
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Obtain the source list

1. API Description

This API is used to obtain the source list.

Request mode: GET/POST [ip]/api/source/list

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

Name	Required	Type	Description
page	No	Integer	Page number.
page_size	No	Integer	The number of items per page.
type	Yes	String	"static" indicates a manually added source, and "dynamic" indicates a source discovered by ndi discovery.

3. Output Parameters

Name	Type	Description
status	Integer	Status code.
code	String	Status description.
page	Integer	Page number.
page_size	Integer	The number of items per page
total	Integer	The number of sources.
selected	Integer	ID of the currently selected source.
data	Array	List of sources.

Data

Name	Type	Description
id	Int	Source id.
config	struct	Refer to the Add sources .

4. Example

Obtaining the list of manually added sources information.

Input Example

```
GET/POST /api/source/list?type=static
```


Output Example

```
{
  "status": 0,
  "code" : "Success",
  "page": 2,
  "page_size": 25,
  "total": 100,
  "selected": 1,
  "data":[
    {
      "id":1,
      "config": {
        "name": "name1",
        "protocol": "ndi",
        "type": "ndi",
        "data": {
          "name": "ULTRA ENCODE (C315230423002-2)",
          "url": "100.100.33.21:5000",
          "low_bw": false,
          "transport": "tcp",
          "pts_mode": "auto",
          "buffer_ms": 60
        }
      }
    },
    {
      "id":2,
      "config": {
        "name": "name1",
        "protocol": "rtsp",
        "type": "url",
        "data": {
          "url": "100.100.33.21:5000",
          "buffer_ms": 60,
          "ptz_en": true,
          "ptz": {
            "protocol": "VISCA over UDP",
            "ip": "192.168.1.1",
            "port": 3000,
            "device_id": 1,
            "message_header": true,
            "invert_pan": false,
            "invert_tilt": false
          }
        }
      }
    }
  ]
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Add sources

1. API Description

This API is used to add sources.

Request mode: POST [ip]/api/source/add

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

Reference source configuration; the following are explanations and examples for each protocol.

Source Settings

- The content of the data field vary according to the value of the type field. When type is url, the data field is the URL source; otherwise, there is an ext field describing its data structure. When type is d_ndi, the data field is the auto-discovered source; when type is ndi, the data field is the custom-added NDI source.
- The protocol field represents the protocol type and supports the following types: "ndi", "rtmp", "ts-srt", "ts-udp", "ts-rtp", "rtsp", "http".

Name	Required	Type	Description
name	Yes	String	Source name.
protocol	Yes	String	Protocol type.
type	Yes	String	Type includes url, d_ndi, ndi
data	Yes	Struct	When type is 'url', specify the URL source; when type is 'd_ndi', specify the auto-discovered source; when type is 'ndi', specify the manual-added NDI source.

URL Source Settings

Name	Required	Type	Description
url	Yes	String	URL address, containing only standard stream information (e.g., IP, port).
buffer-ms	Yes	Integer	Buffer time in milliseconds (ms).
ptz_en	Yes	Boolean	PTZ Control Enable: On the Web UI, the PTZ settings page is collapsed by default. When this parameter is set to true, the PTZ settings section will be not collapsed.
ptz	No	Struct	When the data source is a camera and supports PTZ control, this parameter can be set, referring to the PTZ settings.

PTZ Settings

Name	Required	Type	Description
protocol	Yes	String	PTZ control protocol, value values: "VISCA over UDP", other protocols can be extended later.
ip	Yes	String	PTZ IP address
port	Yes	Integer	PTZ port
device_id	Yes	Integer	PTZ ID
message_header	No	Boolean	Whether to add VISCA UDP message header
invert_pan	No	Boolean	Whether to invert the horizontal control direction
invert_tilt	No	Boolean	Whether to invert the vertical control direction

Automate NDI Discovery Sources

Name	Required	Type	Description
name	Yes	String	NDI stream name
url	Yes	String	NDI address

Manual-added NDI Sources

Name	Required	Type	Description
name	Yes	String	NDI stream name
url	Yes	String	NDI address
low_bw	No	Boolean	Whether to enable low-bandwidth mode, true to enable, false to diable.
transport	No	String	Transport mode includes "auto", "multicast", "udp", "rudp", "tcp", "multi-tcp".
pts_mode	No	String	Timestamp mode includes "auto", "timecode", "timestamp"
buffer_ms	Yes	Integer	Buffer time in milliseconds.

NDI URL

100.100.10.1:5000

URL	Description
100.100.10.1:5000	IP address and port of the NDI source.

HTTP(S) URL

http://100.100.10.1:5000?mw-bitrate=4096&mw-buffer-duration=150

URL	Description
http://100.100.10.1:5000	A standard http url contains IP address and port number.
mw-bitrate	Bitrate
mw-buffer-duration	Buffer time in milliseconds, 150ms at least for HTTP/HLS.

RTSP URL

rtsp://127.0.0.1?mw-tcp-first=true&mw-buffer-duration=60

URL	Description
rtsp://127.0.0.1	A standard rtsp url.
mw-tcp-first	TCP first, value values: true/false
mw-buffer-duration	Buffer time in milliseconds.

RTMP URL

rtmp://127.0.0.1/live/[key]?mw-buffer-duration=60

URL	Description
rtmp://127.0.0.1	A standard rtmp url
key	Key, must be the last part of the url, slash (/) is not supported.
mw-buffer-duration	Buffer time in milliseconds.

MPEG-TS over UDP URL

