网络摄像机 HTTP CGI 说明书

IP Camera HTTP CGI Specifications

VER. 1.0.3

修改记录

Revise Record

版本 VER.	日期 Date	描述 Description
1.0.0	2017 年 12 月 12 日 Dec. 8, 2017	创建 IPC HTTP CGI 说明书 ver1.0.0 Create the IPC HTTP CGI specification ver1.0.0
1.0.1	2019 年 2 月 26 日 Feb. 26,2019	添加移动侦测 GET 和 SET 的 CGI 接口 Add CGI interface for motion detection of GET and SET
1.0.2	2019 年 9 月 27 日 Set. 27,2019	增加 1、用户管理 API，2、获取设备型号 API，3、恢复出厂，保留网络配置 API，4、设备升级功能，5、截图保存功能 API。 Add 1, user management API, 2, acquisition of device model API, 3, restore the factory, retain network configuration API, 4, equipment upgrade function, 5, screenshot preservation API.

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1. HTTP 请求与响应的格式

1. The format of the HTTP request and response

1) HTTP GET 请求，把请求的内容填充在 HTTP URL 中。

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

2) 如果?之后不带配置参数则是查询配置，返回当前配置信息；如果?之后带配置参数则是设置，设置成功之后返回生效的配置参数。

例如　　查询配置　　/cgi-bin/network?uid=XXXXXXXX

　　　　设置配置　　/cgi-bin/network?dhcp=0&uid=XXXXXXXX

2) 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=XXXXXXXX

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

3) 请求失败时在响应的报文中返回错误的原因，格式为：

<?xml version="1.0" encoding="UTF-8"?>

<fault>

<value>describe the value</value>

<reason>describe the reason</reason>

</fault>

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>

2. CGI 接口列表
2. The interface list

序号 No.	请求的 URL The requested URL	描述 Description
1	/cgi-bin/getuid?username=xxxx&password=xxxx	获取 user id Request user id
2	/cgi-bin/keep_alive?uid=XXXXXXXX	心跳 Keep alive
3	/cgi-bin/getinfo?uid=XXXXXXXX	设备信息 Version information
4	/cgi-bin/getcapabilities?uid=XXXXXXXX	能力集 capabilities
5	/cgi-bin/reboot?uid=XXXXXXXX	重启 reboot
6	/cgi-bin/factory_reset?uid=XXXXXXXX	恢复出厂设置 Restore default Settings
7	/cgi-bin/network?uid=XXXXXXXX	网络配置 network
8	/cgi-bin/time?uid=XXXXXXXX	时间 time
9	/cgi-bin/videoencoder/getcapabilities?uid=XXXXXXXX	视频编码能力集 Video encoding capabilities
10	/cgi-bin/videoencoder?uid=XXXXXXXX	视频编码配置 Video encoding configuration
11	/cgi-bin/audioencoder/getcapabilities?uid=XXXXXXXX	音频编码能力集 Audio encoding capabilities
12	/cgi-bin/audioencoder?uid=XXXXXXXX	音频编码配置 Audio encoding configuration
13	/cgi-bin/osd?uid=XXXXXXXX	OSD
14	/cgi-bin/image?uid=XXXXXXXX	图像 image
15	/cgi-bin/ptz_ctrl?stop=1&uid=XXXXXXXX	云台控制 PTZ
16	/cgi-bin/motion?uid=XXXXXXXX	移动侦测 Motion
17	/cgi-bin/getmodel?uid=XXXXXXXX	获取设备型号 Model
18	/cgi-bin/user_management?uid=XXXXXX	用户管理

		User Management
19	/cgi-bin/snapshot.cgi?uid=XXXXXXX	抓图上传 snapshot upload
20	POST /cgi-bin/OnvifFirmwareUpgrade HTTP/1.1	固件升级 Upgrade Firmware

3. 接口说明
3. Interface specification

    首先需要使用/cgi-bin/getuid 接口获取 user id，其他接口都需要验证 user id。User id 60 秒超时，失效之后需要重新请求 user id。每次成功请求 cgi 接口之后重新计算超时时间，如果长时间没有请求但又希望 user id 不失效，可以使用/cgi-bin/keep_alive 接口保持心跳。

    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.

3.1 获取 user id
3.1 Get user id

/cgi-bin/getuid?username=xxxx&password=xxxx

参数名称 Parameter name	参数值 Parameter value	描述 Description
username	字母和数字 Letters and Numbers	IPC 用户名 IPC username
password	字母和数字 Letters and Numbers	IPC 密码 IPC password

响应的报文
Response message

状态码 Status code	内容 Content	描述 Description
200	<?xml version="1.0" encoding="UTF-8"?> <uid>XXXXXXXX</uid>	请求成功，uid 是 XXXXXXXX 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>	获取参数失败 Failed to get parameters
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/getuid</value> <reason>error, parse username</reason>	获取用户名失败 Failed to get username

	</fault>	
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/getuid</value> <reason>error, parse password</reason> </fault>	获取密码失败 Failed to get password
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/getuid</value> <reason>password error</reason> </fault>	密码错误 Wrong password

3.2 心跳
3.2 Keep alive

/cgi-bin/keep_alive?uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.

