Grandstream Networks, Inc.

HTTP API

Version 1.0.0.13

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DOCUMENT OVERVIEW

Grandstream video surveillance API (Application Programming Interface) supports HTTP 1.0 protocol (RFC1945). This document explains in detail the functions of client side and access methods via GET/POST. Users will need administrator privilege to retrieve or set parameters.

Software version requirement

URL format:

Client➔server

```
http://<servername>/goform/<param>?cmd=<value>&<parameter>=<value>&...
```

<param> is used to differentiate function module

Example**:** get device status

http://<servername>/goform/ **systeminfo**?cmd=get

Or POST example

```
POST /goform/systeminfo HTTP/1.0\r\n
Content-Type: application/x-www-form-urlencoded\r\n
Content-Length: xxx\r\n
\r\n
cmd=get\r\n
```

Server➔client

```
HTTP/1.0 <HTTP code> <HTTP text>\r\n
```

Example: get device status

```
HTTP/1.0 200 OK\r\n
….
Content-Type: text/plain\r\n

productmode=GXV3601\r\n
hardwareversion=V0.2B\r\n
partnumber=9670000302B\r\n
bootloaderversion=1.0.2.5\r\n
coreversion=1.2.0.1\r\n
baseversion=1.2.0.5\r\n
```

firmwareversion=1.2.0.5\r\n
systemrun=641\r\n
mac=000B821EA32F\r\n
devicename=my 3601HD\r\n

URL parameter definition

<parameter>=<value>	Values	Description
cmd=<string>	add/remove/set/get /search	Operation command type（Required） add : used for adding client parameter remove: used for deleting client parameter set : used for setting client parameter get: used for getting client parameter search: used for searching wifi ssid
channel=<int>	0,1,2,3	DVS channel 0-3 : Some parameters would need assigned channel, e.g. audio/video setting, motion detection. If the channels are not assigned when setting parameters, parameters of channel 0 will be returned. If the channels are not assigned when getting parameters, parameters of all channels will be returned. This parameter can be skipped for IP Cameras.

Common URL format

Format description	The corresponding format
Devices which support multiple channels use channel number as separators while getting parameters. All the parameters are ordered by level.	channel=0\r\n <param>=<value>\r\n …… channel=1\r\n <param>=<value>\r\n …… channel=2\r\n <param>=<value>\r\n …… channel=3\r\n

	<param>=<value>\r\n ……
Use index to mark when there are multiple parameters of the same channel. E.g. 16 regions of channel	channel=0\r\n ……. md.regn.index=0\r\n <param>=<value>\r\n …… md.regn.index=1\r\n <param>=<value>\r\n …… md.regn.index=2\r\n <param>=<value>\r\n …… md.regn.index=3\r\n <param>=<value>\r\n …… …….
Uncertain number of parameter uses ”count” and ”id” as format to differentiate. E.g. schedule of motion detect region	md.regn.schedule.count=3\r\n md.regn.schedule.id=1 md.regn.index=0 md.regn.schedule.dayset=7 md.regn.schedule.starttime=0 md.regn.schedule.endtime=86399 md.regn.schedule.id=2 md.regn.index=0 md.regn.schedule.dayset=1 md.regn.schedule.starttime=0 md.regn.schedule.endtime=4879 md.regn.schedule.id=3 md.regn.index=1 md.regn.schedule.dayset=7 md.regn.schedule.starttime=0 md.regn.schedule.endtime=86399 …….

Responses from the equipment/device

HTTP/1.0 <*HTTP code*> <*HTTP text*>\r\n

HTTP code	**HTTP text**	**Description**

200	OK	Request successful. It does not mean set/delete/add successful until receiving “Successful\r\n” Successful Need Reboot\r\n: Configure successful and it would take effect after reboot. No Privilege\r\n: Incorrect privilege <param> Invalid\r\n : invalid parameter <param> Missing\r\n : missing parameter <param> Limited\r\n : adding parameters exceeds limited numbers. E.g. numbers of schedule of motion detection
400	Bad Request	Bad request or request failed
401	Unauthorized	Authorization failed
404	Not Found	Not found due to incorrect comment format or incorrect data
503	Service Unavailable	This is the message returned when the server is currently unavailable (i.e. retrieve/set/add/delete failed) or busy.

Example: Request includes invalid file names.

