

**Common Gateway Interface
Network Camera**

VER. 1.0.10

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Revise Record

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1. Introduction

This document describes the interface specification to control network camera from Ethernet. It consists of interface commands list, basic sequence and alarm function.

2. HTTP request and response format

2.1. To request with HTTP GET, write the contents of the request in the HTTP URL.

2.2. example

If there is no configuration parameter behind the question mark, it is the query configuration to return the current configuration information; If the configuration parameter behind the question mark is set, the configuration parameter returned to take effect after the success is set.

For example

Query configuration	/cgi-bin/network?uid=XXXXXXXXXX
Set the configuration	/cgi-bin/network?dhcp=0&uid=XXXXXXXXXX

2.3. The cause of the error returned in the response message when the request failed.

Message

format for example

```
<?xml version="1.0" encoding="UTF-8"?>
<fault>
<value>describe the value</value>
<reason>describe the reason</reason>
</fault>
```

3. Interface commands (CGI)

CGI commands while operating the Network camera from Internet Explorer are shown below. The Camera can be controlled several functions by HTTP protocol from PC browser (Internet Explorer).

This list describes about CGI commands list for video transmission, camera control and setting change.

3.1. CGI commands the interface list

Serial number	Content	Description
1	/cgi-bin/getuid?username=xxxx&password=xxxx	Request user id
2	/cgi-bin/keep_alive?uid=XXXXXXXXXX	Keep alive
3	/cgi-bin/getinfo?uid=XXXXXXXXXX	Version information
4	/cgi-bin/getcapabilities?uid=XXXXXXXXXX	capabilities
5	/cgi-bin/reboot?uid=XXXXXXXXXX	reboot
6	/cgi-bin/factory_reset?uid=XXXXXXXXXX	Restore default Settings
7	/cgi-bin/network?uid=XXXXXXXXXX	network
8	/cgi-bin/time?uid=XXXXXXXXXX	time
9	/cgi-bin/videoencoder/getcapabilities?uid=XXXXXXXXXX	Video encoding capabilities
10	/cgi-bin/videoencoder?uid=XXXXXXXXXX	Video encoding configuration
11	/cgi-bin/audioencoder/getcapabilities?uid=XXXXXXXXXX	Audio encoding capabilities
12	/cgi-bin/audioencoder?uid=XXXXXXXXXX	Audio encoding configuration
13	/cgi-bin/osd?uid=XXXXXXXXXX	OSD
14	/cgi-bin/image?uid=XXXXXXXXXX	image
15	/cgi-bin/ptz_ctrl?stop=1&uid=XXXXXXXXXX	PTZ
16	/cgi-bin/motion?uid=XXXXXXXXXX	Motion

3.1.1. Interface specification

First you need to get the user id using the /cgi-bin/getuid interface. The other interfaces need to authenticate the user id. User id timeout for 60 seconds, user id needs to be requested again after expiration. After each successful request cgi interface to recalculate the timeout, if there is no request for a long time and hope user id does not expire, you can use the /cgi-bin/keep_alive interface to keep

the heartbeat.

3.2. CGI commands list for Basic information about IPC

3.2.1. User management of Request user id

PS:The following examples all use IPC with IP address 192.168.2.10.

Table: CGI command for User management of Request user id

CGI command	URL	Parameter name	Parameter value	Comments
User management of Request user id	/cgi-bin/getuid	username	admin(Initial value)	Users can enter IPC modification
		password	123456(Initial value)	Users can enter IPC modification

- Requested full URL

<http://192.168.1.10/cgi-bin/getuid?username=admin&password=123456>

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <uid>XXXXXXXX</uid>	The request was successful, uid is XXXXXXXX
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/getuid</value> <reason>error, parse parameters</reason> </fault>	Failed to get parameters
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/getuid</value> <reason>error, parse username</reason>	Failed to get username
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/getuid</value> <reason>error, parse password</reason> </fault>	Failed to get password

400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/getuid</value> <reason>password error</reason> </fault>	Wrong password
-----	--	----------------

3.2.2. Request Keep alive

Table: CGI command for Request 3.1.2.Keep alive

CGI commands	URL	Parameter name	Parameter value	Comments
Request ipc KEEP ALIVE	/cgi-bin/keep_alive	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.

- Requested full URL
http://192.168.1.10/cgi-bin/keep_alive?uid=xxxxxxx

. Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <keep_alive>true</keep_alive>	The request was successful
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/keep_alive</value> <reason>error, parse parameters</reason> </fault>	Failed to get parameters (This response message may also appear in the request of other CGI interface error, the following will not be repeated explanation)
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/keep_alive</value> <reason>error, parse uid</reason> </fault>	Failed to get uid (This response message may also appear in the request of other CGI interface error, the following will not be repeated explanation)

400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/keep_alive</value> <reason>uid error</reason> </fault>	uid error or invalid timeout (This response message may also appear in the request of other CGI interface error, the following will not be repeated explanation)
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3.2.3. Version information

Table: Version information

CGI commands	URL	Parameter name	Parameter value	Comments
Request Version information	/cgi-bin/getinfo	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.

- Requested full URL
<http://192.168.1.10/cgi-bin/getinfo?uid=xxxxxx>
- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <info kernel="XXXXXX" filesystem="XXXXXX" sn="XXXXXX"/>	The request was successful. The value of the parameter is: kernel: Kernel version filesystem: File system version sn: Product serial number

3.2.4. Get capabilities

Table: CGI command for Get capabilities

CGI commands	URL	Parameter name	Parameter value	Comments

Get capabilities	/cgi-bin/getcapabilities	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
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- Requested full URL
<http://192.168.1.10/cgi-bin/getcapabilities?uid=xxxxxx>
- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <capabilities video="1" audio="1" ptz="0"/>	The request was successful. The value of parameter 1 is supported, 0 is not supported. video: Whether to support video audio: Whether to support audio ptz: Whether to support PTZ

3.2.5. Reboot

Table: CGI command for Reboot

CGI commands	URL	Parameter name	Parameter value	Comments
Request Reboot	/cgi-bin/reboot	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.

- Requested full URL
<http://192.168.1.10/cgi-bin/reboot?uid=xxxxxx>
- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <reboot>true</reboot>	The request was successful.

3.2.6. Restore default Settings

Table: CGI command for restore default Settings

CGI commands	URL	Parameter name	Parameter value	Comments
Restore default Settings	/cgi-bin/factory_reset	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		retain_network	Option : 0 1	1: Represents that restoring the factory will retain the network configuration of the device. 0: Represents that restoring the factory will no retain the network configuration of the device.

- Requested full URL

http://192.168.1.10/cgi-bin/factory_reset?uid=xxxxxx

http://192.168.1.10/cgi-bin/factory_reset?retain_network=1&uid=XXXXXXX

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <factory_reset>true</factory_reset>	The request was successful.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/factory_reset</value>	The retain network parameter can only be 1. The rest of the parameters are wrong.

	<reason>retain_network 0 or 1</reason> </fault>	
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/factory_reset</value> <reason>retain_network : NULL</reason> </fault>	When the retain_network parameter is empty, an error is reported.

3.2.7. Obtain Equipment Model

Tabel : CGI command for Obtain Equipment Model

CGI commands	URL	Parameter name	Parameter value	Comments
Obtain Equipment Model	/cgi-bin/getmodel?uid=XXXXXXXXX	uid		User id for the session. The id passed through the /cgi-bin/getuid interface.