响应的报文
Response message

状态码 Status code	内容 Content	描述 Description
200	<?xml version="1.0" encoding="UTF-8"?> <keep_alive>true</keep_alive>	请求成功 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>	获取参数失败 （此响应消息在其他 CGI 接口请求出错时也可能出现，下文不做重复解释） 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>`
		获取 uid 失败
		（此响应消息在其他 CGI 接口请求出错时也可能出现，下文不做重复解释）
		
		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 错误或者已经超时失效
		（此响应消息在其他 CGI 接口请求出错时也可能出现，下文不做重复解释）
		
		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)

3.3 获取设备信息
3.3 Version information

/cgi-bin/getinfo?uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.

响应的报文
Response message

状态码 Status code	内容 Content	描述 Description
200	`<?xml version="1.0" encoding="UTF-8"?>` `<info kernel="XXXXXX" filesystem="XXXXXX" sn="XXXXXX"/>`	请求成功。参数的值是： kernel：内核版本 filesystem：文件系统版本 sn：产品序列号

		The request was successful. The value of the parameter is: kernel: Kernel version filesystem: File system version sn: Product serial number

3.4 能力集
3.4 Get capabilities

/cgi-bin/getcapabilities?uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.

响应的报文
Response message

状态码 Status code	内容 Content	描述 Description
200	<?xml version="1.0" encoding="UTF-8"?> <capabilities video="1" audio="1" ptz="0"/>	请求成功。参数的值 1 支持，0 不支持。 video：是否支持视频 audio：是否支持音频 ptz：是否支持云台控制 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

3.5 重启
3.5 Reboot

/cgi-bin/reboot?uid=XXXXXXXX

参数名称	参数值	描述

Parameter name	Parameter value	Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.

响应的报文

Response message

状态码 Status code	内容 Content	描述 Description
200	<?xml version="1.0" encoding="UTF-8"?> <reboot>true</reboot>	请求成功 The request was successful.

3.6 恢复出厂设置
3.6 Restore default Settings

/cgi-bin/factory_reset?uid=XXXXXXXX

/cgi-bin/factory_reset?retain_network=1&uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.
retain_network	数字　　1 Number　　1	1：表示恢复出厂会保留设备的网络配置。 1: Represents that restoring the factory will retain the network configuration of the device.

响应的报文

Response message

状态码 Status code	内容 Content	描述 Description
200	<?xml version="1.0" encoding="UTF-8"?> <factory_reset>true</factory_reset>	请求成功 The request was successful.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/factory_reset</value> <reason>retain_network 0 or 1</reason> </fault>	获取参数失败 retain_network 参数只能是 1，是其余的参数出错。 The retain network parameter can only be 1. The rest of the parameters are wrong.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/factory_reset</value> <reason>retain_network: NULL</reason> </fault>	获取参数失败 retain_network 参数为空的时候，上报错误。 When the retain_network parameter is empty, an error is reported.

3.7 网络配置
3.7 Network

/cgi-bin/network?uid=XXXXXXXX

/cgi-bin/network?dhcp=0&uid=XXXXXXXX

/cgi-bin/network?ipaddr=192.168.4.65&netmask=255.255.255.0&gateway=192.168.4.1&uid=XXXXXXXX

/cgi-bin/network?dns1=114.114.114.114&dns2=8.8.8.8&uid=XXXXXXXX

/cgi-bin/network?port=80&uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.
dhcp	选项(Option): 1 0	1 启用 DHCP，0 禁用 DHCP 1 Enable DHCP, 0 Disable DHCP
ipaddr		IP 地址 IP address
netmask		子网掩码 Subnet mask
gateway		网关地址 Gateway address
dns1		首先 DNS Preferred DNS
dns2		备用 DNS Standby DNS
port	数字 80 或从 1000 至 65535 Numbers 80 or from 1000 to 65535	端口 Server port

响应的报文

Response message

状态码 Status code	内容 Content	描述 Description
200	<?xml version="1.0" encoding="UTF-8"?> <network macaddr="XX-XX-XX-XX-XX-XX" dhcp="0" ipaddr="192.168.0.10" netmask="255.255.255.0" gateway="192.168.0.1" dns1="114.114.114.114"	请求成功。参数的值是： macaddr：MAC 地址 dhcp：1 启用 DHCP，0 禁用 DHCP ipaddr：IP 地址

	dns2="8.8.8.8" port="80"/>	netmask：子网掩码
		gateway：网关地址
		dns1：首先 DNS
		dns2：备用 DNS
		port：端口
		The request was successful. The value of the parameter is:
		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	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/network</value> <reason>dhcp: 0 or 1</reason> </fault>	参数 dhcp 错误 （其他参数的错误提示类似，不重复解释） Parameter dhcp error (Other parameters similar to the wrong tips do not repeat the explanation)