HTTP/1.0 404 Not Found\r\n

Parameters

Audio/Video parameter

Support method: **cmd=set/get**

If devices support 2 streams, they are called primary stream and secondary stream.

http://<*servername*>/goform/audio_video?cmd=<*value*>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	**Values**	**Description**
channel=<*int*>	0,1，2，3	Channel number. Default number for IP Camera is 0
video.primary.encoder=<*int*> video.secondary.encoder=<*int*>	96，26	Video codec: 96: H264 26: MJPEG(not supported by some models) This parameter needs to be set along with the parameter of bitrate.
video.primary.resolution=<*int*> video.secondary.resolution=<*int*>	width(2byte)|height(2 byte) First 2 bytes are used for width (pixel). Last 2 bytes are used for height (pixel).	Video resolution. It varies among different models or NTSC/PAL.
video.primary.bitrate=<*int*> video.secondary.bitrate=<*int*>	16，32，64，1024…	Video bit rate. It varies among different models.
video.primary.brtype=<int> video. secondary.brtype=<int>	0，1	0: VBR(Variable bitrate) 1: CBR(Constant bitrate)
video.primary.framerate=<int> video.secondary.framerate=<int>	1-30	Frame rate. It varies among different models or NTSC/PAL.

video.primary.iframe=<int> video.secondary.iframe=<int>	1-100	I frame interval
video.primary.imagequality=<int> video. secondary.imagequality=<int>	1-5	Image quality: level 1-level5; the lower the value the greater the image quality. It is only valid with VBR.
audio.primary.encoder=<int> audio.secondary.encoder=<int>	0,1,2	Audio codec: 0: pcmu 1: pcma 2: g726 Some models may only support “audio.primary.encoder
audio.primary.bitrate=<int> audio.secondary.bitrate=<int>	16，24，32，40	Audio bitrate. Some models may only support “audio.primary.bitrate”
audio.linein=<int>	0,1	Audio input
audio.lineout=<int>	0,1	Audio output
audio.microphone.volume=<int>	1-10	Audio input volume
audio.speaker.volume=<int>	1-10	Audio output volume
audio.chip.type=<int>	0,1,0xFF	Audio chip type(Read Only) 0: AIC33(default) 1: AIC3104 0xFF: None
ntscpal.type=<int>	0,1	Video format(Read Only) 0:PAL 1:NTSC
power.frequency=<int>	50,60	Power frequency (Applied to 3601HD/3611HD ONLY)

Example：

Audio/Video parameter settings:

```
http://192.168.86.6/goform/audio_video?cmd=set&channel=0&video.primary.encoder=96

200 OK\r\n
Successful\r\n
```

OSD Settings

Support method: **cmd=set/get**

http://<*servername*>/goform/osd?cmd=<value>&<*parameter*>=<*value*>...

<parameter>=<value>	**Values**	**Description**
channel=<*int*>	0，1，2，3	Channel number. Default number for IP Camera is 0
osdposition=<*int*>	0,1	Time OSD position 0: top 1: bottom
osdtimeshow=<int>	0,1	Display time on OSD 0：Not display 1：Display
osdtextshow=<int>	0,1	OSD text: 0: Not display 1: Display
osdopacity=<*int*>	0,10,20…100	OSD Opacity(%)
osdcolor =<string>		OSD color 0xFFFFFE: Auto 0xFFFFFF: White, 0xFF0000: Red， 0x800080: Purple， 0xFF6100: Orange， 0x0000FF: Blue， 0xFFFF00: Yellow， 0x008000: Green， 0x00FFFF: Cyan， 0x000000: Black

osdtext=<string>		OSD; maximum 63 bytes
osdtextindex=<int>	0,1,2…	OSD index number (pending)

Example：

http://192.168.86.6/goform/osd?cmd=set&osdposition=1&osdtimeshow=0&osdtextshow=0&osdopacity=20&osdcolor=0xFFFFFE&osdtext=12345

200 OK\r\n
Successful\r\n

Network parameter

Support **cmd=set/get**, it will take effect on next reboot.

http://<*servername*>/goform/network?cmd=<value>&<*parameter*>=<*value*>...

<parameter>=<value>	**Values**	**Description**
httpport=<int>		http port
enabledhcp=<*int*>	0，1	DHCP 0 disable 1 enable
ipadress=<*string*>	192.168.1.123	IP Address, not valid when starting DHCP
subnetmask=<*string*>	255.255.255.0	Subnet mask
defaultgateway=<string>	192.168.1.1	Default gateway
autodns =<int>	0,1	0 - Preferred DNS server 1 -Obtain DNS Server Address Automatically
dnsserver.primary=<string>		Primary DNS server
dnsserver.standby=<string>		Backup/secondary DNS server

Example：

http://192.168.86.6/goform/network?cmd=set&channel=0&autodns=1&ipadress=192.168.86.145

200 OK\r\n
Successful Need Reboot\r\n

Dynamic DNS (DDNS)

