

Grandstream Networks, Inc.

GDS37xx Door System

HTTP API



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SUPPORTED DEVICES

The following table shows Grandstream products supporting HTTP API covered in this guide.

Model	Firmware
GDS3710	1.0.3.32 or higher



OVERVIEW

Grandstream Door System supports HTTP API (Application Programming Interface).

This document explains in detail the external HTTP-based application programming interface and parameters of functions via the supported method. The HTTP API is firmware dependent. Please refer to the related firmware Release Note for the supported functions.

Administrator Privilege is required, and administrator authentication verification has to be executed before any operation to the related parameter configuration.

Syntax: Client → Server

```
https://<servername>/goform/config?cmd=get&type=<module>
```

```
https://<servername>/goform/config?cmd=set&<param>=<value>&<param1>=<value>...
```

Notes:

- **<param>** is used to identify the different parameter of functions.
- **<module>** is used to identify the different module of functions.



Authentication

Authentication is using encrypted Challenge / Response mode. After successful authentication, the user with administration privilege needs to include the authentication information in each request header of the operation before the operation can be executed.

The authentication process is shown as following:

Step 1:

Client → Server

```
https://<servername>/goform/login?cmd=login&user=admin&type=0
```

Server → Client

```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
<ResCode>0</ResCode>
<ChallengeCode>ChallengeString</ChallengeCode>
<LoginType>0</LoginType>
<RetMsg>OK</RetMsg>
</Configuration>
```

Step 2:

Client → Server

```
https://<servername>/goform/login?cmd=login&user=admin&authcode=<authcodestring>&type=0
```

Server → Client

```
HTTP/1.0 200 OK Content-Type: text/xml;charset=UTF-8
Set-Cookie: session=ac81cade4c9d9264f50c45018fb02c12;path=/;
Set-Cookie: uname=admin;path=/;
Set-Cookie: level=1;path=/;
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <LoginType>0</LoginType>
  <RetMsg>OK</RetMsg>
</Configuration>
```



Notes:

The rule of authentication code string is generated via following rules:

- authcodestring = md5(ChallengeString:GDS3710IzRsFzCbM:password);
 - ChallengeString is the reply strings from Server by **Step 1**
 - Password is the login password of the GDS37xx device.

- The **RED** part of the string is the replied authentication information from Sever after successful authentication. Such information has to be existed in the operation message header of all the following operations, otherwise the operation is abnormal and will fail.

Example: Delete the card with ID number: 7465995

Client → Server

```
POST /goform/config
HTTP/1.1
Host: 192.168.86.8
Connection: keep-alive
Content-Length: 26
Cache-Control: max-age=0
Origin: https://192.168.86.8
User-Agent: Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36
(KHTML, like Gecko) Chrome/57.0.2987.98 Safari/537.36
Content-Type: application/x-www-form-urlencoded; charset=UTF-8
Accept: application/xml, text/xml, */*; q=0.01
X-Requested-With: XMLHttpRequest
If-Modified-Since: 0
Referer: https://192.168.86.8/Pages/user_list.html?t=1496385815560
Accept-Encoding: gzip, deflate, br
Accept-Language: zh-CN,zh;q=0.8
Cookie: gdsauthkey4433=150e080c781be0deb8d5a8a2c6ed95d2;
gdslanguage=zh; session=643e985e113a50979fd245762be01a57;
uname=admin; level=1; gdsauthkey443=643e985e113a50979fd245762be01a57;
curpage=user_list.html cmd=del&user_list=7465995,
```

Note:

The **RED** part of the string is the Authentication String MUST be carried in the header message by the cookie during operation



Tips of HTTP API Usage:

- In most situation, parameters fetched by using “GET” can be revised by using “SET”, except Status or Display parameter information.
- When using “SET”, sometimes there are inter-action or restrictions among those related parameters, all parameters must “SET” or configure correctly together before the device taking effect.
- Please refer to related WebGUI page for reference if unsure about the HTTP API.