3.8 时间
3.8 Time

/cgi-bin/time?uid=XXXXXXXX

/cgi-bin/time?timezone=GMT+08:00&uid=XXXXXXXX

/cgi-bin/time?update_method=MANUAL&year=2017&month=11&day=30&hour=8&min=0&sec=0&uid=XXXXXXXX

/cgi-bin/time?update_method=ntp&ntpaddr=pool.ntp.org&port=123&uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.
timezone	选项(Option)： GMT+00:00 GMT+01:00 GMT+02:00	时区 Time zone

	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	
update_method	选项(Option): MANUAL NTP P2P	更新方式 Update method
year	数字 Numbers	年 year
month	数字 Numbers	月份 month
day	数字 Numbers	日期 day
hour	数字 Numbers	小时 hour

min	数字	分钟
	Numbers	minute
sec	数字	秒钟
	Numbers	Seconds
ntpaddr		NTP 服务器地址
		NTP server address
port	数字 80 或从 1000 至 65535	NTP 服务器端口
	Numbers 80 or from 1000 to 65535	NTP server port

响应的报文

Response message

状态码 Status code	内容 Content	描述 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"/>`
		请求成功。参数的值是：
		timezone：时区
		update_method：更新方式
		ntpaddr：NTP 服务器地址
		port：NTP 服务器端口
		current_time：当前时间
		
		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>`
		参数 timezone 错误
		（其他参数的错误提示类似，不重复解释）
		
		Parameter timezone error
		(Other parameters similar to the wrong tips do not repeat the explanation)

3.9 视频编码能力集
3.9 Video encoding capabilities

/cgi-bin/videoencoder/getcapabilities?uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.

响应的报文
Response message

状态码 Status code	内容 Content	描述 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>`
	`        </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">`
		请求成功。参数的值是：
		stream1：主码流
		stream2：子码流
		encode_mode：编码模式
		resolution：分辨率
		framerate_range：帧率范围
		bitrate_range：码率范围
		
		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

`<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>`
`<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>`	

3.10 视频编码配置
3.10 Video encoding configuration

/cgi-bin/videoencoder?uid=XXXXXXXX

/cgi-bin/videoencoder/stream1?encode_mode=H265&resolution=1080P&framerate=25&govlength=100&bitrate=2500&bitrate_control=CBR&uid=XXXXXXXX

/cgi-bin/videoencoder/stream2?encode_mode=H265&resolution=480X360&framerate=25&govlength=100&bitrate=200&bitrate_control=CBR&uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.
encode_mode		编码模式，通过/cgi-bin/videoencoder/getcapabilities 接口得到的选项 Encode_mode. Options available through the /cgi-bin/videoencoder/getcapabilities interface
resolution		分辨率，通过/cgi-bin/videoencoder/getcapabilities 接口得到的选项 Resolution. Options available through the /cgi-bin/videoencoder/getcapabilities interface

framerate		帧率，通过/cgi-bin/videoencoder/getcapabilities 接口得到的选项 Framerate.　Options　available　through　the /cgi-bin/videoencoder/getcapabilities interface
govlength		I 帧间隔 Gov length
bitrate		码率，通过/cgi-bin/videoencoder/getcapabilities 接口得到的选项 Bitrate.　Options　available　through　the /cgi-bin/videoencoder/getcapabilities interface
bitrate_control	选项(Option): CBR VBR	码率控制类型 Bitrate control type

响应的报文

Response message

状态码 Status code	内容 Content	描述 Description

200	`<?xml version="1.0" encoding="UTF-8"?>`
	`<videoencoder>`
	`<stream1 encode_mode="H265" resolution="1080P" framerate="25" govlength="100" bitrate="2500" bitrate_control="CBR"/>`
	`<stream2 encode_mode="H265" resolution="480X360" framerate="25" govlength="100" bitrate="200" bitrate_control="CBR"/>`
	`</videoencoder>`
		请求成功。参数的值是：
		stream1：主码流
		stream2：子码流
		encode_mode：编码模式
		resolution：分辨率
		framerate_range：帧率范围
		govlength：I 帧间隔
		bitrate_range：码率范围
		bitrate_control：码率控制类型
		
		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
		govlength: Gov length
		bitrate_range: Bitrate range
		bitrate_control: Bitrate control type

400	`<?xml version="1.0" encoding="UTF-8"?>`
	`<fault>`
	`<value>/cgi-bin/videoencoder/stream1</value>`
		参数 encode_mode 错误
		（其他参数的错误提示类似，不重复解释）

	<reason>encode_mode error</reason> </fault>	Parameter encode_mode error (Other parameters similar to the wrong tips do not repeat the explanation)

3.11 音频编码能力集
3.11 Audio encoding capabilities

/cgi-bin/audioencoder/getcapabilities?uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.