Support **cmd=set/get**

http://<*servername*>/goform/ddns?cmd=<value>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	**Values**	**Description**
enableddns=<*int*>	0，1	DDNS 0: disable 1: enable
isptype=<*int*>	0-4	ISP type 0: dyndns.org 1: noip.com 2: ActiveDNS 3: cn99.com 4: unknown
sitename=<*string*>		Site name，max 255 Bytes
ddnsip=<string>		Custom DDNS site.
account=<string>		DDNS account，max 23 Bytes
password=<*string*>		DDNS password，max 63 Bytes
stunserver=<string>		STUN Server，max 255 Bytes

Example：

http://192.168.86.6/goform/ddns?cmd=set&enableddns=1

200 OK\r\n
Successful\r\n

SIP

Support **cmd=set/get**, it will take effect on next reboot.

http://<*servername*>/goform/sip?cmd=<value>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	**Values**	**Description**
registeredstate=<int>	0,1	Registration state. 0 Offline 1 Online
unregister=<int>	0,1	Unregister on reboot. 0 – No 1 - Yes
accountname=<*string*>		Account name, max 127 Bytes
sipserver=<*string*>		SIP server, max 255 Bytes
proxyserver=<string>		Proxy server or IP address
userid=<string>		SIP user ID, max 255 Bytes
authenticateid=<string>		Authenticate ID; it can be same or different from SIP UserID, max 127 Bytes
accountpsw=<*string*>		Account password, max 127 Bytes This parameter can only be used for setting password, not getting password.
stunserver=<string>		STUN server URI or IP：PORT, max 127 Bytes
sipstream=<int>	0,1	0:Secondary 1:Primary
audioencoder=<int>	0,1	Default 0 PCMU,1 PCMA
regexpiration=<int>		In minutes. default 3600, max 45 days
localsipport=<int>		Local SIP port; default 5060
localrtpport		Local RTP port: 1024-30000

Phonebook settings; support cmd=add/remove/get

phone.count=<int>		Total phonebook entries
phone.index=<int>	1,2….	Index of phonebook entries
phone.number=<string>		Phone number, max 15 Bytes
phone.name=<string>		Name/Note of phone number, max 127 Bytes

Note: phonebook entry can be added one at a time.

Example:

Add phone number:

```
http://192.168.86.6/goform/sip?cmd=add&phone.name=6006&phone.number=5003

200 OK\r\n
Successful Need Reboot\r\n
```

Date & Time

Support **cmd=set/get**

http://<*servername*>/goform/date_time?cmd=<value>&<*parameter*>=<*value*>...

<parameter>=<value>	**Values**	**Description**
updatemode=<int>	1-2	Update mode: 1: Update via NTP server (Default) 2:Self-Defined
year=<*int*>	Greater than 1900	Current year
month=<*int*>	1-12	Current month
day=<int>	0-31	Current day
hour=<int>	0-23	Current hour
minute=<int>	0-59	Current minute
second=<*int*>	0-59	Current second

timezone=<int>	1-54	1 GMT-12(Eniwetok,Kwajalein) 2 GMT-11(Midway Isl., Samoa) 3 GMT-10(Hawaii, AleutianIsl.) 4 GMT-09 (Alaska) 5 GMT-08 (LasVegas,SanFran cisco, Vancouver) 6 GMT-07 (Calgary, Denver, Salt Lake City) 7 GMT-06 (Chicago, Dallas, Mexico City) 8 GMT-05 (Cuba) 9 GMT-05 (New York, Toronto, Washington DC) 10 GMT-04 (Paraguay) 11 GMT-04 (Chile) 12 GMT-04 (Charlottetown, Manaus) 13 GMT-03 (Brazilia, Sao Paulo) 14 GMT-02 (Noronha, Mid-Atlantic) 15 GMT-01(Azores, Cap Verde Isl.) 16 GMT (Dublin, Lisbon, London, Reykjavik) 17 GMT+01 (Amsterdam, Berlin, Rome, Stockholm) 18 GMT+02 (Athens, Helsinki, Istanbul, Riga) 19 GMT+02 (Egypt) 20 GMT+02 (Israel) 21 GMT+02 (Lebanon) 22 GMT+02 (Syria) 23 GMT+03 (Moscow, Riyadh) 24 GMT+03 (Iraq) 25 GMT+03:30 (Iran) 26 GMT+04 (Abu Dubai, Baku) 27 GMT+04:30 (Kabul) 28 GMT+05 (Islamabad, Karachi, Tashkent) 29 GMT+05:30 (Bombay, Calcutta, New Delhi) 30 GMT+06 (Novosibirsk, Omsk) 31 GMT+07 (Bangkok, Hanoi, Jakarta) 32 GMT+08 (Beijing, Hong Kong, Shanghai, Taipei, Taiwan) 33 GMT+09 (Osaka, Sapporo, Tokyo)