```
// Multicast
udp://@ip:port?mw-audio-track=1&mw-buffer-duration=60

// Unicast
udp://@0.0.0.0:port?mw-audio-track=1&mw-buffer-duration=60
```

URL	Description
ip	Unicast: 0.0.0.0 multicast: 224.0.0.0 ~ 239.255.255.255
port	Port number, range: 1 ~ 65535.
mw-audio-track	Audio track, 1 ~ 8.
mw-buffer-duration	Buffer time in milliseconds.

MPEG-TS over SRT URL

```
// Caller
srt://ip:port?mode=caller&streamid=12323&passphrase=12345678914&latency=123&mw-audio-track=1&mw-buffer-duration=60

// Listener
srt://0.0.0.0:port?mode=listener&streamid=12323&passphrase=12345678914&latency=123&mw-audio-track=1&mw-buffer-duration=60
```

URL	Description
ip	Listener: 0.0.0.0 caller: legal ip address (can't be 0.0.0.0)
port	Port number, value range: 1 ~ 65535
mode	Mode, value values: caller/listener
streamid	Streamid
latency	Delay time, value range: 20 ~ 8000
encryption	Whether encryption, value values: true/false
passphrase	Encryption password, optional, set when encryption is needed, length: 10 ~ 79
mw-audio-track	Audio-track, value range: 1 ~ 8
mw-buffer-duration	Buffer time in milliseconds.

MPEG-TS over RTP URL

```
// Multicast
rtp://ip:port?mw-ts-progid=123&mw-audio-track=1&mw-buffer-duration=60

// Unicast
rtp://0.0.0.0:port?mw-ts-progid=123&mw-audio-track=1&mw-buffer-duration=60
```

URL	Description
ip	Unicast: 0.0.0.0 Multicast: IP range 224.0.0.0 ~ 239.255.255.255
port	port number, value range: 1 ~ 65535
mw-audio-track	audio-track, value range: 1 ~ 8
mw-ts-progid	progid, optional.
mw-buffer-duration	Buffer time in milliseconds.

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Adding NDI sources.

Input Example

```
{
  "name": "name1",
  "protocol": "ndi",
  "type": "ndi",
  "data": {
    "name": "ULTRA ENCODE (C315230423002-2)",
    "url": "100.100.330.21:5000",
    "low_bw": false,
    "transport": "tcp",
    "pts_mode": "auto",
    "buffer_ms": 60
  }
}
```

Output Example

```
{
  "status": 0,
  "code" : "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Modify sources

1. API Description

This API is used to modify sources. Only the parameters that need to be modified are required to be transmitted; unchanged parameters can be omitted.

Request mode: POST [ip]/api/source/update

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

Name	Required	Type	Description
id	Yes	Integer	The unique node ID.
config	Yes	struct	Refer to the Add sources .