- Requested full URL
<http://192.168.1.10/cgi-bin/getmodel?uid=xxxxxxxx>
- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <model>MC200J6</model>	Suppose the MC200J6 model operates and requests success. model:OEM Equipment type:MC200J6

3.3. CGI commands list for Network Configuration about IPC

3.3.1. Network

Table: CGI command for Network

CGI commands	URL	Parameter name	Parameter value	Comments

Request Network	/cgi-bin/network	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		dhcp	Option: 1 0	1 Enable DHCP, 0 Disable DHCP
		ipaddr	IP address	Format is similar 192.168.4.65
		netmask	Subnet mask	Format is similar 255.255.255.0
		gateway	Gateway address	Format is similar 192.168.4.1
		dns1	Preferred DNS	Format is similar 114.114.114.114
		dns2	Standby DNS	Format is similar 8.8.8.8
		port	Port number	Numbers 80 or from 1000 to 65535

- Requested full URL

<http://192.168.1.10/cgi-bin/network?uid=XXXXXXXX>

<http://192.168.1.10/cgi-bin/network?dhcp=0&uid=XXXXXXXX>

<http://192.168.1.10/cgi-bin/network?ipaddr=192.168.4.65&netmask=255.255.255.0&gateway=192.168.4.1&uid=XXXXXXXX>

<http://192.168.1.10/cgi-bin/network?dns1=114.114.114.114&dns2=8.8.8.8&uid=XXXXXXXX>

<http://192.168.1.10/cgi-bin/network?port=80&uid=XXXXXXXX>

- Response message

Status code	Content	Description
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200	<pre><?xml version="1.0" encoding="UTF-8"?> <network macaddr="XX-XX-XX-XX-XX-X X" dhcp="0" ipaddr="192.168.0.10" netmask="255.255.255.0" gateway="192.168.0.1" dns1="114.114.114.114" dns2="8.8.8.8" port="80"/></pre>	<p>The request was successful. The value of the parameter is:</p> <ul style="list-style-type: none"> macaddr: MAC address dhcp: 1 Enable DHCP, 0 Disable DHCP ipaddr: IP address netmask: Subnet mask gateway: Gateway address dns1: Preferred DNS dns2: Standby DNS port: Server port
400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/network</value > <reason>dhcp: 0 or 1</reason> </fault></pre>	<p>Parameter dhcp error (Other parameters similar to the wrong tips do not repeat the explanation)</p>

3.4. CGI commands list for Time for IPC

3.4.1. Time

Table: CGI command for Time

CGI commands	URL	Parameter name	Parameter value	Comments
Request Time	/cgi-bin/time	uid	f2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.

	timezone (Option): GMT+00:00 GMT+01:00 GMT+02:00 GMT+03:00 GMT+03:30 GMT+04:00 GMT+04:30 GMT+05:00 GMT+05:30 GMT+05:45 GMT+06:00 GMT+06:30 GMT+07:00 GMT+08:00 GMT+09:00 GMT+09:30 GMT+10:00 GMT+11:00 GMT+12:00 GMT+13:00 GMT-01:00 GMT-02:00 GMT-03:00 GMT-03:30 GMT-04:00 GMT-04:30 GMT-05:00 GMT-06:00 GMT-07:00 GMT-08:00 GMT-09:00 GMT-10:00 GMT-11:00 GMT-12:00	Time zone
	update_me thod Option: MANUAL,NTP P2P	Update method

year	Numbers	year
month	Numbers	month
day	Numbers	day
hour	Numbers	hour
min	Numbers	minute
sec	Numbers	Seconds
ntpaddr	Strings	NTP server address
port	Numbers 80 or from 1000 to 65535	NTP server port
update_period	Numbers from 60 to 999999	ntp synchronization interval, interval time is in seconds

- Requested full URL

<http://192.168.1.10/cgi-bin/time?uid=XXXXXXXXXX>

<http://192.168.1.10/cgi-bin/time?timezone=GMT+08:00&uid=XXXXXXXXXX>

http://192.168.1.10/cgi-bin/update_method=MANUAL&year=2017&month=11&day=30&hour=8&min=0&sec=0&uid=XXXXXXXXXX

http://192.168.1.10/cgi-bin/time?update_method=ntp&ntpaddr=pool.ntp.org&port=123&update_period=60&uid=XXXXXXXXXX

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <time timezone="GMT+08:00" update_method="ntp" ntpaddr="pool.ntp.org" port="123" current_time="2017-11-30 08:00:00"/>	The request was successful. The value of the parameter is: timezone: Time zone update_method: Update method ntpaddr: NTP server address port: NTP server port current_time: Current time

400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/time</value> <reason>timezone error</reason> </fault>	Parameter timezone error (Other parameters similar to the wrong tips do not repeat the explanation)
-----	--	--

3.5. CGI commands list for video transmission

3.5.1. Video encoding capabilities

Table: CGI command for Network

CGI commands	URL	Parameter name	Parameter value	Comments
Request Network	/cgi-bin/videoencoder/getcapabilities	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.

- Requested full URL

<http://192.168.1.10/cgi-bin/videoencoder/getcapabilities?uid=XXXXXXXX>

* Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <video_capabilities> <stream1> <encode_mode name="H264"> <resolution name="2592X1944"> <framerate_range>1-15</framerate_range> <bitrate_range>500-8000</bitrate_range> </resolution> <resolution name="1080P"> <framerate_range>1-30</framerate_range> <bitrate_range>500-6000</bitrate_range>	The request was successful. The value of the parameter is: stream1: Main stream stream2: Sub stream encode_mode: Encode mode resolution: Resolution framerate_range: Framerate range bitrate_range: Bitrate range

```
</resolution>
</encode_mode>
<encode_mode name="H265">
    <resolution name="2592X1944">

        <framerate_range>1-15</framerate_range>

        <bitrate_range>500-6000</bitrate_range>
            </resolution>
            <resolution name="1080P">

                <framerate_range>1-30</framerate_range>

                <bitrate_range>500-4000</bitrate_range>
                    </resolution>
                    </encode_mode>
</stream1>
<stream2>
    <encode_mode name="H264">
        <resolution name="VGA">

            <framerate_range>1-30</framerate_range>

            <bitrate_range>50-2000</bitrate_range>
                </resolution>
                <resolution name="480X360">

                    <framerate_range>1-30</framerate_range>

                    <bitrate_range>50-2000</bitrate_range>
                        </resolution>
                        </encode_mode>
                        <encode_mode name="H265">
                            <resolution name="VGA">

                                <framerate_range>1-30</framerate_range>
```

	<pre> <bitrate_range>50-2000</bitrate_range> </resolution> <resolution name="480X360"> <framerate_range>1-30</framerate_range> <bitrate_range>50-2000</bitrate_range> </resolution> </encode_mode> </stream2> </video_capabilities></pre>	
--	---	--

3.5.2. Video encoding configuration

Table: CGI commands for Video encoding configuration

CGI command	URL	Parameter name	Parameter value	Comments
Video encoding configuration	/cgi-bin/videoencoder	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		encode_mode	H264 H265	Encode_mode. Options available through the /cgi-bin/videoencoder/getcapabilities interface
		framerate	1-15 1-30	Framerate. Options available through the /cgi-bin/videoencoder/getcapabilities interface
		govlength		Gov length
		bitrate	500-4000 500-6000	Bitrate. Options available through the /cgi-bin/videoencoder/getcapabilities interface
		bitrate_control	Option: CBR VBR	Bitrate control type