		34 GMT+09:30 (Adelaide, Darwin) 35 GMT+10 (Hobart) 36 GMT+10 (Canberra, Melbourne, Sydney) 37 GMT+11(Solomon Isl.) 38 GMT+12(Auckland, Wellington) 39 GMT-9:00 Daylight Saving Time(Alaska Time) 40 GMT-8:00 Daylight Saving Time(Pacific Time) 41 GMT-7:00 Daylight Saving Time(Mountain Time) 42 GMT Daylight Saving Time (Dublin, Ireland) 43 GMT Daylight Saving Time (Lisbon, Portuga) 44 GMT Daylight Saving Time(London, Great Britain) 45 GMT+1:00 Daylight Saving Time(Amsterdam, Barcelona, Berlin, Brussels, Budapest, Copenhagen) 46 GMT+1:00 Daylight Saving Time(Geneva, Madrid, Oslo, Paris, Prague, Roma, Stockholm) 47 GMT+2:00 Daylight Saving Time(Athens, Helsinki, Kyiv, Tallinn) 48 GMT+3:00 Daylight Saving Time(Moscow) 49 GMT+3:00 Daylight Saving Time(St.Petersburg) 50 GMT+9:30 Daylight Saving Time(Adelaide) 51 GMT+10:00 Daylight Saving Time(Melbourne, Canberra, Sydney) 52 GMT+10:00 Daylight Saving Time(Hobart) 53 GMT+12:00 Daylight Saving Time(Auckland, Wellington) 54 Using self-defined Time Zone
deftimezone=<string>		Self-defined Time Zone; e.g. MTZ+6MDT+5,M4.1.0,M11.1.0 Valid when timezone= 54(Using self-defined Time Zone)

ntpserverenable=<int>	0,1	Enable NTP server 0 No 1 Yes
ntpserver=<string>		NTP server，max 255 Bytes
datestyle=<int>	1,2,3	ODS date format 1 YYYY-MM-DD 2 MM/DD/YYYY 3 DD MM YYYY

Note: parameter “updatemode” is required in each link.

Example：

http://192.168.86.6/goform/date_time?cmd=set&updatemode=1&year=2902&month=9&day=26&hour=22&minute=22&second=33&timezone=22&deftimezone=MTZ+6MDT+5,M4.1.0,M11.1.11&ntpserver=time.nist.com

200 OK\r\n
Successful\r\n

Status

Support **cmd=get/set** (cmd=set can only be used by “devicename”)

http://<*servername*>/goform/systeminfo?cmd=<value>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	**Values**	**Description**
productmode=<string>	GXV3601， GXV3501 GXV3611…	Device model.
hardwareversion=<*string*>		Hardware version.
partnumber=<*string*>		P/N number
bootloaderversion=<string>		BOOTLOADER version
coreversion=<string>		Core version
baseversion=<string>		Base version

firmwareversion=<*string*>		Firmware version
cameratype=<string>		Camera type: brand and model.
ddnsstate=<int>	0,1	DDNS Status 0 :Disable 1 :Processing 2 :Success 3 :Account/Password Error 4 :Server blocking 5 :Stun Server error 6 :Database failed
wifistate=<int>	0,1	WiFi Status 0: Disconnected 1: Connected
systemrun=<string>		System up time
mac=<string>		MAC Address
ledstatus=<int>	0,1	LED Status(GXV3615 Only) 0:On 1:Off

Account management

Support **cmd=add/remove/set/get**

http://<*servername*>/goform/usermanage?cmd=<value>&<*parameter*>=<*value*>...

<parameter>=<value>	**Values**	**Description**
user.count=<*int*>	>=1	Total user numbers
user.index=<*int*>	1,2…	Index of users
user.level=<int>	0，1，2	User Privilege 0: administrator 1: user 2: anonymous

user.name=<*string*>		User name，max 23 Bytes
user.password=<string>		User password, max 63 Bytes
anonymous.enable =<int>	0,1	Allow Anonymous Login 0: No 1: Yes

Example：

http://192.168.89.43/goform/usermanage?cmd=remove&user.name=name

200 OK\r\n
Successful\r\n

SMTP(E-mail) Setting

Support **cmd= set/get**

http://<*servername*>/goform/smtp?cmd=<value>&<*parameter*>=<*value*>...