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description.

4. Example

Modifying the NDI source ID=1.

Input Example

```
{
  "id": 1,
  "config": {
    "name": "name1",
    "protocol": "ndi",
    "type": "ndi",
    "data": {
      "name": "ULTRA ENCODE (C315230423002-2)",
      "url": "100.100.33.21:5000",
      "low_bw": false,
      "transport": "tcp",
      "pts_mode": "auto",
      "buffer_ms": 60
    }
  }
}
```

Output Example

```
{
  "status": 0,
  "code" : "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Delete a source

1. API Description

This API is used to delete a source.

Request mode: POST [ip]/api/source/delete

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

Name	Required	Type	Description
id	Yes	Integer or Array	The unique node ID.

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Deleting a source.

Input Example

```
{
  "id": [1]
}
```

Output Example

```
{
  "status": 0,
  "code" : "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Enable a source

1. API Description

This API is used to enable a source.

- When id > 0, it is a valid ID, and the source corresponding to the ID will be enabled.
- When id <= 0, it is an invalid ID, and all sources will be disabled.

Request mode: POST [ip]/api/source/select

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

Name	Required	Type	Description
id	Yes	Integer	Unique node ID.

3. Output Parameters

Name	Type	Description
status	Integer	Status code.
code	String	Status description.

4. Example

Enabling a source.

Input Example

```
{
  "id": 1
}
```

Output Example

```
{
  "status": 0,
  "code" : "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Obtain stream status

1. API Description

This API is used to obtain stream status.

Request mode: GET/POST [ip]/api/stream/status/get

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Integer	Status code
code	String	Status description
data	struct	Refer to stream status.

Stream Status

Name	Type	Description
name	String	Name of current stream.
protocol	String	Protocol of current stream.
state	Integer	Connection status. 2 indicates connected.
uptime	Integer	Up time in milliseconds.
extra	struct	Refer to tally status.
video	struct	Refer to video status.
audio	struct	Refer to audio status.

Tally Status (NDI)

Name	Type	Description
tally-preview	Boolean	Preview indicator (reserved).
tally-program	Boolean	Program indicator (reserved).

Video Status

Name	Type	Description
codec	String	Video format.
jitter	Integer	Video jitter.
kbps	Integer	Video biterate.
width	Integer	Video width.
height	Integer	Video height.
field_rate	Double	Video field rate.
drops	Integer	The number of video drop packets.

Audio Status

Name	Type	Description
codec	String	Audio format.
jitter	Integer	Audio jitter.
kbps	Integer	Audio bitrate.
sample_rate	Integer	Sample rate.
bit_count	Integer	Bit depth.
channels	Integer	The number of audio channels.
drops	Integer	The number of audio drop packets.

4. Example

Obtain stream status.

Input Example

None

Output Example

```
{
  "data": {
    "audio": {
      "codec": "ADTS",
      "jitter": 118856,
      "kbps": 123,
      "sample_rate": 48000,
      "bit_count": 16,
      "channels": 2,
      "drops": 0
    },
    "video": {
      "codec": "H264",
      "jitter": 210575,
      "kbps": 8029,
      "scan_mode": "progressive",
      "width": 1920,
      "height": 1080,
      "field_rate": 60.0,
      "drops": 0
    },
    "extra": {
      "tally_preview": false,
      "tally_program": false
    },
    "state": 2,
    "uptime": 2028,
    "name": "NDI Server",
    "protocol": "ndi"
  },
  "status": 0,
  "code": "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Get network card info

1. API Description

This API is used to get network card information.