	/cgi-bin/videoencoder/AdvanceEncoderConfig	profile	Option: 0 ~ 1	Video Encode Profile 0:default 1:baseprofile
--	--	---------	------------------	--

- Requested full URL

<http://192.168.1.10/cgi-bin/videoencoder?uid=XXXXXXX>

http://192.168.1.10/cgi-bin/videoencoder/stream1?encode_mode=H265&resolution=1080P&frame_rate=25&govlength=100&bitrate=2500&bitrate_control=CBR&uid=XXXXXXX

http://192.168.1.10/cgi-bin/videoencoder/stream2?encode_mode=H265&resolution=480X360&frame_rate=25&govlength=100&bitrate=200&bitrate_control=CBR&uid=XXXXXXX

<http://192.168.22.60/cgi-bin/videoencoder/AdvanceEncodeConfig?profile=1&uid=XXXXXXX>

* Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <time timezone="GMT+08:00" update_method="ntp" ntpaddr="pool.ntp.org" port="123" current_time="2017-11-30 08:00:00"/>	The request was successful. The value of the parameter is: timezone: Time zone update_method: Update method ntpaddr: NTP server address port: NTP server port current_time: Current time
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/time</value> <reason>timezone error</reason> </fault>	Parameter timezone error (Other parameters similar to the wrong tips do not repeat the explanation)

3.5.3. Audio encoding capabilities

Table: CGI commands list for camera controls

CGI command	URL	Parameter name	Parameter value	Comments
Audio encoding capabilities	/cgi-bin/audioencoder/getcapabilities	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.

- Requested full URL

<http://192.168.1.10/cgi-bin/audioencoder/getcapabilities?uid=XXXXXXXX>

- Response message

Status code	Content	Description
200	<pre><?xml version="1.0" encoding="UTF-8"?> <audio_capabilities> <encode_type name="G.711"> <samplerate name="8000"> <bitrate>64000</bitrate> </samplerate> </encode_type> <encode_type name="G.711A"> <samplerate name="8000"> <bitrate>64000</bitrate> </samplerate></pre>	<p>The request was successful. The value of the parameter is:</p> <p>encode_type: G.711 G711A AAC</p> <p>samplerate: 8000 16000</p>

	<pre></encode_type> <encode_type name="AAC"> <samplerate name="16000"> <bitrate>16000</bitrate> </samplerate> </encode_type> </audio_capabilities></pre>	bitrate: 64000 16000
--	--	----------------------------

3.5.4. Audio encoding configuration

Table: CGI command list for Audio encoding configuration

CGI command	URL	Parameter name	Parameter value	Comments
Audio encoding configuration	/cgi-bin/audioencoder	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		enable	Options: 1 0	1 Enable audio, 0 Disable audio
		encode_type	Option: G.711 G.711A AAC	Encode type. Options available through the /cgi-bin/audioencoder/getcapabilities interface
		samplerate	Options: 8000 16000	Samplerate. Options available through the /cgi-bin/audioencoder/getcapabilities interface
		bitrate	Options: 64000 16000	Bitrate. Options available through the /cgi-bin/audioencoder/getcapabilities interface
		input_volume	Numbers from 1 to 100	Input volume

	output_volume	Numbers from 1 to 100	Output volume
	amplify	Options: 1 0	1 Enable audio amplifier, 0 Disable audio amplifier

- Requested full URL

<http://192.168.1.10/cgi-bin/audioencoder?uid=XXXXXXXX>

<http://192.168.1.10/cgi-bin/audioencoder?enable=0&uid=XXXXXXXX>

<http://192.168.1.10/cgi-bin/audioencoder?enable=1&uid=XXXXXXXX>

http://192.168.1.10/cgi-bin/audioencoder?enable=1&encode_type=G.711&samplerate=8000&bitrate=64000&uid=XXXXXXXX

http://192.168.1.10/cgi-bin/audioencoder?input_volume=60&output_volume=80&lify=1&uid=XXXXXXXX

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <audioencoder enable="1" encode_type="G.711" samplerate="8000" bitrate="64000" input_volume="60" output_volume="80" amplify="1"/>	The request was successful. The value of the parameter is: enable: Enable or disable audio encode_type: Encode type samplerate: Samplerate bitrate: Bitrate input_volume: Input volume output_volume: Output volume amplify: Enable or disable audio amplifier
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/audioencoder</value> <reason>enable: 0 or 1</reason> </fault>	Parameter enable error (Other parameters similar to the wrong tips do not repeat the explanation)

3.6. CGI commands list for setup change

3.6.1. OSD setup

Table: CGI commands list for OSD setup change

CGI command	URL	Parameter name	Parameter value	Comments
OSD setup	/cgi-bin/osd	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		enable	Option 0 1	Enable OSD, 0 Disable OSD
		color	Option: 0 1 2 3	OSD color. 0 Black text on white background, 1 White text on black background, 2 Black text white border on transparent background, 3 White text black border on transparent background
		fontsize	Option 0,1,2	Font size. 0 Small, 1 Medium, 2 Large
		Mpassword	character string	Login password to server (0-63byte)
		title_pos_type	Option 0,1	Title position type. 0 Direction, 1 Coordinate

CGI command	URL	Parameter name	Parameter value	Comments
		title_pos_x	Numbers	Title x-axis position. Values 0 to 2 for title_pos_type = 0 and 0 to 100 for title_pos_type = 1
		title_pos_y	Numbers	Title x-axis position. Values 0 to 2 for title_pos_type = 0 and 0 to 100 for title_pos_type = 1
		show_res_bit	(Option): 0 1 2 3	0 does not display resolution and code rate, 1 display resolution does not display code rate, 2 display code rate does not display resolution, 3 display resolution and code rate.
		time_pos_type	(Option): 0,1	Time position type. 0 Direction, 1 Coordinate
		time_pos_x	Numbers	Time x-axis position. Values 0 to 2 for time_pos_type = 0 and 0 to 100 for time_pos_type = 1
		time_pos_y	Numbers	Time y-axis position. Values 0 to 2 for time_pos_type = 0 and 0 to 100 for time_pos_type = 1
		show_week	(Option): 0,1	1 shows the week, 0 does not show the week

CGI command	URL	Parameter name	Parameter value	Comments
		time_format	(Option): yyyy-mm-dd_hh:mm:ss yyyy/mm/dd_hh:mm:ss yy-mm-dd_hh:mm:ss yy/mm/dd_hh:mm:ss hh:mm:ss_dd/mm/yyyy hh:mm:ss_dd-mm-yyyy hh:mm:ss_mm/dd/yyyy hh:mm:ss_mm-dd-yyyy mm/dd/yyyy_hh:mm:ss mm-dd-yyyy_hh:mm:ss	Time format Because the CGI URL can not contain the space character ' ', the time format space is replaced by the underscore '_' when setting the parameters, and the space characters in the time format reserved in the response message's message. For example, when setting parameters: yyyy-mm-dd hh: mm: ss Response message parameters: yyyy-mm-dd hh: mm: ss
		title_utf8		Title content The title_utf8 parameter specification: according to the HTTP URL specification, if the value of title_utf8 is both alphanumeric and the number does not need to be converted, if it contains other characters, it needs to be converted to a utf8 encoded string. For example: ipcamera title_utf8=ipcamera 你好 title_utf8=%E4%BD%A0%E5%A 5%BD 你好 ipcamera title_utf8=%E4%BD%A0%E5%A 5%BDipcamera