<parameter>=<value>	**Values**	**Description**
enablesmtp=<*int*>	0/1	Enable SMTP: 0: No 1: Yes
smtpserver=<*string*>		SMTP Server, max 255 Bytes
smtpserverport=<int>		SMTP Server port
emailfrom=<*string*>		From E-Mail address, max 63 Bytes
emailuser=<string>		E-mail user name, max 63 Bytes
emailpassword=<string>		E-mail password, max 63 Bytes
emailto1=<string>		To E-Mail address 1, max 63 Bytes
emailto2=<string>		To E-Mail address 2, max 63 Bytes
emailto3=<string>		To E-Mail address 3, max 63 Bytes
enablessl=<int>	0,1	Use SSL: 0: No

		1: Yes
smtptest=<int>	1	To test SMTP uses smtptest=1. Other value does not work. Return: smtptestresult = 0: test failed with smtperrormessag smtptestresult = 1:Success

Example：

```
http://192.168.86.66/goform/smtp?cmd=set&enablesmtp=0

200 OK\r\n
Successful\r\n
```

FTP Settings

Support **cmd= set/get**

http://<*servername*>/goform/ftp?cmd=<value>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	**Values**	**Description**
enableftp=<*int*>	0/1	Enable FTP 0: No 1: Yes
ftpserver=<*string*>		FTP server, max 255 Bytes
ftpserverport=<int>		FTP server port
ftpuser=<*string*>		FTP user name, max 23 Bytes
ftppassword=<string>		FTP password; it would not be sent along with parameters, max 63 Bytes
ftppath=<string>		FTP path, max 63 Bytes
ftptest=<int>	1	To test FTP uses ftptest =1. Other value does not work.

		Return: ftptestresult = 0: test failed with ftperrormessage ftptestresult = 1:Success

Example：

http://192.168.86.6/goform/ftp?cmd=set&ftpserver=123456&ftpserverport=111&ftpuser=admin&ftppath=admin

200 OK\r\n
Successful\r\n

PTZ Settings

Support **cmd= set/get**

http://<*servername*>/goform/ptz?cmd=<value>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	**Values**	**Description**
protocol=<*int*>	0,1…	Select PTZ Protocol 0: PELCO-P 1: PELCO-D
channel=<int>	0-3	(pending)
baudrate=<*int*>	1200,2400,4800,9600…	Baudrate
ptzparam=<int>	0-63 (Speed) 0-127 (Default position)	PTZ speed or default position
ptzcontrol=<int>	0,1…	PTZ Control 0 Stop 1 Tilt Up 2 Tilt Down 3 Pan Left 4 Pan Rigjt 5 Pan to upper left corner 6 Pan to lower left corner 7 Pan to upper right corner 8 Pan to lower right corner

		9 Zoom in 10 Zoom out 11 Focus near 12 Focus far 13 IRIS open 14 IRIS close 15 Turn to default position 16 Clear default position 17 Set default position 18 Auto Pan 19 Stop Auto Pan

Example:

http://192.168.86.66/goform/ptz?cmd=set&ptzcontrol=4&ptzparam=31

200 OK\r\n
Successful\r\n
Note: ptzcontrol and ptzparam would both need to be included in the link

Alarm Event

Support **cmd= set/get/add/remove**

http://<*servername*>/goform/alarmio?cmd=<value>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	**Values**	**Description**
alarmin.count=<int>	1,4…	Numbers of alarm input supported by devices. This may vary among models. E.g. IP camera supports 1 alarmin and GXV3504 supports 4.
alarmin.index=<*int*>	0,1,2,3	Index of alarm input
alarmin.schedule.count=<*int*>	0,1…	Numbers of schedules
alarmin.schedule.id=<int>	1,2,3…	ID of schedules
alarmin.schedule.dayset=<*int*>	0-7	0 Sunday 1 Monday

		2 Tuesday 3 Wednesday 4 Thursday 5 Friday 6 Saturday 7 Everyday(default)
alarmin.schedule.starttime=<int>	0-86399	Default is 0. (in seconds) Example: 12：39，starttime=12*3600+39*60
alarmin.schedule.endtime=<int>	0-86399	Default is 86399. (in seconds) Alarm event end time
alarmout.stop=<string>	yes	Stop alarm output
event.record.pretime=<int>	0-160 (video.primary.bitrate<256) 0-100 (video.primary.bitrate<512) 0-50 (video.primary.bitrate<1024) 0-25 (video.primary.bitrate>1024)	Record Video From Pre Alarm(in seconds) The range varies among different bitrate.
event.record.aftertime=<int>	0-320 (video.primary.bitrate<256) 0-200 (video.primary.bitrate<512) 0-100 (video.primary.bitrate<1024) 0-50 (video.primary.bitrate>1024)	Record Video to After Alarm(in seconds) The range varies among different bitrate.
event.record.storage=<int>	1,2…	Alarm record storage method: 0 Do not save 1 SD card 2 USB Flash Drive