URL Parameter Definitions

<parameter>=<value>	Values	Description
cmd=<string>	add/del/set/get /reboot/reset	Operation command type (Required): add: add parameter or data del: delete parameter or data set: set device parameter get: get command or parameter reboot: reboot device reset: factory reset device

XML Returned by Device

Response Code	Response Text	Description
0	OK	Success
1		User does not exist
2		Password error
3		Max login or max white list number
4		Phone number exist
5		Parameter should not be empty
6		Parameter contain illegal characters
7		Message sending error
8		New password not match
9		FTP test error
10		Hostage passwd



11		Remote /Local PIN not same with hostage password
12		SMTP timeout
13		Retrieve Password (Account is no exist)
14		SMTP authentication failed
15		SMTP test failed
16		Invalid SMTP server
17		Email address is empty
18		Email test timeout
19		SIP is calling
401		Authentication failed
408		Session time out

Example:

Returned XML by device:

```
<?xml version="1.0"encoding="UTF-8" ?>
  <Configuration>
    <ResCode>0</ResCode>
    <RetMsg>OK</RetMsg>
  </Configuration>
```



PARAMETERS

1. Card Management

Method Supported: **cmd = get/add/set/del**

Get:

```
http://<servername>/goform/config?cmd=get&type=user_list
```

Example:

```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <total>1</total>
  <item>
    <idx>0</idx> <!-- index, assigned by system -->
    <ID>1</ID> <!-- card number -->
    <room_num>1</room_num> <!-- virtual number -->
    <sip_num>1</sip_num> <!-- sip number -->
    <username>1</username> <!-- user name -->
    <passwd>1</passwd> <!-- open door password -->
    <gender>0</gender> <!-- gender -->
    <identify_num>1</identify_num> <!-- ID number -->
    <cellphone_num>1</cellphone_num> <!-- cellphone number -->
    <EOD>20991231</EOD> <!-- card valid date -->
    <enable_card>1</enable_card> <!-- enable or disable -->
  </item>
  <item>
    <idx>1</idx>
    <ID>1</ID>
    <room_num>1</room_num>
    <sip_num>1</sip_num>
    <username>1</username>
    <passwd>1</passwd>
    <gender>0</gender>
```



```

<identify_num>1</identify_num>
<cellphone_num>1</cellphone_num>
<EOD>20991231</EOD>
<enable_card>1</enable_card>
</item>
<item>
  <idx>2</idx>
  <ID>1</ID>
  <room_num>1</room_num>
  <sip_num>1</sip_num>
  <username>1</username>
  <passwd>1</passwd>
  <gender>0</gender>
  <identify_num>1</identify_num>
  <cellphone_num>1</cellphone_num>
  <EOD>20991231</EOD>
  <enable_card>1</enable_card>
</item>
</Configuration>

```

Add / Set:

<http://<servername>/goform/config?cmd=<add/set>&<parameter>=<value>...>

<parameter>=<value>	Values	Description
ID=<int>	Numeric Digits	RFID card number. Unique and cannot be empty
room_num =<int>	Numeric Digits	Virtual Number (Room Number) Cannot be empty
sip_num =<string>	Numeric Digits	SIP extension number (max. length: 20) Binding via SIP
username =<string>	Character Strings	Name (max. 32 characters). Cannot be empty



passwd =<string>	Numeric Digits	PIN to open door (max. length: 12)
gender =<int>	<0 1>	Gender 0 - Male (Default) 1 - Female
ID=<string>		Delete ID number. “,” used as separator; max 20 can be deleted on time.
identify_num =<string>		ID Number (max. length: 20)
cellphone_num =<int>		Cell Number (max. length: 16)
EOD =<int>		Valid Date Format: 20171001 (YYYYMMDD) Default: 20991231
enable_card =<int>	<0 1>	Enable the RFID card 0: Disable 1: Enable

Del:

<http://<servername>/goform/config?cmd=del&ID=ID1,ID2,ID3,ID4,...>

Example:

```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
</Configuration>
```