响应的报文
Response message

状态码 Status code	内容 Content	描述 Description

200	```<?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>`
	`</encode_type>`
	`<encode_type name="AAC">`
	`    <samplerate name="16000">`
	`        <bitrate>16000</bitrate>`
	`    </samplerate>`
	`</encode_type>`
	`</audio_capabilities>`
		请求成功。参数的值是：
		encode_type：编码类型
		samplerate：采样率
		bitrate：比特率
		
		The request was successful. The value of the parameter is:
		encode_type: Encode type
		samplerate: Samplerate
		bitrate: Bitrate

3.12 音频编码配置
3.12 Audio encoding configuration

/cgi-bin/audioencoder?uid=XXXXXXXX

/cgi-bin/audioencoder?enable=0&uid=XXXXXXXX

/cgi-bin/audioencoder?enable=1&uid=XXXXXXXX

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

/cgi-bin/audioencoder?input_volume=60&output_volume=80&amplify=1&uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.
enable	选项(Option): 1 0	1 启用音频，0 禁用音频 1 Enable audio, 0 Disable audio
encode_type		编码类型，通过/cgi-bin/audioencoder/getcapabilities 接口得到的选项 Encode type. Options available through the /cgi-bin/audioencoder/getcapabilities interface
samplerate		采样率，通过/cgi-bin/audioencoder/getcapabilities 接口得到的选项 Samplerate. Options available through the /cgi-bin/audioencoder/getcapabilities interface
bitrate		比特率，通过/cgi-bin/audioencoder/getcapabilities 接口得到的选项 Bitrate. Options available through the /cgi-bin/audioencoder/getcapabilities interface
input_volume	数字 1 至 100 Numbers from 1 to 100	输入音量 Input volume
output_volume	数字 1 至 100 Numbers from 1 to 100	输出音量 Output volume
amplify	选项(Option): 1 0	1 启用音频功放，0 禁用音频功放 1 Enable audio amplifier, 0 Disable audio amplifier

响应的报文

Response message

状态码 Status code	内容 Content	描述 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"/>`	请求成功。参数的值是： enable：启用或禁用音频 encode_type：编码类型 samplerate：采样率 bitrate：比特率 input_volume：输入音量 output_volume：输出音量 amplify：启用或禁用音频功放 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>`
		参数 enable 错误
		（其他参数的错误提示类似，不重复解释）
		
		Parameter enable error
		(Other parameters similar to the wrong tips do not repeat the explanation)

3.13 OSD
3.13 OSD

/cgi-bin/osd?uid=XXXXXXXX
/cgi-bin/osd?enable=0&uid=XXXXXXXX
/cgi-bin/osd?enable=1&uid=XXXXXXXX
/cgi-bin/osd?title_utf8=XXXXXXXX&uid=XXXXXXXX
/cgi-bin/osd?enable=1&color=1&fontsize=1&title_pos_type=1&title_pos_x=1&title_pos_y=0&sh

ow_res_bit=0&time_pos_type=1&time_pos_x=1&time_pos_y=0&show_week=1&time_format=y
yyy-mm-dd_hh:mm:ss&title_utf8=XXXXXXXX&uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.
enable	选项(Option)： 0 1	1 启用 OSD，0 禁用 OSD 1 Enable OSD, 0 Disable OSD
color	选项(Option)： 0 1 2 3	OSD 颜色，0 黑色字白色背景，1 白色字黑色背景，2 黑字白框透明背景，3 白字黑框透明背景 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	选项(Option)： 0 1 2	字体尺寸，0 小，1 中， 2 大 Font size. 0 Small, 1 Medium, 2 Large
title_pos_type	选项(Option)： 0 1	标题位置类型，0 方向，1 坐标 Title position type. 0 Direction, 1 Coordinate
title_pos_x	数字 Numbers	标题 x 轴位置， title_pos_type=0 时取值 0 至 2，title_pos_type=1 时取值 0 至 100 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	数字 Numbers	标题 y 轴位置， title_pos_type=0 时取值 0 至 2，title_pos_type=1 时取值 0 至 100 Title y-axis position. Values 0 to 2 for title_pos_type = 0 and 0 to 100 for title_pos_type = 1
show_res_bit	选项(Option)： 0 1 2 3	0 不显示分辨率和码率，1 显示分辨率不显示码率，2 显示码率不显示分辨率，3 显示分辨率和码率 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	选项(Option)： 0 1	时间位置类型，0 方向，1 坐标 Time position type. 0 Direction, 1 Coordinate
time_pos_x	数字 Numbers	时间 x 轴位置， time_pos_type=0 时取值 0 至 2，time_pos_type=1 时取值 0 至 100