- Requested full URL

<http://192.168.1.10/cgi-bin/osd?uid=XXXXXXXXXX>

<http://192.168.1.10/cgi-bin/osd?enable=0&uid=XXXXXXXX>
<http://192.168.1.10/cgi-bin/osd?enable=1&uid=XXXXXXXX>
http://192.168.1.10/cgi-bin/osd?title_utf8=XXXXXXXXXX&uid=XXXXXXXX
http://192.168.1.10/cgi-bin/osd?enable=1&color=1&fontsize=1&title_pos_type=1&title_pos_x=1&title_pos_y=0&show_res_bit=0&time_pos_type=1&time_pos_x=1&time_pos_y=0&show_week=1&time_format=yyyy-mm-dd hh:mm:ss&title_utf8=XXXXXXXXXX&uid=XXXXXXXX

* Response message

Status code	Content	Description
200	<pre><?xml version="1.0" encoding="UTF-8"?> <osd enable="1" color="1" fontsize="1" title_pos_type="1" title_pos_x="1" title_pos_y="0" show_res_bit="0" time_pos_type="1" time_pos_x="1" time_pos_y="0" show_week="1" time_format="yyyy-mm-dd" hh:mm:ss" title_utf8="XXXXXXXXXX"/></pre>	<p>The request was successful. The value of the parameter is:</p> <ul style="list-style-type: none"> enable : Enable or disable OSD color : Color fontsize : Font size title_pos_type : Title position type title_pos_x : Title x-axis position title_pos_y : Title y-axis position show_res_bit : Whether to display the resolution and bit rate time_pos_type : Time position type time_pos_x : Time x-axis position time_pos_y : Time y-axis position show_week : Whether to show the week time_format : Time format title_utf8 : Title content

400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/osd</value> <reason>enable: 0 or 1</reason> </fault>	Parameter enable error (Other parameters similar to the wrong tips do not repeat the explanation)
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3.6.2. UserOSD setup

Table: CGI commands list for UserOSD setup change

CGI command	URL	Parameter name	Parameter value	Comments
UserOSD setup	/cgi-bin/userosd	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		title_index	Option: 0 ~ 4	UserOSD sequence number
		enable	Option 0 1	Enable UserOSD, 0 Disable UserOSD
		color	Option: 0x00 ~ 0xffffffff	Represents the color value of UserOSD. Use 16-bit RGB color value for representation
		fontsize	Option 0,1,2	Font size. 0 Small, 1 Medium, 2 Large
		title_pos_type	Option 0,1	Title position type. 0 Direction, 1 Coordinate
		title_pos_x	Numbers	Title x-axis position. Values 0 to 2 for title_pos_type = 0 and 0 to 100 for title_pos_type = 1
		title_pos_y	Numbers	Title x-axis position. Values 0 to 2 for title_pos_type = 0 and 0 to 100 for title_pos_type = 1

	title_utf8	<p>Title content</p> <p>The title_utf8 parameter specification: according to the HTTP URL specification, if the value of title_utf8 is both alphanumeric and the number does not need to be converted, if it contains other characters, it needs to be converted to a utf8 encoded string.</p> <p>For example:</p> <p>ipcamera</p> <p>title_utf8=ipcamera</p> <p>你好</p> <p>title_utf8=%E4%BD%A0%E5%A5%BD</p> <p>你好 ipcamera</p> <p>title_utf8=%E4%BD%A0%E5%A5%BDipcamera</p>
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- Requested full URL

http://192.168.1.10/cgi-bin/userosd?title_index=x&uid=XXXXXXX
http://192.168.1.10/cgi-bin/userosd?title_index=x&enable=0&uid=XXXXXXX
http://192.168.1.10/cgi-bin/userosd?title_index=x&enable=1&uid=XXXXXXX
http://192.168.1.10/cgi-bin/userosd?title_index=x&title_utf8=XXXXXXX&uid=XXXXXXX
http://192.168.1.10/cgi-bin/userosd?title_index=x&enable=1&color=1&fontsize=1&title_pos_type=1&title_pos_x=1&title_pos_y=0&title_utf8=XXXXXXX&uid=XXXXXXX

* Response message

Status code	Content	Description
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200		The request was successful. The value of the parameter is: enable : Enable or disable OSD color : Color fontsize : Font size title_pos_type : Title position type title_pos_x : Title x-axis position title_pos_y : Title y-axis position title_utf8 : Title content
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/userosd</value> <reason>enable: 0 or 1</reason> </fault>	Parameter enable error (Other parameters similar to the wrong tips do not repeat the explanation)

3.6.3. Image

Table: CGI commands list for setup Image

CGI command	URL	Parameter name	Parameter value	Comments
Image setup	/cgi-bin/image	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		brightness	Numbers from 0 to 255	Brightness
		contrast	Numbers from 0 to 255	Contrast
		saturation	Numbers from 0 to 255	Saturation
		sharpness	Numbers from 0 to 255	Sharpness
		hlc	Numbers from 0 to 255	Highlight Compensation
		blc	Numbers from 0 to 255	Back Light Control

nr2d	Numbers from 0 to 255	2D noise reduction
nr3d	Numbers from 0 to 255	3D noise reduction
tvsystem	Numbers 50 or 60	system mode
antificker	Numbers 0 or 1	forced antificker

- Requested full URL

<http://192.168.1.10/cgi-bin/image?uid=XXXXXXXXXX>

<http://192.168.1.10/cgi-bin/image?brightness=128&contrast=128&saturation=128&sharpness=128&uid=XXXXXXXXXX>

<http://192.168.1.10/cgi-bin/image?brightness=128&contrast=128&saturation=128&sharpness=128&hlc=128&blc=128&nr2d=128&nr3d=128&tvsystem=60&antificker=1&uid=XXXXXXXXXX>

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <image brightness="128" contrast="128" saturation="128" sharpness="128"/>	The request was successful. The value of the parameter is: brightness : Brightness contrast : Contrast saturation : Saturation sharpness : Sharpness
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/image</value> <reason>brightness range: 0-255</reason> </fault>	Parameter enable error (Other parameters similar to the wrong tips do not repeat the explanation)

3.6.4. Motion Detect configuration

Table: CGI command list for Motion Detect configuration

CGI command	URL	Parameter name	Parameter value	Comments
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CGI command	URL	Parameter name	Parameter value	Comments
Motion Detect configuration	/cgi-bin/motion	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		enable	Options: 1, 0	Motion detection enable 1 Start motion detection 0 Turn off motion detection.
		sensitivity	Number 1 to 100	sensitivity
		alarmthreshold	Number 1 to 100	alarm threshold.
		enable_nighttime	(Option) 1 0	Night parameter enable 1 Enable nighttime parameters 0 Disable nighttime parameters. Night parameters include: night_sensitivity, night_alarmthreshold.
		night_sensitivity	Number 1 to 100	Night sensitivity
		night_alarmthreshold	Number 1 to 100	Night alarm threshold
		blockcount	String Row block number x column block number	Number of area blocks for motion detection

CGI command	URL	Parameter name	Parameter value	Comments
		areavalue		<p>Motion detection area value</p> <p>Description:</p> <p>Each 8 blocks from left to right are filled in a byte bit by bit, and the extra bit is filled in 0 (1 represents the selected block, 0 represents the unselected block), and these bytes are encoded in a hexadecimal string, which is the final value of the mobile detection region.</p> <p>For example:</p> <p>All 4x4 areas are selected, the motion detection area value is: ffff, and all are unchecked, it is 0000.</p>