2. Door System Basic Settings

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

Get:

```
http://<servername>/goform/config?cmd=get&type=door
```

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
<ResCode>0</ResCode>
<RetMsg>OK</RetMsg>
<P14100>0</P14100>
<P14101>5</P14101>
<P14829>300</P14829>
<P14830>1000</P14830>
<P14846>2</P14846>
<P14102>5</P14102>
<P14103>1</P14103>
<P15420>1</P15420>
<P15421>1</P15421>
<P14105>0</P14105>
<P10462></P10462>
<P10464>1</P10464>
<P10465>0</P10465>
<P15423>5</P15423>
<P14340>0</P14340>
<P14120>0</P14120>
<P14121>0</P14121>
<P14800>1</P14800>
<P14801>1</P14801>
<P14856>0</P14856>
<P14827>0</P14827>
<P10457>N</P10457>
```



```

<P10463>N</P10463>
<P14850>0</P14850>
<P14851>N</P14851>
<P14852/></P14852>
<P14853></P14853>
<P14858>0</P14858>
<P14560>142000</P14560>
<P14561>200059</P14561>
<P14562>1</P14562>
<P14580>0</P14580>
<P15301>0</P15301>
</Configuration>

```

Set:

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

<parameter>=<value>	Values	Description
P14100=<int>	0 - 20	Delay before Unlock Action(s)
P14101=<int>	1 - 20	Unlock Action Holding Time(s)
P14829=<int>	0 - 2000	Minimum Interval of Swiping Card (in millisecond)
P14103=<int>	<0 1>	Take snapshot when strike operated: 0: No 1: Yes
P15420=<int>	<0 1>	Take snapshot when doorbell pressed: 0: No 1: Yes



P14856=<int>	<0 1>	Call Mode: 0: Virtual Number (or Room Number) 1: SIP Number
P14827=<int>	<0 1 2>	Mode of Door Bell: 0: Call Doorbell Number 1: Doorbell Output Control (DO1) 2: Both above
P10462=<string>		Number Called When Door Bell Pressed (Max. Length=255)
P10457=<string>		PIN for Open Door Remotely Max. length = 8
P10464=<int>	<0 1 2>	PIN type for Open Door locally: 0: Private PIN 1: Universal PIN 2: Card & private PIN
P10463=<string>		Local PIN to Open Door (all digit's value)
P14858=<int>	<0 1>	Enable DTMF Open Door 0: Enable 1: Disable (Default)
P14825=<int>	<0 1>	Enable Guest PIN Open Door: 0: Disable 1: Enable
P14851=<string>		Guest PIN: Numerical Digits Max. Length = 8
P14852=<string>	e.g.: 2017/06/14 00:00:00	Guest PIN starting time



P14853=<string>	e.g.: 2017/06/14 02:02:10	Guest PIN ending time
P14580=<int>	<0 1>	Disable Auto-Answer 0: Disable (Default) 1: Enable
P14582=<int>	<0 1>	Enable Doorbell Button to Hang Up Call 0: Disable (Default) 1: Enable
P15421=<int>	<0 1>	Disable Keypad (except Doorbell Button) 0: Disable (Default) 1: Enable
P15422=<int>	<0 1>	Enable On Hook After Remote Door Opened 0: Disable (Default) 1: Enable
P15424=<int>	<0 1>	Enable HTTP API Remote Open Door 0: Disable (Default) 1: Enable
P15428=<int>	5 -- 300	Open Door Valid Time
P10465=<int>	<0 1>	Enable Card Issuing Mode 0: Disable (Default) 1: Enable
P15423=<int>	1-1440	Card Issuing State Expire Time(m)
P14801=<int>	<0 1>	Enable White LED Back Light 0: Disable 1: Enable



P15301=<int>	<0 1>	Central Mode 0: Disable (Default) 1: Enable
P14340=<int>	<0 1 2>	Key Pressing Tone 0: Default 1: DTMF 2: Mute
P14120=<int>	<0 1>	Enable Weigand Input 0: Disable 1: Enable
P14121=<int>	<0 1 2>	Weigand Output 0: Disable 1: Relay and Local Authentication 2: Relay and Bypass Local
P14560=<string>		Start time turning on the Blue Door Bell Light Digit string like "1459". The first two digit is 24-hour format, las two is minutes 00 <= hour <=23; 00 <= minute <= 59
P14561=<string>		End time turning on the Blue Door Bell Light Digit string like "1459". The first two digit is 24-hour format, las two is minutes 00 <= hour <=23 00 <= minute <= 59
P14562=<int>	<0 1>	Enable Door Bell Blue Light 0: Disable 1: Enable



3. Group

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

Get:

```
http://<servername>/goform/config?cmd=get&type=group
```

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
<ResCode>0</ResCode>
<RetMsg>OK</RetMsg>
<group>
  <groupid>1</groupid>
  <schid>0</schid>
  <groupName>Qua</groupName>
</group>
<group>
  <groupid>2</groupid>
  <schid>1</schid>
  <groupName>Tech</groupName>
</group>
<P15301>0</P15301>
<schdeulelist>
  <schdeuleitem>AAA@0,</schdeuleitem>
  <schdeuleitem>BBB@0,</schdeuleitem>
  <schdeuleitem>schedule3@0,0@0000@0000,</schdeuleitem>
  <schdeuleitem>schedule4@0,0@0000@0000,</schdeuleitem>
  <schdeuleitem>schedule5@0,0@0000@0000,</schdeuleitem>
  <schdeuleitem>schedule6@0,0@0000@0000,</schdeuleitem>
  <schdeuleitem>schedule7@0,0@0000@0000,</schdeuleitem>
  <schdeuleitem>schedule8@0,0@0000@0000,</schdeuleitem>
  <schdeuleitem>schedule9@0,0@0000@0000,</schdeuleitem>
  <schdeuleitem>schedule10@0,0@0000@0000,</schdeuleitem>
</schdeulelist>
</Configuration>
```



Add:

```
http://<servername>/goform/config?cmd=add<para1>=<value1>&<para2>=<value2>
```

<para>=<value>	Values	Description
groupname=<string>&schid=<int>	groupname: string	groupname Max. Length=64
	schid: 1 -- 10	Time Schedule Index

Set:

```
http://<servername>/goform/config?cmd=set<para1>=<value1>&<para2>=<value2>&<para3>=<value3>
```

<parameter>=<value>	Values	Description
<para1>=<value1>&<para2>=<value2> &<para3>=<value3> groupid=<int>&groupname=<string>&schid=<int>	groupid: 1-10	groupname Max. Length=64 schid: Time Schedule Index
	schid: 1-10	groupid: group index.

Del:

```
http://<servername>/goform/config?cmd=del<para1>=<value1>
```

<parameter>=<value>	Values	Description
groupid=<int>	1 - 10	groupid: group index.

4. Schedule

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

Get:

```
http://<servername>/goform/config?cmd=get&type=door_schedule
```

Example:

```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P15301>0</P15301>
  <P15200>AAA@0,</P15200>
  <P15201>BBB@0,</P15201>
  <P15202>schedule3@0,0@0000@0000,</P15202>
  <P15203>schedule4@0,0@0000@0000,</P15203>
  <P15204>schedule5@0,0@0000@0000,</P15204>
  <P15205>schedule6@0,0@0000@0000,</P15205>
  <P15206>schedule7@0,0@0000@0000,</P15206>
  <P15207>schedule8@0,0@0000@0000,</P15207>
  <P15208>schedule9@0,0@0000@0000,</P15208>
  <P15209>schedule10@0,0@0000@0000,</P15209>
  <holidayitem>holiday1,</holidayitem>
  <holidayitem>holiday2,</holidayitem>
  <holidayitem>holiday3,</holidayitem>
  <holidayitem>holiday4,</holidayitem>
  <holidayitem>holiday5,</holidayitem>
  <holidayitem>holiday6,</holidayitem>
  <holidayitem>holiday7,</holidayitem>
  <holidayitem>holiday8,</holidayitem>
  <holidayitem>holiday9,</holidayitem>
  <holidayitem>holiday10,</holidayitem>
</Configuration>
```