		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	数字 Numbers	时间 y 轴位置， time_pos_type=0 时取值 0 至 2，time_pos_type=1 时取值 0 至 100 Time y-axis position. Values 0 to 2 for time_pos_type = 0 and 0 to 100 for time_pos_type = 1
show_week	选项(Option)： 0 1	1 显示星期，0 不显示星期 1 shows the week, 0 does not show the week
time_format	选项(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	时间格式 由于 CGI URL 不能包含空格字符' '，所以在设置参数时把时间格式的空格换成了下划线'_'，而响应消息的报文中保留的时间格式的空格字符。 比如设置参数时 yyyy-mm-dd_hh:mm:ss 响应消息报文中 yyyy-mm-dd 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		标题内容 　　按照 HTTP URL 的规范，如果 title_utf8 的值都是字母和数字则不需要转换，如果包含其他字符则需要转换为 utf8 编码的字符串。 例如: ipcamera 　　title_utf8=ipcamera 你好 　　title_utf8=%E4%BD%A0%E5%A5%BD 你好 ipcamera 　　title_utf8=%E4%BD%A0%E5%A5%BDipcamera 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%A5%BD
		你好 ipcamera
		title_utf8=%E4%BD%A0%E5%A5%BDipcamera

响应的报文

Response message

状态码 Status code	内容 Content	描述 Description
200	<?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="XXXXXXXX"/>	请求成功。参数的值是： enable：启用或禁用 OSD color：颜色 fontsize：字体尺寸 title_pos_type：标题位置类型 title_pos_x：标题 x 轴位置 title_pos_y：标题 y 轴位置 show_res_bit：是否显示分辨率和码率 time_pos_type：时间位置类型 time_pos_x：时间 x 轴位置 time_pos_y：时间 y 轴位置 show_week：是否显示星期 time_format：时间格式 title_utf8：标题内容 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 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>`
		参数 enable 错误
		（其他参数的错误提示类似，不重复解释）
		
		Parameter enable error
		(Other parameters similar to the wrong tips do not repeat the explanation)

3.14 图像
3.14 Image

/cgi-bin/image?uid=XXXXXXXX

/cgi-bin/image?brightness=128&contrast=128&saturation=128&sharpness=128&uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.
brightness	数字 0 至 255 Numbers from 0 to 255	亮度 Brightness
contrast	数字 0 至 255 Numbers from 0 to 255	对比度 Contrast
saturation	数字 0 至 255 Numbers from 0 to 255	饱和度 Saturation
sharpness	数字 0 至 255 Numbers from 0 to 255	锐度 Sharpness

响应的报文

Response message

状态码 Status code	内容 Content	描述 Description
200	`<?xml version="1.0" encoding="UTF-8"?>`	请求成功。参数的值是：

	`<image brightness="128" contrast="128" saturation="128" sharpness="128"/>`	brightness：亮度 contrast：对比度 saturation：饱和度 sharpness：锐度 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>`
		参数 brightness 错误
		（其他参数的错误提示类似，不重复解释）
		
		Parameter brightness error
		(Other parameters similar to the wrong tips do not repeat the explanation)

3.15 PTZ 控制
3.15 PTZ

停止（stop）
/cgi-bin/ptz_ctrl?stop=1&uid=XXXXXXXX
左（left）
/cgi-bin/ptz_ctrl?move_x=-1&move_y=0&speed=5&uid=XXXXXXXX
右（rifht）
/cgi-bin/ptz_ctrl?move_x=1&move_y=0&speed=5&uid=XXXXXXXX
上（up）
/cgi-bin/ptz_ctrl?move_x=0&move_y=1&speed=5&uid=XXXXXXXX
下（down）
/cgi-bin/ptz_ctrl?move_x=0&move_y=-1&speed=5&uid=XXXXXXXX
左上（upper left）
/cgi-bin/ptz_ctrl?move_x=-1&move_y=1&speed=5&uid=XXXXXXXX
左下（lower left）
/cgi-bin/ptz_ctrl?move_x=-1&move_y=-1&speed=5&uid=XXXXXXXX
右上（upper right）
/cgi-bin/ptz_ctrl?move_x=1&move_y=1&speed=5&uid=XXXXXXXX
右下（lower right）
/cgi-bin/ptz_ctrl?move_x=1&move_y=-1&speed=5&uid=XXXXXXXX
放大（zoom narrow）
/cgi-bin/ptz_ctrl?zoom=1&uid=XXXXXXXX