- Requested full URL

<http://192.168.1.10/cgi-bin/motion?uid=XXXXXXX>

<http://192.168.1.10/cgi-bin/motion?enable=0&uid=XXXXXXX>

<http://192.168.1.10/cgi-bin/motion?enable=1&uid=XXXXXXX>

<http://192.168.1.10/cgi-bin/motion?enable=1&blockcount=22x18&areavalue=XXXXXXX>

[&uid=XXXXXXX](http://192.168.1.10/cgi-bin/motion?enable=1&blockcount=22x18&areavalue=XXXXXXX&uid=XXXXXXX)

http://192.168.1.10/cgi-bin/motion?enable=1&sensitivity=80&alarmthreshold=20&enable_nighttime=1&night_sensitivity=80&night_alarmthreshold=20&blockcount=22x18&areavalue=XXXXXXX&uid=XXXXXXX

- Response message

Status code	Content	Description
200	<pre><?xml version="1.0" encoding="UTF-8"?> <motion enable="1" sensitivity="80" alarmthreshold="20" enable_nighttime="1" night_sensitivity="80" night_alarmthreshold="22" blockcount="22x18 areavalue="xxxxxxxxxx"/></pre>	<p>The request was successful. The value of the parameter is:</p> <p>enable : Enable or disable mobile detection</p> <p>sensitivity</p> <p>alarmthreshold</p> <p>" enable_nighttime : Enable or disable night parameters</p> <p>night_sensitivity</p> <p>night_alarmthreshold</p> <p>blockcount : Number of Blocks in Mobile Detection</p> <p>areavalue : Mobile Detection Area Value</p>
400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/motion</value> <reason>enable: 0 or 1</reason> </fault></pre>	<p>Parameter enable error</p> <p>(Other parameters similar to the wrong tips do not repeat the explanation)</p>

3.6.5. User Management

Table: CGI command list for User Management

CGI command	URL	Parameter name	Parameter value	Comments
User Management	/cgi-bin/user_management	uid		User id for the session. The id passed through the /cgi-bin/getuid interface.
		action (must)	1: add 2: delete 3: edit 4: get_user	1. Add is to add user actions 2. delete is a delete user operation 3. Edit is an edit user operation 4. get_user is to get all the user's XML

CGI command	URL	Parameter name	Parameter value	Comments
		name (must)	Char *	User name PS: Maximum allowable length of 40 bytes.
		newpasswd	Char*	Password: To edit the user's password
		privilege	Char* 1、User 2 、Administrator 3 、Operator	User Configuration can only be viewed, but configuration cannot be modified. Administrator Ownership Operator Have all rights except user management
		enable	Char* 1、Enable 2、Disable	Enable: enabling users Disable: Disabled Users
		uid		User id for the session. The id passed through the /cgi-bin/getuid interface.
		action (must)	1: add 2: delete 3: edit 4: get_user	1. Add is to add user actions 2. delete is a delete user operation 3. Edit is an edit user operation 4. get_user is to get all the user's XML
		name (must)	Char *	User name PS: Maximum allowable length of 40 bytes.

- Requested full URL

http://192.168.1.10/cgi-bin/user_management?action=add&name=XXXX&newpasswd=XXX&privilege=User&enable=Enable&uid=XXXXXX

http://192.168.1.10/cgi-bin/user_management?action=delete&name=XXXX&uid=XXXXXX

http://192.168.1.10/cgi-bin/user_management?action=edit&name=XXXX&newpasswd=XXX&privilege=User&enable=Disable&uid=XXXXXX

http://192.168.1.10/cgi-bin/user_management?action=edit&name=XXXX&newpasswd=XXX&uid=XXXX

http://192.168.1.10/cgi-bin/user_management?action=get_user&uid=XXXXXX

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <user_management>OK</user_management>	OK
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/user_management</value> <reason>action: add or edit or delete</reason> </fault>	The parameter is not add or edit or delete an error.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/user_management</value> <reason>error username</reason> </fault>	Report this error when the user name entered by the parameter does not exist. (Can't delete non-existent users)
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/user_management</value> <reason>error username duplicated</reason> </fault>	Report this error when the user name entered by the parameter is exist.(unable to create existing users)
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/user_management</value> <reason>username none exist to edit</reason> </fault>	Report this error when the user name entered by the parameter does not exist. (unable to edit non-existent users)

400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/user_management</value> <reason>privilege: User or Administrator or Operator</reason> </fault>	Privilege parameter input error, need to enter User or Administrator or Operator
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/user_management</value> <reason>enable: Enable or Disable</reason> </fault>	enable parameter input error, need to enter Enable or Disable
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/user_management</value> <reason>The parameters must include name,newpasswd,privilege,enable</reason> > </fault>	The Add parameter is missing errors, and all four parameters need to be entered to create a new user.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/user_management</value> <reason>Non-administrators cannot edit users</reason> </fault>	User privileges are not administrators. User management configuration items cannot be modified.

3.6.6. RTMP Configuration

Table: CGI commands list for RTMP Configuration

CGI command	URL	Parameter name	Parameter value	Comments

RTMP Configuration	/cgi-bin/rtmp	uid		User id for the session. The id passed through the /cgi-bin/getuid interface.
		enable	0-1	0: Disable RTMP 1: Open RTMP
		server	Char *	The address of the server, similar to: 192.168.2.125
		appname	Char*	RTMP application name
		streamid	Char*	RTMP stream ID
		port	Int 0-65535	RTMP port number
		streamno	0-1	Stream type 0: main stream, 1: sub stream
		type	0-1	Type of agreement: 0: standard mode, 1: compatible mode

- Requested full URL

<http://192.168.1.10/cgi-bin/rtmp?uid=XXXXXXX>

<http://192.168.1.10/cgi-bin/rtmp?enable=0&uid=XXXXXXXXXX>

<http://192.168.1.10/cgi-bin/rtmp?enable=1&uid=XXXXXXXXXX>

<http://192.168.1.10/cgi-bin/rtmp?enable=1&server=XXXXXX&appname=XXXXXXXXXX&streamid=XXXXXX&streamno=XXXXXX&type=XXXXXX&port=XXXXXX&uid=XXXXXXXXXX>

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <RtmpConfig Enable="1" Streamno="0" Server="192.168.2.12" Port="98" Appname="live5" Streamid="55" Type="1"/>	请求成功。参数 user_management 显示为 OK

400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/rtmp</value> <reason>enable: 0 or 1</reason> </fault></pre>	enable 参数不是 0 或者 1 上报参数报错。 If the enable parameter is not 0 or 1, an error is reported in the parameter.
400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/rtmp</value> <reason>server is NULL</reason> </fault></pre>	Server 的服务器地址输入字符串为空上报错误。 The server's server address input string is empty to report an error.
400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/rtmp</value> <reason>port range: 0-65535</reason> </fault></pre>	port 端口号参数的范围不是 0-65535 port number parameter range is not 0-65535
400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/rtmp</value> <reason>streamno range: 0-1</reason> </fault></pre>	streamno 的输入参数的范围不是 0-1 上报错误。 The input parameter range of streamno is not 0-1 to report an error.
400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/rtmp</value> <reason>appname is NULL</reason> </fault></pre>	appname 的参数输入空字符串上报错误。 An error was reported in the input string of appname.
400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/rtmp</value> <reason>streamid is NULL</reason> </fault></pre>	streamid 参数输入空字符串上报错误。 The streamid parameter reports an empty string input error.
400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/rtmp</value> <reason>type range: 0-1</reason> </fault></pre>	type 参数输入的值范围不为 0-1 上报错误。 The value entered for the type parameter is not 0-1 and reports an error.