Set:

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

<parameter>=<value>	Values	Description
P15200=<string>		Value format:
P15201=<string>		name@holiday_mode,weekday0@start_time0@end
P15202=<string>		_time0,weekday1@start_time1@end_time1,...
P15203=<string>		Use (,) as separator when set multiple numbers.
P15204=<string>		e.g.:
P15205=<string>		AAA@0,0@0830 @1459 ,0@1600@1800,
P15206=<string>		AAA is a revisable name for a schedule, Max.
P15207=<string>		Length = 64
P15208=<string>		1 st @ represent holiday mode, 0-10.
P15209=<string>		2 st @ represent date of the week, 0-6, Sunday to
		Saturday
		3 nd @ the pre-four digits represent start time of that
		period, 0830 represent 08:30 in 24 hour format;
		2 nd @ the post-four digits represent end time of that
		period, 1459 represent 14:59 in 24 hour format.

Notes:

- There should be **NO** overlap in any time period configured in the same day.
- (,) should be used to separate the different time period configured.



5. Holiday

Support **cmd = get/set**

Get:

http://<servername>/goform/config?cmd=get&type=holiday

Example:

```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P15301>0</P15301>
  <P15250>schedule_1,</P15250>
  <P15251>schedule_2,</P15251>
  <P15252>schedule_3,</P15252>
  <P15253>schedule_4,</P15253>
  <P15254>schedule_5,</P15254>
  <P15255>schedule_6,</P15255>
  <P15256>schedule_7,</P15256>
  <P15257>schedule_8,</P15257>
  <P15258>schedule_9,</P15258>
  <P15259>schedule_10,</P15259>
</Configuration>
```

Set:

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

<parameter>=<value>	Values	Description
P15250=<string>		Value format: name,start_date0@end_date0, start_date1@end_date1,
P15251=<string>		
P15252=<string>		



P15253=<string>	Use (,) as separator when set multiple dates. e.g.: schedule_1,20180405@20180420, 20180421@20180425, schedule_1 is a revisable name for a schedule, Max. Length = 64
P15254=<string>	
P15255=<string>	
P15256=<string>	
P15257=<string>	
P15258=<string>	
P15259=<string>	

Notes:

- There should be **NO** overlap in any time period configured in the same day.
- (,) should be used to separate the different time period configured.

6. Date and Time

Support **cmd = get/set**

Get:

http://<servername>/goform/config?cmd=get&type=date

Example:

```

<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P64>16</P64>
  <P246/>
  <P14046>GMT+00:00</P14046>
  <P5006>1</P5006>
  <P30>pool.ntp.org</P30>
  <P10006>1440</P10006>
  <P10004>0</P10004>
  <P10005/>
  <P10008>0</P10008>
  <P14040>2018</P14040>
  
```



```

<P14041>4</P14041>
<P14042>24</P14042>
<P14043>15</P14043>
<P14044>49</P14044>
<P14045>16</P14045>
</Configuration>

```

Set:

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

<parameter>=<value>	Values	Description
P64=<int>	0 - 38 and 55,56	Time Zone: 1: GMT-12 (Eniwetok, Kwajalein) 2: GMT-11 (Midway Isl., Samoa) 3: GMT-10 (Hawaii, Aleutian Isl.) 4: GMT-09 (Alaska) 5: GMT-08 (Las Vegas, San Francisco, 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) 55: GMT-04:30 (Caracas) 13: GMT-03 (Brasilia, 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) 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) 56: GMT+13 (Auckland, Wellington)
P10004=<int>	<0 1>	Enable Daylight Saving Time 0 : Disable 1 : Enable
P14829=<string>		Start time for Daylight Saving Time
P14103=<string>		End time for Daylight Saving Time
P5006=<int>	<0 1>	Enable NTP 0 : Disable 1 : Enable
P30=<string>		NTP Server
P10006=<int>	60 - 1440	Interval of time update (minute)