缩小（zoom wide）

/cgi-bin/ptz_ctrl?zoom=-1&uid=XXXXXXXX

近焦（focus near）

/cgi-bin/ptz_ctrl?focus=1&uid=XXXXXXXX

远焦（focus far）

/cgi-bin/ptz_ctrl?focus=-1&uid=XXXXXXXX

光圈变大（iris open）

/cgi-bin/ptz_ctrl?iris=1&uid=XXXXXXXX

光圈变小（iris close）

/cgi-bin/ptz_ctrl?iris=-1&uid=XXXXXXXX

调用预置点（call preset）

/cgi-bin/ptz_ctrl?call_preset=1&uid=XXXXXXXX

添加预置点（add preset）

/cgi-bin/ptz_ctrl?add_preset=1&uid=XXXXXXXX

删除预置点（delete preset）

/cgi-bin/ptz_ctrl?delete_preset=1&uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.
speed	数字 1 至 10 Numbers from 1 to 10	速度 Speed
		其他参数不列举，按照上文列举的 URL 使用 Other parameters are not listed, according to the URL listed above

响应的报文

Response message

状态码 Status code	内容 Content	描述 Description
200	<?xml version="1.0" encoding="UTF-8"?> <ptz_ctrl>true</ptz_ctrl>	请求成功。 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>	参数 move_x 错误 （其他参数的错误提示类似，不重复解释） Parameter move_x error (Other parameters similar to the wrong tips do not repeat the explanation)

3.16 移动侦测配置
3.16 Motion Detect configuration

/cgi-bin/motion?uid=XXXXXXXX

/cgi-bin/ motion?enable=0&uid=XXXXXXXX

/cgi-bin/ motion?enable=1&uid=XXXXXXXX

/cgi-bin/ motion?enable=1& blockcount=22x18&areavalue=XXXXXXXX &uid=XXXXXXXX

/cgi-bin/motion?enable=1&sensitivity=80&alarmthreshold=20&enable_nighttime=1&night_sensi

tivity=80&night_alarmthreshold=20&blockcount=22x18&areavalue=XXXXXXXX&uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.
enable	选项(Option) 1 0	移动侦测使能 1 启动移动侦测 0 关闭移动侦测 Motion detection enable 1 Start motion detection 0 Turn off motion detection.
sensitivity	数字 1 至 100	灵敏度 sensitivity
alarmthreshold	数字 1 至 100	报警门限值 alarm threshold.
enable_nighttime	选项(Option) 1 0	夜间参数使能 1 启用夜间参数 0 停用夜间参数 夜间参数包括: night_sensitivity, night_alarmthreshold. Night parameter enable 1 Enable nighttime parameters 0 Disable nighttime parameters. Night parameters include: night_sensitivity, night_alarmthreshold.
night_sensitivity	数字 1 至 100	夜间灵敏度 Night sensitivity
night_alarmthreshold	数字 1 至 100	夜间报警门限值 Night alarm threshold

blockcount	字符串 行块数 x 列块数	移动侦测的区域块数 Number of area blocks for motion detection
areavalue		移动侦测区域值 说明: 区域块数从左往右每8块按位填充到一个字节里面,多余位填充0(1代表被选中块,0代表没有被选中块),并对这些字节进行16进制字符串的编码,就是最终的移动侦测区域值。 例如: 4x4的区域全部选中,移动侦测区域值为:ffff,全部不选中,则为0000。 Motion detection area value Description: 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. For example: All 4x4 areas are selected, the motion detection area value is: ffff, and all are unchecked, it is 0000.

响应的报文
Response message

状态码 Status code	内容 Content	描述 Description
200	<?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="xxxxxxxxx"/>	请求成功。参数的值是: enable:启用或禁用移动侦测 sensitivity:灵敏度 alarmthreshold:报警门限值 enable_nighttime:启用或停用夜间参数 night_sensitivity:夜间灵敏度 night_alarmthreshold:夜间报警门限值 blockcount:移动侦测的区域块数 areavalue:移动侦测区域值

| 400 | `<?xml version="1.0" encoding="UTF-8"?>`
`<fault>`
`<value>/cgi-bin/motion</value>`
`<reason>enable: 0 or 1</reason>`
`</fault>` | 参数 enable 错误
（其他参数的错误提示类似，不重复解释）

Parameter enable error
(Other parameters similar to the wrong tips do not repeat the explanation) |

3.17 获取设备型号（OEM）
3.17 Obtain Equipment Model

/cgi-bin/getmodel?uid=XXXXXXXX

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.