Request mode: POST [ip]/api/network/if-info

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description
device-name	String	The device name
net	Array of NetData	The network card list
ext-mobile-first	Booean	Reserved

NetData

Name	Type	Description
support-enable	Boolean	Whether to support Enable/Disable Wi-Fi/AP true: Yes; false: No
enable	Boolean	Whether the network card service is enabled true: Yes; false: No
prio	Int	Network card priority 0: No priority, generally referring to USB, ETH CONSOLE; 1 ~ 99 is normal
iface	String	The network card name
type	Int	The network card type 0: Ethernet 1: Wi-Fi/AP 2: USB Sharing 3: USB NET 4: Built-in 4G/5G 5: Bridge
use-dhcp	Boolean	Whether to enable DHCP to get IP address true: Yes; false: No
ipaddr	String	IP address
ipv6addr	String	IPv6 address
netmask	String	The subnet mask
gateway	String	The gateway address
dns1	String	Primary DNS. Empty characters mean not set.
dns2	String	Secondary DNS. Empty characters mean not set.
mac	String	The MAC address
link-speed	Int	The link speed 10: 10Mbps 100: 100Mbps 1000: 1Gbps 2500: 2.5Gbps 10000: 10Gbps 12: full-speed 480: high-speed 5000: super-speed-5g 10000: super-speed-10g
link-state	Int	The link state 0: Network port exception 1: Not connected 2: Connected
tx-speed-kbps	Int	The sending speed (Kbps)
rx-speed-kbps	Int	The receiving speed (Kbps)
mode	Int	The working mode of wireless network card 0: STA mode; 1: AP mode
mode-lock	Boolean	Whether the wireless card working mode is locked or not true: Yes; false: No
ssid	String	The AP name
reboot-require	Boolean	Whether it requires reboot when the wireless network card switches working mode true: Yes; false: No

Name	Type	Description
enable-ncm	Boolean	Whether USB NET is enabled. true: Enabled; false: Disabled
sim-state	Int	The SIM card state 0: not ready 1: ready 2: PIN 3: PUK
pin-remaind	Int	The remaining PIN times
standard	Int	Cellular network signal types 0: Unknown; 2: 2G; 3: 3G; 4: 4G; 5: 5G Signal quality for 3G and below refers to RSSI Signal reference for 4G/5G is RSRP
rsi	Int	Cellular Network Signal Strength Very Good: RSSI > -65dBm Good: RSSI = -65 ~ -75dBm Average: RSSI = -75 ~ -85dBm Poor: RSSI = -85 ~ -95dBm Very Poor: RSSI < -95dBm
rsrp	Int	4G/5G RSRP Very Good: RSRP>-115dBm Good: RSRP=-120 to -115dBm Average: RSRP=-125 to -120dBm Poor: RSRP=-130 to -125dBm Very Poor: RSRP<-130dBm
rsrq	Int	4G/5G RSRQ value, in dB
sinr	Int	4G/5G SINR value, in dB
imei-no	String	IMEI information
operator	String	The operator, including CHN-MOBLIE, CHN-UNICOM, CHN-CT, Orange, O2, Vodafone, AT&T, T-Mobile, Verizon, Google Fi
phone-number	String	SIM number
vendor	String	The vendor of the 4G/5G module
product	String	The product information of the 4G module

4. Example

Obtaining network card information.

Input Example

None

Output Example

```
{
  "device-name": "00A601230913015",
  "ext-mobile-first": false,
  "net": [
    {
      "support-enable": false,
      "enable": true,
      "prio": 34,
      "iface": "eth0",
      "type": 0,
      "use-dhcp": true,
      "ipaddr": "10.10.6.222",
      "netmask": "255.255.240.0",
      "gateway": "10.10.0.1",
      "dns1": "10.10.1.3",
      "dns2": "",
      "ipv6addr": [
        "fe80::d2c8:57ff:fe81:c75e"
      ],
      "mac": "d0:c8:57:81:c7:5e",
      "link-speed": 1000,
      "link-state": 2,
      "tx-speed-kbps": 0,
      "rx-speed-kbps": 35
    }
  ]
  {
    "support-enable": true,
    "enable": true,
    "prio": 41,
    "iface": "wlan0",
    "type": 1,
    "mode": 1,
    "mode-lock": false,
    "ssid": "Magewell_ASR_3015_5G",
    "reboot-require": false,
    "use-dhcp": true,
    "ipaddr": "",
    "netmask": "",
    "gateway": "",
    "dns1": "",
    "dns2": "",
    "ipv6addr": [
      "fe80::d2c8:57ff:fe81:b7f1"
    ],
    "mac": "d0:c8:57:81:b7:f1",
    "link-speed": -1,
    "link-state": 2,
    "tx-speed-kbps": 0,
    "rx-speed-kbps": 0
  }
  {
    "support-enable": false,
    "enable": true,
    "prio": 36,
    "iface": "wwan0",
    "type": 4,
    "use-dhcp": true,
    "ipaddr": "",
    "netmask": "",
    "gateway": "",
```

```

        "dns1": "",
        "dns2": "",
        "ipv6addr": [
        ],
        "mac": "1a:97:9f:84:3a:e2",
        "link-speed": -1,
        "link-state": 0,
        "tx-speed-kbps": 0,
        "rx-speed-kbps": 0,
        "enable-ipv6": false,
        "sim-state": 2,
        "pin-remaind": 3,
        "standard": 0,
        "rssi": 0,
        "rsrp": 0,
        "rsrq": 0,
        "sinr": 0,
        "band": "",
        "imei-no": "",
        "phone-number": "",
        "operator": "",
        "version": "",
        "vendor": "Quectel Wireless Solutions Co., Ltd.",
        "product": "EC20\EC25\EM05-CE LTE modem"
    }
],
"status": 0,
"code": "Success"
}