		3 DISK（This may not be available for some model）
event.record.uploadftp=<int>	0,1	Record Video and Upload to FTP Server 0 – enable, 1 - disable
event.sipphone.enable=<int>	0,1	Voice Alarm to SIP Phone 0 – enable, 1 - disable
event.alarmout.enable=<int>	0,1, 2, 3, 4	Enable/Disable alarm output alarm in 1 corresponds alarm out 1 alarm in 2 corresponds alarm out 2 ……
event.uploadcenter.enable=<int>	0,1	Upload to Alarm Center. This option has to be enabled for PC to receive alarm event notification 0 – enable, 1 - disable
event.shotemail.enable=<int>	0,1	Email snapshot and store it to USB card or SD drive. Note: e-mail and storage devices have to be set up and enabled. 0 – enable, 1 - disable

Example：

Parameter settings.

```
http://192.168.86.6/goform/alarmio?cmd=add&alarmin.index=0&event.record.pretime=20&event.record.aftertime=10&event.record.storage=1&event.record.uploadftp=1&event.sipphone.enable=1&event.alarmout.enable=1&event.uploadcenter.enable=1&event.shotemail.enable=1

HTTP/1.0 200 OK\r\n
Successful\r\n
```

Add a schedule with ”Everyday” as default.

http://192.168.86.6/goform/alarmio?cmd=add& alarmin.index=0

HTTP/1.0 200 OK\r\n
Successful\r\n

http://192.168.86.6/goform/alarmio?cmd=add&alarmin.index=0&alarmin.schedule.dayset=4&
alarmin.schedule.starttime=200& alarmin.schedule.endtime=40000

HTTP/1.0 200 OK\r\n
Successful\r\n

Delete a schedule which has id=111.

http://192.168.86.6/goform/alarmio?cmd=remove&alarmin.schedule.id =1,2,3,…

HTTP/1.0 200 OK\r\n
Successful\r\n

Motion Detection

Support **cmd= add/remove/set/get**

http://<*servername*>/goform/motiondetect?cmd=<value>&<*parameter*>=<*value*>...

<parameter>=<value>	**Values**	**Description**
md.channel.count=<int>	1, 4	Number of channels for motion detection. IP camera has only 1 channel; 4 channels DVS supports 4.
md.channel.index=<int>	0, 1, 2，3	Corresponding index for channels. IP camera:1 4 channel DVS: 0-3
md.active.enable=<int>	0,1	Enable Motion Detection 0: No 1: Yes
md.regn.index=<int>	0-15	Motion Detection Region 0-15
md.regn.leftup=<int>		First 2 bytes are used for X; last 2

		bytes are used for Y
md.regn.rightdown=<int>		First 2 bytes are used for X; last 2 bytes are used for Y. If md.regn.leftup=0 and md.regn.rightdown=0, it is an invalid region.
md.regn.sensitivity=<int>	0-100	Sensitivity. The higher the value the greater the sensitivity
md.regn.schedule.count=<*int*>	0,1…	Total number of schedule.
md.regn.schedule.id=<int>	0,1,2,3…	Schedule ID (1-n). If ID is set to 0, all the schedules will be deleted.
md.regn.schedule.dayset=<*int*>	0-7	0: Sunday 1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday 7: Everyday(default)
md.regn.schedule.starttime=<int>	0-86399	Default is 0. (in seconds) Example: 12：39，starttime=12*3600+39*60
md.regn.schedule.endtime=<int>	0-86399	Default is 86399. (in seconds) Example: 12：39，starttime=12*3600+39*60
md.record.storage=<int>	0,1,2,3…	Alarm record storage method: 0 Do not save 1 SD card 2 USB Flash Drive 3 DISK（This may not be available for some model）
event.record.pretime=<int>	0-160 (video.primary.bitrate<256)	Record Video From Pre Alarm(in seconds). This may vary among different bitrates.