响应的报文

Response message

状态码 Status code	内容 Content	描述 Description
200	<?xml version="1.0" encoding="UTF-8"?> <model>MC200J6</model>	假设是 MC200J6 型号进行操作并请求成功。 model:OEM 设备型号 MC200J6 Suppose the MC200J6 model operates and requests success. model:OEM Equipment type:MC200J6

3.18 用户管理
3.18User Management

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

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

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

/cgi-bin/user_management?action=edit&name=XXXX&newpasswd=XXX&uid=XXXXXX

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

1.使用 get_user 指令可以获取当前设备中的所有的用户的 XML 信息。

用户管理即是权限管理。

2. 普通用户 User:只能查看 IPC 的配置，不能修改配置的用户。

3. 操作用户 Operator：拥有除了用户管理外的所有权限

4. 管理员用户 Administrator:拥有 IPC 的所有的权限

除了相关操作的用户名和密码之外的参数

-add 方法要求：name、newpasswd、privilege、enable

-delete 方法要求：name

-edit 方法要求：name

-edit 方法可选：newpasswd、privilege、enable

1. The get_user instruction can be used to obtain the XML information of all users in the current device.

User management is authority management.

2.Ordinary User: User who can only view the configuration of IPC, can not modify the configuration.

3. Operator for Operator: All rights except user management

4. Administrator: Has all the permissions of IPC

Parameters in addition to username and password for the associated action
- Add Requires: name, password, privilege, enable
- Delete Requires: name
- Edit Requires: name
- Edit Optional: password, privilege, enable

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id 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 是添加用户操作 2、delete 是删除用户操作 3、edit 是编辑用户操作 4、get_user 是获取用户所有的 XML 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）	字符串 Char *	用户名 PS：最大允许 40 个字节的长度。 User name PS: Maximum allowable length of 40 bytes.
newpasswd	字符串 Char*	Password: To edit the user's password
privilege	字符串 Char* 1、User 2、Administrator 3、Operator	权限问题： 1. User 只能查看配置，不能修改配置 2. Administrator 拥有所有权限 3. Operator 拥有除了用户管理外的所有权限 1. User Configuration can only be viewed, but configuration cannot be modified. 2. Administrator Ownership 3. Operator Have all rights except user management
enable	字符串 Char* 1、Enable 2、Disable	Enable：使能用户 Disable：失能用户 Enable: enabling users Disable: Disabled Users

响应的报文
Response message

状态码 Status code	内容 Content	描述 Description
200	<?xml version="1.0" encoding="UTF-8"?> <user_management>OK</user_management>	请求成功。参数 user_management 显示为 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>`
		action 参数不是 add or edit or delete 报错
		
		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>`
		delete 参数输入的用户名不存在的时候上报此错误。
		（不能够删除不存在的用户）
		
		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>`
		add 参数输入相同的用户名的时候上报此错误。（不能够创建已经存在的用户）
		
		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>`
		edit 参数输入不同的用户名的时候上报错误。(不能够编辑不存在的用户)
		
		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 参数输入错误，需要输入
		User or Administrator or Operator
		
		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 参数输入错误，需要输入
		Enable or Disable
		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 Correct include name,newpasswd,privilege,enable</reason>`
	`</fault>`
		Add 方法参数缺少错误，需要输入全部 4 个的所有参数才能创建新用户。
		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>`	用户权限不是管理员，无法进行用户管理配置项。

	<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.
400	<?xml version="1.0" encoding="UTF-8"?> <fault> <value>/cgi-bin/user_management</value> <reason>username not exist to edit</reason> </fault>	登录用户不存在 Login user does not exist

3.19 抓图上传
3.19 snapshot upload

/cgi-bin/snapshot.cgi&username=XXXXXX&password=XXXXXX

/cgi-bin/snapshot.cgi?stream=0&username=XXXXXX&password=XXXXXX

/cgi-bin/snapshot.cgi?stream=0&upload=0&username=XXXXXX&password=XXXXXX

/cgi-bin/snapshot.cgi?stream=1&upload=1&username=XXXXXX&password=XXXXXX

1、开启 onvif 认证之后，就需要输入 username 参数和 password 参数。

2、缺省 stream 参数后，跟着 username 的一定要使用&，否则上报错误。

3、缺省 stream 参数后，默认为 stream0。

4、缺省 upload 参数后，不上报错误。

1. After the onvif authentication is enabled, you need to enter the username parameter and password parameter.

2. After the default stream parameter, follow the username's to use &, otherwise, report the error.

3. After the default stream parameter, the default value is stream0.

4. After the default upload parameter, no error is reported.

参数名称 Parameter name	参数值 Parameter value	描述 Description
uid		会话的用户 id，通过/cgi-bin/getuid 接口得到的 id User id for the session. The id passed through the /cgi-bin/getuid interface.
stream(must)	数字 0-1 Number 0-1	参数值为 0 代表：子码流抓图 参数值为 1 代表：主码流抓图 Parameter value of 0 represents: sub code stream snapshot The parameter value of 1 represents: Master

		bitstream snapshot
upload(optional)	数字 0-3 Number 0-3	参数值为 0 代表：抓图后上传到 SD 卡 参数值为 1 代表：抓图后上传到 FTP 参数值为 2 代表：抓图后上传到 Email 参数值为 3 代表：抓图后上传到远程的 NFS 服务器 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