```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Configure Ethernet

1. API Description

This API is used to configure Ethernet.

Request mode: POST [ip]/api/network/if-set

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
iface	Yes	String	The network card name, eth0
use-dhcp	Yes	Boolean	Whether to enable DHCP to get IP address true: Yes; false: No
ipaddr	No	String	The IP address, which must be filled in when use-dhcp is false
netmask	No	String	The subnet mask, which must be filled in when use-dhcp is false
gateway	No	String	The gateway address, which must be filled in when use-dhcp is false
dns1	No	String	Primary DNS
dns2	No	String	Secondary DNS

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Configuring Ethernet.

Input Example

```
{
  "iface": "eth0",
  "use-dhcp": false,
  "ipaddr": "10.10.10.88",
  "netmask": "255.255.240.0",
  "gateway": "10.10.0.1",
  "dns1": "10.10.0.3",
  "dns2": "",
}
```

Output Example

```
{
  "status": 0,
  "code": "Success"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	Missing required parameters
31	MW_STATUS_NOT_PERMITTED	The Ethernet card is missing

Configure USB NET

1. API Description

This API is used to configure USB NET.

Request mode: POST [ip]/api/network/usb-config

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
iface	Yes	String	The network card name, usb0
ipaddr	Yes	String	IP address

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Configuring USB NET.

Input Example

```
{
  "iface": "usb0",
  "ipaddr": "192.168.66.1"
}
```

Output Example

```
{
  "status": 0,
  "code": "Success"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	Missing required parameters
12	MW_STATUS_DEVICE_LOST	The USB network card is missing

Log in

1. API Description

This API is used to log in. After the user logs in successfully, the Session ID is stored in the Cookie (Cookie: sid-[serial number]=t2i704wbvoy51y408p588bpji010ibp0).

Request mode: POST [ip]/api/user/login

Administrator Rights	Logged-in
No	No

2. Input Parameters

Name	Required	Type	Description
username	Yes	String	The user name, obtained using Get system user list
password	Yes	String	The password which is encrypted with sha256

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description
sid	String	User ID

4. Example

Logging in.

Input Example

```
{
  "username": "test",
  "password": "c4ca4238a0b923820dcc509a6f75849b"
}
```

Output Example

Response Headers

```
Content-Type: application/json; charset=utf-8
Expires: 0
Set-Cookie: sid-A506220808450=6440wa6u5wfw8wv43f91v55cqkctnpv6
```