	0-100 (video.primary.bitrate<512) 0-50 (video.primary.bitrate<1024) 0-25 (video.primary.bitrate>1024)	
md.record.aftertime=<int>	0-320 (video.primary.bitrate<256) 0-200 (video.primary.bitrate<512) 0-100 (video.primary.bitrate<1024) 0-50 (video.primary.bitrate>1024)	Record Video to After Alarm(in seconds). This may vary among different bitrates.
md.record.uploadftp=<int>	0,1	Record Video and Upload to FTP Server 0 – enable, 1 - disable
md.sipphone.enable=<int>	0,1	Voice Alarm to SIP Phone 0 – enable, 1 - disable
md.alarmout.enable=<int>	0,1, 2, 3, 4	Enable/Disable alarm output alarm in 1 corresponds alarm out 1 alarm in 2 corresponds alarm out 2 ……
md.uploadcenter.enable=<int>	0,1	Upload to Alarm Center. This option has to be enabled for PC to receive alarm event notification 0 – enable, 1 - disable
md.snapshot.enable=<int>	0,1	Email snapshot and store it to USB card or SD drive. Note: e-mail and storage devices have to be set up and enabled. 0 – enable, 1 - disable

Example:

Parameter settings.

Delete a schedule which has id=111.

```
http://192.168.86.6/goform/motiondetect?cmd=set&md.record.storage=1&md.record.aftertime=10&md.record.pretime=20&md.record.uploadftp=1&md.sipphone.enable=1&md.alarmout.enable=1&md.uploadcenter.enable=1&md.snapshot.enable=1

HTTP/1.0 200 OK\r\n
Successful\r\n
```

System Log

Support **cmd= set/get**

http://<*servername*>/goform/systemlog?cmd=<value>&<*parameter*>=<*value*>...

<parameter>=<value>	**Values**	**Description**
logserver=<string>		Syslog server, max 127 Bytes
loglevel=<int>	1，2，3，4, 5	Syslog level: 0: NONE 1: DEBUG 2: INFO 3: WARNING 4: ERROR 5: NONE

Example:

```
http://192.168.86.6/goform/systemlog?cmd=set&loglevel=1&logserver=12345464

200 OK\r\n
Successful Need Reboot\r\n
```

USB/SD Storage

Support **cmd= remove/get**

http://<*servername*>/goform/storage?cmd=<value>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	**Values**	**Description**
storage.count=<int>	0…	Total number of storage equiments
storage.index=<int>	1,101,201	1:USB 101:SD 201:DISK
storage.capacity=<string>		Total storage capacity
storage.usedspace=<string>		Used space (MB)
storage.freespace=<string>		Free Space (MB)
file.count=<int>		Total numbers of saved files.
file.index=<int>	1，2，3	File index
file.size=<string>		File size (MB)
file.name=<string>		File Name with path. It can be used to download that particular file. e.g. http://serverhost:port/file.name

Example:

Delete a file from USB/SD card.

```
http://192.168.86.95/goform/storage?cmd=remove&file.name=/mnt/sd/192.168.86.95_chn1_2010_01_13_09_21_58.jpg

200 OK\r\n
Successful\r\n
```

Maintenance/Upgrade

Support **cmd= set/get**

http://<*servername*>/goform/maintenance?cmd=<value>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	**Values**	**Description**

restart=<string>	yes	Restart the device
restore=<string>	yes	Reset settings to factory default
update.viatype=<int>	1,2,3	Upgrade via: 1: TFTP 2: HTTP 3: HTTPS
upgrade.serverpath=<string>	serverhost:port/dir	Firmware Server path
upgrade.cfgserverpath=<string>		Configuration server path, max 255 Bytes
upgrade.automatic=<int>	0,1	Automatic upgrade: 0: No 1: Yes
upgrade.interval=<int>	60-525600	Automatic Upgrade Interval(minutes)

Contrast, Saturation, Brightness, Chroma

Support **cmd= set/get**

http://<*servername*>/goform/videocontrol?cmd=<value>&<*parameter*>=<*value*>...

Note：Contrast, saturation, brightness, and chroma have to be set at the same time. Otherwise, it would be 0(default). Color may not be available for some models.

<parameter>=<value>	**Values**	**Description**
channel=<int>	0,1,2,3	Assigned channel number; Default number for IP Camera is 0
brightness=<int>	0-255	Brightness
contrast=<int>	0-255	Contrast
saturation=<int>	0-255	Saturation
chroma=<int>	0-255	Chroma (Chroma may not be available for some models)

Example:

http://192.168.86.6/goform/videocontrol?cmd=set&contrast=101

200 OK\r\n
Successful\r\n

WIFI Setting

Support cmd= set/get/search

http://<servername>/goform/wireless?cmd=<value>&<parameter>=<value>...