3.7. CGI commands list for Camera control

3.7.1. PTZ control

Table: CGI commands list for setup Image

CGI command	URL	Parameter name	Parameter value	Comments
PTZ control	/cgi-bin/ptz_ctrl	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		speed	Numbers from 1 to 10	speed
		contrast	Numbers from 0 to 255	Contrast
		move_x	Option -1,0,1	Saturation
		move_y	Option -1,0,1	Sharpness
		zoom	Option -1,0,1	
		focus	Option -1,0,1	
		iris	Option -1,0,1	

- Requested full URL

STOP(停止):

http://192.168.1.10/cgi-bin/ptz_ctrl?stop=1&uid=XXXXXXX

Left(左):

http://192.168.1.10/cgi-bin/ptz_ctrl?move_x=-1&move_y=0&speed=5&uid=XXXXXXX

Rifht(右):

http://192.168.1.10/cgi-bin/ptz_ctrl?move_x=1&move_y=0&speed=5&uid=XXXXXXX

Up(上):

http://192.168.1.10/cgi-bin/ptz_ctrl?move_x=0&move_y=1&speed=5&uid=XXXXXXX

Down(下):

http://192.168.1.10/cgi-bin/ptz_ctrl?move_x=0&move_y=-1&speed=5&uid=XXXXXXX

Upper left(左上):

http://192.168.1.10/cgi-bin/ptz_ctrl?move_x=-1&move_y=0&speed=5&uid=XXXXXXX

Lower left(左下):

http://192.168.1.10/cgi-bin/ptz_ctrl?move_x=-1&move_y=-1&speed=5&uid=XXXXXXX

Upper right(右上):

http://192.168.1.10/cgi-bin/ptz_ctrl?move_x=1&move_y=1&speed=5&uid=XXXXXXX

Lower right(右下):

http://192.168.1.10/cgi-bin/ptz_ctrl?move_x=1&move_y=-1&speed=5&uid=XXXXXXX

Zoom narrow(放大):

http://192.168.1.10/cgi-bin/ptz_ctrl?zoom=1&uid=XXXXXXX

Zoom wide(缩小):

http://192.168.1.10/cgi-bin/ptz_ctrl?zoom=-1&uid=XXXXXXX

Focus near(近焦):

http://192.168.1.10/cgi-bin/ptz_ctrl?focus=1&uid=XXXXXXX

Focus far(远焦):

http://192.168.1.10/cgi-bin/ptz_ctrl?focus=-1&uid=XXXXXXX

Iris open(光圈变大):

http://192.168.1.10/cgi-bin/ptz_ctrl?iris=1&uid=XXXXXXX

Iris close(光圈变小):

http://192.168.1.10/cgi-bin/ptz_ctrl?iris=-1&uid=XXXXXXX

Call preset(调用预置点):

http://192.168.1.10/cgi-bin/ptz_ctrl?call_preset=1&uid=XXXXXXX

Add preset(添加预置点):

http://192.168.1.10/cgi-bin/ptz_ctrl?add_preset=1&uid=XXXXXXX

Delete preset(删除预置点):

http://192.168.1.10/cgi-bin/ptz_ctrl?delete_preset=1&uid=XXXXXXX

. Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <ptz_ctrl>true</ptz_ctrl>	The request was successful.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/ptz_ctrl</value> <reason>move_x range: -1,0,1</reason> </fault>	Parameter enable error (Other parameters similar to the wrong tips do not repeat the explanation)

3.7.2. Connect check

Table: CGI commands list for connect_check

CGI command	URL	Parameter name	Parameter value	Comments
Connect_check	/cgi-bin/connect_check	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.

- Requested full URL

http://192.168.1.10/cgi-bin/connect_check?uid=XXXXXXX

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <connect_check>true</connect_check>	The request was successful. The value of the parameter is:
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/connect_check</value> <reason>error, invalid addr</reason> </fault>	Parameter enable error (Other parameters similar to the wrong tips do not repeat the explanation)

3.7.3. ScheduleStorage Configuration

Table: CGI commands list for ScheduleStorage Configuration

CGI command	URL	Parameter name	Parameter value	Comments
ScheduleStorage Configuration	/cgi-bin/setScheduleStorage	uid		User id for the session. The id passed through the /cgi-bin/getuid interface.
		localEnable	0-1	0: Disable Local storage 1: Open Local storage

CGI command	URL	Parameter name	Parameter value	Comments
		remoteEnable	0-1	0: Disable Network Storage 1: Open Network Storage
		recordFileSize	Int 2, 5, 10, 20, 30	Video file length
		remote_nfs_server	Char*	Only effective when remoteEnable = 1 Network storage server.
		nfs_server_path	Char*	Only effective when remoteEnable = 1 The server path of the network storage.
		stream	0, 1, 2	Stream type 0: main stream, 1: sub stream, 2: main stream and sub stream
		JpegInterval	0-1	0: Disable screenshot function 1: enable the capture function
		enable	0-1	If the value is 0, it means that the timer recording is not stored. If the value is 1, the localEnable = 1 switch is stored in the local recording, otherwise it is not stored in the local storage. When the remoteEnable = 1 switch is turned on, it is stored in network storage, otherwise it is not stored in network storage.

- Requested full URL

<http://192.168.1.10/cgi-bin/setScheduleStorage?uid=XXXXXX>

<http://192.168.1.10/cgi-bin/setScheduleStorage?username=admin&password=123456>

http://192.168.1.10/cgi-bin/setScheduleStorage?localEnable=0&remoteEnable=1&remote_nfs_ser

[ver=XXXXX&nfs_server_path=XXXXXX&recordFileSize=XXXXX&stream=1&JpegInterval=1&enable=1&uid=XXXXXXXX](#)

- Response message

Status code	Content	Description
200	<pre><?xml version="1.0" encoding="UTF-8"?> <RecordConfig> <Common LocalEnable="1" RemoteEnable="0" MountParam="" RecordFileSize="10"/> <ScheduleRecord Stream="1" LocalStore="1" RemoteStore="0" JpegInterval="1"/> </RecordConfig></pre>	请求成功。 The request was successful.
400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/setScheduleStorage</value> <reason>enable: 0,1 </reason> </fault></pre>	enable 参数不是 0 或者 1 就上报参数报错。 If the enable parameter is not 0 or 1, an error is reported in the parameter.
400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/setScheduleStorage</value> <reason>localEnable: 0 or 1</reason> </fault></pre>	localEnable 参数不是 0 或者 1 就上报参数报错。 If the localEnable parameter is not 0 or 1, an error is reported in the parameter.
400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/setScheduleStorage</value> <reason>remoteEnable: 0 or 1</reason> </fault></pre>	remoteEnable 参数不是 0 或者 1 就上报参数报错。 If the remoteEnable parameter is not 0 or 1, an error is reported in the parameter.