Response Body

```
{
  "status": 0,
  "code": "Success",
  "sid": "6440wa6u5wfw8wv43f91v55cqkctnpv6"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	The parameters are missing
16	MW_STATUS_NOT_EXIST	The user does not exist
36	MW_STATUS_AUTH_FAILED	Wrong password

Log out

1. API Description

This API is used to log out and return to the login screen.

Request mode: POST [ip]/api/user/logout

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Logging out.

Input Example

None

Output Example

<pre>{ "status": 0, "code": "Success" }</pre>

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
37	MW_STATUS_NOT_LOGGED_IN	Not logged in, Invalid Log-in

Get system user list

1. API Description

This API is used to obtain the user list of the system.

Request mode: POST [ip]/api/user/get-all

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description
users	Array of user	User list

USER

Name	Type	Description
username	String	User name
group	String	User group, Admin or User

4. Example

Obtaining the user list.

Input Example

None

Output Example

```
{
  "users": [
    {
      "username": "Admin",
      "group": "Admin"
    },
    {
      "username": "test",
      "group": "User"
    }
  ],
  "status": 0,
  "code": "Success"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
31	NOT_PERMITTED	Only administrators have permission

Add a user

1. API Description

This API is used to add a user.

Request mode: POST [ip]/api/user/add

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
username	Yes	String	The user name
password	Yes	String	The password which is encrypted with sha256

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Adding a user.

Input Example

```
{
  "username": "test",
  "password": "c4ca4238a0b923820dcc509a6f75849b"
}
```

Output Example

```
{
  "status": 0,
  "code": "Success"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	The parameters are missing
31	NOT_PERMITTED	Only administrators have permission
41	CONSTRAINT_VIOLATION	The existed user

Delete a user

1. API Description

This API is used to delete a user.

Request mode: POST [ip]/api/user/del

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
username	Yes	String	The user name, obtained using Get system user list

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Deleting a user.

Input Example

```
{
  "username": "test"
}
```

Output Example

```
{
  "status": 0,
  "code": "Success"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	The parameters are missing
31	NOT_PERMITTED	Only administrators have permission

Change login password

1. API Description

This API is used to change the user's login password. The current password must be input when changing the password.

Request mode: POST [ip]/api/user/ch-password

Administrator Rights	Logged-in
No	Yes

2. Input Parameters

Name	Required	Type	Description
password	Yes	String	The current password which is encrypted with sha256
new-password	Yes	String	The new password which is encrypted with sha256

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Changing the current password.

Input Example

```
{
  "password": "c4ca4238a0b923820dcc509a6f75849b",
  "new-password": "c1c224b03cd9bc7b6a86d77f5dace40191766c485cd55dc48caf9ac873335d6f"
}
```

Output Example

```
{
  "status": 0,
  "code": "Success"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	Missing required parameters
39	MISMATCH	Wrong current password

Reset password

1. API Description

This API is used to reset the password, and it does not need to input the current password.

Request mode: POST [ip]/api/user/set-password

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
username	Yes	String	The user name, obtained using Get system user list
password	Yes	String	The password which is encrypted with sha256

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Resetting the "test" user's password.

Input Example

```
{
  "username": "test",
  "password": "c4ca4238a0b923820dcc509a6f75849b"
}
```

Output Example

```
{
  "status": 0,
  "code": "Success"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	Missing required parameters
16	NOT_EXIST	The user does not exist
31	NOT_PERMITTED	Only administrators have permission

Upload firmware

1. API Description

This API is used to upload firmware. The upload file format should be .mwf.

Request mode: POST [ip]/api/system/upload-fw

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Binary encapsulated attachment data.

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description
need-clean-data	Boolean	Whether user data is cleared when upgrading true: Yes; false: No
up-to-date	Boolean	Whether the firmware is the latest version true: Yes; false: No
version	String	The firmware version to upload
size	Int	The firmware size to upload

4. Example

Uploading firmware.

Input Example

```
-----WebKitFormBoundaryIQYf0LWb1KdjY6f3
Content-Disposition: form-data; name="file"; filename="usb_fusion_rev_a_2_5_0.mwf"
Content-Type: application/octet-stream

-----WebKitFormBoundaryIQYf0LWb1KdjY6f3--
```