<parameter>=<value>	**Values**	**Description**
Wifiexist=<int>	0,1	This is only applicable on GXV3615 0:WIFI is not supported 1:WIFI is supported
enable=<int>	0,1	0: Disable 1: Enable
ssid=<string>		SSID
authentication=<int>	0-6	Security Mode 0:NONE 1:WEP/Shared 2:WEP/Open 3:WPA PSK TKIP 4:WPA PSK AES 5:WPA2 PSK TKIP 6:WPA2 PSK AES
keyindex=<int>	1-4	Key index
key=<string>		Key

Example:

Setting WIFI parameter：

http://192.168.86.6/goform/wireless?cmd=set&ssid =mywifi

200 OK\r\n
Successful Need Reboot\r\n

System Setting

Support cmd= set/get/search

http://<servername>/goform/device?cmd=<value>&<parameter>=<value>...

<parameter>=<value>	**Values**	**Description**
devicename=<string>		Device name
channel=<int>	0-3	Channel number
alarmin.type=<int>	0,1	0:Normal Open 1:Normal Close
alarmout.type=<int>	0,1	0:Normal Open 1:Normal Close
alarmin.status=<int>	0,1	This is used to **get** the current state of the alarm in. 0: Open 1: Close
alarmout.status=<int>	0,1	This is used to **get** the current state of the alarm in. 0: Open 1: Close

Example:

Setting alarm active state：

http://192.168.86.6/goform/device?cmd=set&alarmout.type=1

200 OK\r\n
Successful \r\n

Example2:

Alarm Type	Alarm Status	Result
alarmout.type=NORMAL OPEN	alarmout.status=OPEN	IDLE, no alarm output
alarmout.type=NORMAL OPEN	alarmout.status=CLOSE	alarm output enabled
alarmout.type=NORMAL CLOSE	alarmout.status=OPEN	alarm output enabled
alarmout.type=NORMAL CLOSE	alarmout.status=CLOSE	IDLE, no alarm output
alarmin.type=NORMAL OPEN	alarmin.status=OPEN	IDLE, no alarm input
alarmin.type=NORMAL OPEN	alarmin.status=CLOSE	alarm input detected
alarmin.type=NORMAL CLOSE	alarmin.status=OPEN	alarm input detected
alarmin.type=NORMAL CLOSE	alarmin.status=CLOSE	IDLE, no alarm input

PPPoE Setting

Support cmd= set/get

http://<*servername*>/goform/pppoe?cmd=<value>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	Values	Description
pppoe.user=<string>		PPPoE username
password=< string >		PPPoE password (get is not displayed)
pppoe.status =<int>	0,1	PPPoE status (read only) 0:disconnected 1:connected
pppoe.ip =< string >		Get the PPPoE IP address (read only)

Example:

Send command(URL)	Result
http://192.168.86.6/goform/device?cmd=set&pppoe.user=username&password=pwd	Sets the pppoe username and password.

Snapshot Settings

http://<*servername*>/snapshot/view0.jpg

<*parameter*>=<*value*>	Values	Description
view0.jpg, view1.jpg view2.jpg, view3.jpg		Primary stream is view0.jpg GXV3504 primary streams are view0.jpg – view3.jpg For secondary streams use view4.jpg to

Example:

Send command (URL)	Result
http://192.168.86.146/snapshot/view1.jpg	Returns the picture in jpg format.

Language Settings

http://<*servername*>/goform/language?cmd=<value>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	Values	Description
language	0,1	0:English (default) 1: Simplified Chinese

For Example

Send command URL)	Results
http://192.168.86.146/goform/language?cmd=set?language=1	Sets the language to Chinese.

Decoding Settings

http://<*servername*>/goform/decode?cmd=<value>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	Values	Description
decode_source=<int>		Decode source
default_decode=<int>	0-7	Default channel decoding
enable_patrol=<int>	0,1	1:enable patrol 0:disable patrol
start_patrol=<int>	0,1	1:start patrol 0: stop patrol
channel[i]=<int>	0-4	Video channel Decode channels=0-7
port[i]=<int>		Port i=0-7
time[i]=<int>		i=0-7
host[i]=<string>		i=0-7
user[i]=<string>		i=0-7
password[i]=<string>		i=0-7
description[i]=<string>		i=0-7

Example：

http://<servername>/goform/decode?cmd=set?channel=1

Example:

Send command (URL)	Result
http://192.168.86.146/ goform/decode?cmd=set?channel=1	The channel is set to 1

Stream Settings

http://<*servername*e>/gofrom/stream?cmd=<value>&<*parameter*>=<*value*>...

<*parameter*>=<*value*>	Values	Description
channel=<int>	0-7	Channel number（default is 0) The primary stream is 0, the secondary stream is 4. For the GXV3504 you can use 1,2,3 for the other channels primary stream and 5,6,7 for the other channels secondary stream.

Example：

http://192.168.86.25/goform/stream?cmd=get&channel=0

Example

Send command (URL)	Result
http://192.168.86.25/goform/stream?cmd=get&channel=0	Will get the main stream video