响应的报文

Response message

状态码 Status code	内容 Content	描述 Description
200	`<?xml version="1.0" encoding="UTF-8"?>` `<upload>OK</upload>`	请求成功。参数的值是： 提示抓图完全并上传成功 The request succeeded. The value of the parameter is: Successful upload

400	`<?xml version="1.0" encoding="UTF-8"?>`
	`<fault>`
	`<value>/cgi-bin/snapshot</value>`
	`<reason>sd not mount</reason>`
	`</fault>`
		SD 卡没有插入或者 SD 卡没有部署成功。
		
		The SD card was not inserted or deployed successfully.

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>`
		Upload 的参数不是 0-3 的数值就会上报此错误。
		
		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 的服务器没有部署
		
		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>`
		SD 卡没有插入，或者 SD 卡损坏，或者没有部署。
		
		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 没有挂载
		NFS Server not mounted

3.20 固件升级
3.20 Upgrade Firmware

详细的信息请查看 upload.html 文档。

JS 使用异步的调用方式：

```
1.  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w
    3.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/OnvifFirmwareUp
    grade", true);
23.             xmlHttpRequest.setRequestHeader("Content-Type", "application/oct
    et-stream");
24.             xmlHttpRequest.setRequestHeader("Access-Control-Allow-Origin", "
    *");
25.          xmlHttpRequest.setRequestHeader("Cache-Control", "no-cache");
26.           xmlHttpRequest.setRequestHeader("Authorization", "Basic QWxpY2U6
    MTIzNDU2");
27.             xmlHttpRequest.send(file);
28.      }
29. </script>
30. </body>
31. </html>
```

4.使用 XMLHttpRequest 调用 WEB 服务器的 CGI 程序
4. Using XMLHttpRequest to call CGI program of web server

以获得 IPC 设备的 uid 程序为例子写的一个调用程序。
JS 调用的程序实例代码：

```javascript
1.   function timestamp(url){
2.       //  var getTimestamp=Math.random();
3.       var getTimestamp=new Date().getTime();
4.       if(url.indexOf("?")>-1){
5.           url=url+"×tamp="+getTimestamp
6.       }else{
7.           url=url+"?timestamp="+getTimestamp
8.       }
9.       return url;
10.  }
11.
12.  function inner__getuid()
13.  {
14.      var xmlHttpRequest = null;
15.      try{
16.
17.          if (window.XMLHttpRequest) {
18.              xmlHttpRequest = new XMLHttpRequest();
19.          }
20.          else if (window.ActiveXObject) {
21.              xmlHttpRequest = new ActiveXObject("Microsoft.XMLHTTP");
22.          }
23.          var szPort = window.location.port;
24.          var szProtocol = window.location.protocol;
25.          var szHostname = window.location.hostname;
26.
27.          //先得出 UID 的值
28.          var g_des_userid_test = des("WebLogin", hexToString(g_des_userid), 0,
     0);
29.          var g_des_passwd_test = des("WebLogin", hexToString(g_des_passwd), 0,
     0);
30.
31.          //去掉字符串中：中文，英文和数字以外的字符。
32.          var re=/[^\u4e00-\u9fa5a-zA-Z0-9]/g;
33.          g_des_userid_test = g_des_userid_test.replace(re,"");
34.          g_des_passwd_test = g_des_passwd_test.replace(re,"");
35.
```

```
36.          var szUrl = szProtocol+ "//" + szHostname + ":" + szPort + "/cgi-bin
      /getuid?username="+g_des_userid_test+"&password="+g_des_passwd_test;
37.
38.          //增加时间戳，兼容 IE 浏览器
39.          xmlHttpRequest.open("GET", timestamp(szUrl), false);
40.          xmlHttpRequest.send(null);
41.          if(xmlHttpRequest.readyState==4)
42.          {
43.              if(xmlHttpRequest.status==200) {
44.                  var xml = xmlLoadText(xmlHttpRequest.responseText);
45.                  //这个就是提取 xml 里面的数据的函数
46.                   var uid = xml.getElementsByTagName("uid")[0].childNodes[0].n
      odeValue;
47.              }
48.              else
49.              {
50.                  uid = 0;
51.              }
52.          }
53.      }
54.      catch(e)
55.      {
56.          uid = 0;
57.      }
58.      return uid;
59. }
```