Output Example

```
{
  "status": 0,
  "code": "Success",
  "need-clean-data": false,
  "up-to-date": false,
  "version": "2.5.0",
  "size": 258818308
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
23	MW_STATUS_FILE_TYPE_ERROR	The file is error

Upgrade firmware

1. API Description

This API is used to upgrade firmware. During the upgrade process, you can [get firmware version and upgrade status](#).

Request mode: POST [ip]/api/upgrade/update

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
is-online	Yes	Boolean	Whether it is online upgrade. true: Yes; false: No, it is manual upgrade.
mode	Yes	Int	The upgrade mode 0: Auto
timeout	Yes	Int	Upgrade fails with timeout (upgrade progress keeps unchanged), in seconds

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Upgrading firmware.

Input Example

```
{
  "is-online": false,
  "mode": 0,
  "timeout": 120
}
```

Output Example

```
{
  "status": 0,
  "code": "Success"
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	Missing required parameters
11	MW_STATUS_DEVICE_BUSY	Upgrading
16	MW_STATUS_NOT_EXIST	The file does not exist

Get firmware version and upgrade status

1. API Description

This API is used to get the current firmware version and upgrade status.

Request mode: POST [ip]/api/upgrade/state

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description
state	Int	The task execution status 0: Idle 1: Initialize and upgrade 2: Upgrading 3: Upgraded 4: Online firmware downloading
cur-ver	String	The current firmware version
update-version	String	The latest firmware version
num-steps	Int	The total number of steps for upgrade, only available when state is 2
step	Int	The current step number, only available when state is 2
step-name	String	The name of the current step, only available when state is 2
step-progress	Int	The progress of the current step, only available when state is 2 Value range: 0 - 100 Unit: %
download-percent	Float	The percentage of online download

4. Example

Getting the current firmware version and upgrade status.

Input Example

None

Output Example

```
{
  "status": 0,
  "code": "Success",
  "state": "updating",
  "cur-ver": "1.1.72",
  "update-version": "1.1.72",
  "num-steps": 4,
  "step": 2,
  "step-name": "Erasing image",
  "step-progress": 28
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Clear upgrade status

1. API Description

This API is used to clear the upgrade status.

Request mode: POST [ip]/api/upgrade/clear

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Clearing the upgrade status.

Input Example

None

Output Example

```
{
  "status": 0,
  "code": "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Clear logs

1. API Description

This API is used to clear all the system logs.

Request mode: POST [ip]/api/log/clear

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

None

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description

4. Example

Clearing all the system logs.

Input Example

None

Output Example

```
{
  "status": 0,
  "code": "Success"
}
```

5. Error Code

No error code related to the API business logic. For other error codes, see [Common Error Codes](#).

Filter logs

1. API Description

This API is used to filter logs.

Request mode: POST [ip]/api/log/filter

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
types	Yes	Int	Log types, including all, info, warn and error, which can be separated by commas if multiple types are requested.
key	Yes	String	The key word for filtering, which can be an empty string.

3. Output Parameters

Name	Type	Description
status	Int	Status code
code	String	Status description
logs	Array of LogList	Log list

LogList

Name	Type	Description
no	Int	The log number
time	String	The log time
type	String	The log type, including info, warn, and error
message	String	The log content

4. Example

Filtering all logs.

Input Example

```
{
  "types": "all",
  "key": ""
}
```

Output Example

```
{
  "status": 0,
  "code": "Success",
  "logs": [
    {
      "no": 0,
      "time": "2022/09/09 16:11:07.920",
      "type": "info",
      "message": "xxxxxx"
    },
    {
      "no": 1,
      "time": "2022/09/09 16:11:04.721",
      "type": "info",
      "message": "xxxxxx"
    }
  ]
}
```

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	Missing required parameters

Export logs

1. API Description

This API is used to export the current system log of the device as a .html file.

Request mode: POST [ip]/api/log/export

Administrator Rights	Logged-in
Yes	Yes

2. Input Parameters

Name	Required	Type	Description
filename	Yes	String	The exported filename

3. Output Parameters

The log is downloaded as a .html file and saved to a local folder.

4. Example

Exporting the current system log of the device as Log_2024_04_11_14_01_08.html.

Input Example

```
{
  "filename": "Log_2024_04_11_14_01_08.html"
}
```

Output Example

Download the html file and save to a local folder.

5. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Status	Definition	Description
7	MW_STATUS_INVALID_ARG	Missing required parameters