400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/setScheduleStorage</value> <reason>recordFileSize: 2,5,10,20,30</reason> </fault>	recordFileSize 参数不是 2,5,10,20,30 这些数据就上报错误。 ReportFileSize parameter is not 2, 5, 10, 20, 30 to report an error
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/setScheduleStorage</value> <reason>stream: 0,1,2 </reason> </fault>	stream 参数不是 0, 1, 2 上报参数报错。 If the stream parameter is not 0 or 1, 2, an error is reported in the parameter.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/setScheduleStorage</value> <reason>JpegInterval: 0,1 </reason> </fault>	JpegInterval 参数不是 0 或者 1 上报参数报错。 If the JpegInterval parameter is not 0 or 1, an error is reported in the parameter.
200	<?xml version="1.0" encoding="UTF-8"?> <RecordConfig> <Common LocalEnable="1" RemoteEnable="0" MountParam="" RecordFileSize="10"/> <ScheduleRecord Stream="1" LocalStore="1" RemoteStore="0" JpegInterval="1"/> </RecordConfig>	请求成功。 The request was successful.

3.7.4. Upgrade Firmware

JS uses asynchronous calling:

```
1. <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
2. <html xmlns="http://www.w3.org/1999/xhtml">
3. <head>
4.   <title>IP Camera</title>
5. </head>
6. <body>
7. <div id="m_plugin"></div>
8.
9. <input type="file" name="file1" id="filename"/>
10. <input type="submit" id="upgrade_submit" value="Submit" onclick="upload()"/>
11.
12. <script type="text/javascript">
13.   function upload(){
14.     var XMLHttpRequest = null;
15.     if (window.XMLHttpRequest) {
16.       XMLHttpRequest = new XMLHttpRequest();
17.     }
18.     else if (window.ActiveXObject){
19.       XMLHttpRequest = new ActiveXObject("Microsoft.XMLHTTP");
20.     }
21.     var file = document.getElementById("filename").files[0];
22.     XMLHttpRequest.open("POST", "http://192.168.2.67/OnvifFirmwareUpgrade", true);
23.     XMLHttpRequest.setRequestHeader("Content-Type", "application/octet-stream");
24.     XMLHttpRequest.setRequestHeader("Access-Control-Allow-Origin", "*");
25.     XMLHttpRequest.setRequestHeader("Cache-Control", "no-cache");
26.     XMLHttpRequest.setRequestHeader("Authorization", "Basic QWxpY2U6MTIzNDU2");
27.     XMLHttpRequest.send(file);
28.   }
29. </script>
30. </body>
31. </html>
```

3.7.5. Snapshot Upload

Table: CGI commands list for Snapshot Upload

CGI command	URL	Parameter name	Parameter value	Comments
Connect_check	/cgi-bin/connect_check	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		stream(must)	Number 0-1	Parameter value of 0 represents: sub code stream snapshot The parameter value of 1 represents: Master bitstream snapshot
		upload(optional)	Number 0-3	Parameter value is 0: upload to SD card after capturing parameter value is 1, which means: upload to FTP after capturing Parameter value is 2: upload to email after capturing Parameter value is 3: upload to remote NFS server after snapshot

- Requested full URL

http://192.168.1.10/cgi-bin/connect_check?uid=XXXXXXX

<http://192.168.1.10/cgi-bin/snapshot.cgi?stream=0&username=XXXXXX&password=XXXXXX>

[http://192.168.1.10/cgi-bin/snapshot.cgi?stream=0&upload=0&username=XXXXXX&password=XXX
XXX](http://192.168.1.10/cgi-bin/snapshot.cgi?stream=0&upload=0&username=XXXXXX&password=XXX
XXX)

[http://192.168.1.10/cgi-bin/snapshot.cgi?stream=1&upload=1&username=XXXXXX&password=XXX
XXX](http://192.168.1.10/cgi-bin/snapshot.cgi?stream=1&upload=1&username=XXXXXX&password=XXX
XXX)

- Response message

Status	Content	Description
--------	---------	-------------

code		
200	<?xml version="1.0" encoding="UTF-8"?> <connect_check>true</connect_check>	The request was successful. The value of the parameter is:
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/connect_check</value> <reason>error, invalid addr</reason> </fault>	Parameter enable error (Other parameters similar to the wrong tips do not repeat the explanation)
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/snapshot</value> <reason>upload 0 or 1 or 2 or 3</reason> </fault>	This error will be reported if the parameter of Upload is not 0-3.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/snapshot</value> <reason>Ftp not deploy</reason> </fault>	FTP servers are not deployed.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/snapshot</value> <reason>sd card not mounted</reason> </fault>	The SD card is not inserted, damaged or deployed.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/snapshot</value> <reason>NFS Server not mounted</reason> </fault>	NFS Server not mounted

3.7.6. IRCUT Control

Table: CGI commands list for Snapshot Upload

CGI command	URL	Parameter name	Parameter value	Comments

CGI command	URL	Parameter name	Parameter value	Comments
Connect_check	/cgi-bin/set_ircut	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.

- Requested full URL

http://192.168.1.10/cgi-bin/set_ircut?ircutmode=1&uid=XXXXXXXX

- Response message

Status code	Content	Description
200		<p>The request was successful. The value of the parameter is:</p> <p>enable : Enable or disable OSD color : Color fontsize : Font size title_pos_type : Title position type title_pos_x : Title x-axis position title_pos_y : Title y-axis position title_utf8 : Title content</p>
400	<pre><?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/set_led</value> <reason>ircutmode: 0 ~ 5</reason> </fault></pre>	<p>Parameter ircutmode error (Other parameters similar to the wrong tips do not repeat the explanation)</p>

400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/set_led</value> <reason>not find param time</reason> </fault>	Parameter time not found (Other parameters similar to the wrong tips do not repeat the explanation)
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/set_led</value> <reason>error param time</reason> </fault>	Parameter time error (Other parameters similar to the wrong tips do not repeat the explanation)

3.7.7. Led Control

Table: CGI commands list for Snapshot Upload

CGI command	URL	Parameter name	Parameter value	Comments
Connect_check	/cgi-bin/set_iricut	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		brightness	Number 0 ~ 100	Light brightness
		ledstatus	Option 0 or 1	1: turn on the light, 0 : turn off the light
		ledmode	Option: 1 or 2	light type 1: Indicates infrared 2: Indicates white light

- Requested full URL

http://192.168.1.10/cgi-bin/set_led?brightness=50&ledstatus=0&ledmode=1&uid=XXXXXXXX

- Response message

Status code	Content	Description
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200		The request was successful. The value of the parameter is: enable : Enable or disable OSD color : Color fontsize : Font size title_pos_type : Title position type title_pos_x : Title x-axis position title_pos_y : Title y-axis position title_utf8 : Title content
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/set_led</value> <reason>brightness: 0 ~ 100</reason> </fault>	Parameter brightness error (Other parameters similar to the wrong tips do not repeat the explanation)
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/set_led</value> <reason>not find param brightness </reason> </fault>	Parameter brightness not found (Other parameters similar to the wrong tips do not repeat the explanation)

3.7.8. Service port switch

Table: CGI commands list for Snapshot Upload

CGI command	URL	Parameter name	Parameter value	Comments
Connect_check	/cgi-bin/set_ircut	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		enable_web	0-1	0: Close WEB port 1: Open the web port
		enable_control	0-1	0: Close the control port of PTZ 1: Open the control port of PTZ
		enable_rtsp	0-1	0: Disable RTSP port 1: Open RTSP port

		enable_hik	0~1	0: Close the port of Haikang protocol 1: open the port of Haikang protocol
		webport	1~65535	WEB Port
		hikport	1~65535	HIK Port
		rtspport	1~65535	RTSPPort
		controlport	1~65535	Control Port

- Requested full URL

http://192.168.1.10/cgi-bin/set_service_port?uid=XXXXXXXXXX

http://192.168.1.10/cgi-bin/set_service_port?enable_web=1&enable_control=1&enable_rtsp=1&enable_hik=1&uid=XXXXXXXXXX

http://192.168.1.10/cgi-bin/set_service_port?enable_web=1&webport=80&enable_control=1&controlport=8091&enable_rtsp=1&rtspport=554&enable_hik=1&hikport=8000&uid=XXXXXXXXXX

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <MediaStreamConfig> <StreamAccess enable_web="1" enable_rtsp="1" enable_comm="1" enable_hik="1" /> </MediaStreamConfig>	The request was successful.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/set_service_port</value> <reason>enable_web: 0 ~ 1</reason> </fault>	Failed to get parameters The range of the enable_web is 0~1, and the rest of the range will report an error.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/set_service_port</value> <reason>enable_control: 0 ~ 1</reason> </fault>	Failed to get parameters The range of the enable_control parameter is 0~1, and the rest of the range will report an error.

400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/set_service_port</value> <reason>enable_rtsp: 0 ~ 1</reason> </fault>	Failed to get parameters The range of the enable_rtsp parameter is 0-1, and the rest of the range will report an error.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/set_service_port</value> <reason>enable_hik: 0 ~ 1</reason> </fault>	Failed to get parameters The range of the enable_hik parameter is 0-1, and the rest of the range will report an error.

3.7.9. URL skip the login

Table: CGI commands list for Snapshot Upload

CGI command	URL	Parameter name	Parameter value	Comments
Connect_check	/WEBlogin	username	web username	web username
		password	web password	web password

Requested full URL

<http://192.168.1.10/WEBlogin?username=xxxx&password=xxxxx>

3.7.10. Set UID valid time

Table: CGI commands list for Snapshot Upload

CGI command	URL	Parameter name	Parameter value	Comments

Connect_check	/cgi-bin/ <u>setUid</u> <u>ValidTime</u>	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		validTime	Option: >0	Indicates the effective time of setting the current uid, unit: second, the default effective time of the current uid is 60 seconds

Requested full URL

<http://192.168.1.10/cgi-bin/setUidValidTime?validTime=80&uid=xxxxxx>

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <SetUidValidTime>Uid valid time is 60 sec</SetUidValidTime>	The request was successful.
400		Parameter time error (Other parameters similar to the wrong tips do not repeat the explanation)

3.7.11. Manually trigger io input alarm

Table: CGI commands list for Snapshot Upload

CGI command	URL	Parameter name	Parameter value	Comments
Connect_check	/cgi-bin/setManualInputAlarm	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.

Requested full URL

<http://192.168.1.10/cgi-bin/setManualInputAlarm?uid=xxxxxx>

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <ManualInputAlarm>successful</ManualInputA larm>	The request was successful.
400		Parameter time error (Other parameters similar to the wrong tips do not repeat the explanation)

3.7.12. onvif authentication settings

Table: CGI commands list for Snapshot Upload

CGI command	URL	Parameter name	Parameter value	Comments
Connect_check	/cgi-bin/onvif	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.

Requested full URL

http://192.168.1.10/cgi-bin/onvif?onvif_auth=1&uid=xxxxxx

- Response message

Status code	Content	Description
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200	<?xml version="1.0" encoding="UTF-8"?> <RtspConfig rtsp_auth="1"/>	The request was successful.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/rtsp </value> <reason> rtsp_auth: 0 or 1 </reason>	Parameter time error (Other parameters similar to the wrong tips do not repeat the explanation)

3.7.13. Get the position status of the relay

Table: CGI commands list for Snapshot Upload

CGI command	URL	Parameter name	Parameter value	Comments
Connect_check	/cgi-bin/getRelayStatus	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.

Requested full URL

<http://192.168.1.10/cgi-bin/getRelayStatus? uid=xxxxxxx>

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <RelayStatus>status=1</RelayStatus>	The request was successful.
400	<?xml version="1.0" encoding="UTF-8"?> <RelayStatus>Get status(0) fail</RelayStatus>	Parameter time error (Other parameters similar to the wrong tips do not repeat the explanation)

3.7.14. Set the position state of the relay

Table: CGI commands list for Snapshot Upload

CGI command	URL	Parameter name	Parameter value	Comments
Connect_check	/cgi-bin/setRelayStatus	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		status	0-1	0: close 1: open

Requested full URL

<http://192.168.1.10/cgi-bin/setRelayStatus? status=0& uid=xxxxxxx>

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <RelayStatus> set status=1</RelayStatus>	The request was successful.
400		Parameter time error (Other parameters similar to the wrong tips do not repeat the explanation)

3.7.15. Set manual shutter speed

Table: CGI commands list for Snapshot Upload

CGI command	URL	Parameter name	Parameter value	Comments

CGI command	URL	Parameter name	Parameter value	Comments
Connect_check	/cgi-bin/setRelayStatus	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		dayShutterMode	Day shutter mode : 0-1	0: auto 1 : manual
		dayShutterSpeed	10 - 10000	Day Shutter Speed
		nightShutterMode	night shutter mode : 0-1	0: auto 1 : manual
		nightShutterSpeed	10 - 10000	Night Shutter Speed

Requested full URL

<http://192.168.1.10/cgi-bin/setShutterSpeed?>

dayShutterMode=x&dayShutterSpeed=xxx&nightShutterMode=x&nightShutterSpeed=xxx&uid=xxxxx
xx

- Response message

Status code	Content	Description
200	<?xml version="1.0" encoding="UTF-8"?> <setShutterSpeed>Set dayShutterMode=1, dayShutterSpeed=100, nightShutterMode=1, nightShutterSpeed=100</setShutterSpeed>	The request was successful.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/setShutterSpeed </value> <reason> dayShutterMode: 0 or 1 </reason>	Parameter time error (Other parameters similar to the wrong tips do not repeat the explanation)
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/setShutterSpeed </value> <reason>dayShutterSpeed: 10 or 10000</reason>	Parameter time error (Other parameters similar to the wrong tips do not repeat the explanation)

400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/setShutterSpeed </value> <reason>nightShutterMode: 0 or 1 </reason>	Parameter time error (Other parameters similar to the wrong tips do not repeat the explanation)
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/setShutterSpeed </value> <reason> nightShutterSpeed: : 10 or 10000 </reason>	Parameter time error (Other parameters similar to the wrong tips do not repeat the explanation)

3.7.16. Set device OEM model

Table: CGI commands list for Snapshot Upload

CGI command	URL	Parameter name	Parameter value	Comments
Connect_check	/cgi-bin/setRelayStatus	uid	ff2e45cd(Like this format)	User id for the session. The id passed through the /cgi-bin/getuid interface.
		deviceName	OEM device name	

Requested full URL

<http://192.168.1.10/cgi-bin/setDeviceName?deviceName=xxxxxxx&uid=xxxxxx>

- Response message

Status code	Content	Description

200	<?xml version="1.0" encoding="UTF-8"?> <setDeviceName>Set device name(xxxxx) successful!</setDeviceName>	The request was successful.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/setDeviceName </value> <reason>set device name failed! </reason>	Parameter time error (Other parameters similar to the wrong tips do not repeat the explanation)