7. Network Settings

Support **cmd = get/set**

Get:

```
http://<servername>/goform/config?cmd=get&type=net
```

Example:

```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P67>00:0B:82:B9:A9:1C</P67>
  <P8>0</P8>
  <P9>192</P9>
  <P10>168</P10>
  <P11>5</P11>
  <P12>202</P12>
  <P13>255</P13>
  <P14>255</P14>
  <P15>255</P15>
  <P16>0</P16>
  <P17>192</P17>
  <P18>168</P18>
  <P19>5</P19>
  <P20>1</P20>
  <P10107>0</P10107>
  <P21>192</P21>
  <P22>168</P22>
  <P23>5</P23>
  <P24>1</P24>
  <P25>192</P25>
  <P26>168</P26>
  <P27>5</P27>
  <P28>1</P28>
```



```

<P1684>1</P1684>
<P51>0</P51>
<P87>0</P87>
</Configuration>

```

Set:

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

<parameter>=<value>	Values	Description
P8=<int>	<0 1>	IP Address Mode 0: DHCP 1: Static IP
P9=<int>	0 - 255	IP Address P9.P10.P11.P12
P10=<int>	0 - 255	
P11=<int>	0 - 255	
P12=<int>	0 - 255	
P13=<int>	0 - 255	Subnet Mask P13.P14.P15.P16
P14=<int>	0 - 255	
P15=<int>	0 - 255	
P16=<int>	0 - 255	
P17=<int>	0 - 255	Gateway



P18=<int>	0 - 255	P17.P18.P19.P20
P19=<int>	0 - 255	
P20=<int>	0 - 255	
P10107=<int>	<0 1>	DNS
P21=<int>	0 - 255	DNS Server 1 P21.P22.P23.P24
P22=<int>	0 - 255	
P23=<int>	0 - 255	
P24=<int>	0 - 255	
P25=<int>	0 - 255	DNS Server 2 P25.P26.P27.P28
P26=<int>	0 - 255	
P27=<int>	0 - 255	
P28=<int>	0 - 255	
P1684=<int>	<0 1>	Enable LLDP 0: Disable 1: Enable
P51=<int>	0-255	Layer 2 QoS 802.1Q/VLAN Tag
P87=<int>		Layer 2 QoS 802.1p Priority Value



8. Access Settings

Support cmd = get/set

Get:

`http://<servername>/goform/config?cmd=get&type=access`

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P12054>1</P12054>
  <P901>443</P901>
  <P903>554</P903>
  <P12056>5</P12056>
  <P14832>5</P14832>
  <P14834>5</P14834>
  <P12052>1</P12052>
  <P12053>1</P12053>
  <P276>1</P276>
  <P27006>22</P27006>
</Configuration>
```

Set:

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

<code><parameter>=<value></code>	Values	Description
P12054=<int>	<0 1>	Web Access Mode 0: HTTP 1: HTTPS



P901=<int>	HTTP: 80 - 65535 HTTPS: 443 - 65535	Web Port
P903=<int>	554 - 65535	RTSP Port
P12056=<int>	3 - 60	Time Out for Login (minute)
P14832=<int>	3 - 10	Max. continuous errors for Login Lock
P14834=<int>	5 - 60	Login error lockout time (minute)
P12053=<int>	<0 1>	Enable UPnP Search 0 : Disable 1 : Enable
P276=<int>	<0 1>	Enable SSH 0 : Disable 1 : Enable
P27006=<int>	22 - 65535	SSH Port

9. User Management

Support **cmd = set**

Set:

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

<parameter>=<value>	Values	Description
oldpwd=<string>		Oldpwd: Old Password, Max. Length = 32



Newpwd=<string>		Newpwd: New Password Max. Length = 32
cfmnewpwd=<string>		cfmnewpwd: Confirmed New Password; Max. Length = 32
		e.g.:
		cmd=set&oldpwd=123&newpwd=admin&cfmnewpwd=admin
		Oldpwd、Newpwd、cfmnewpwd , three must be set at the same time, and Newpwd must be the same as cfmnewpwd. Otherwise invalid.
P10124=<string>		Password Recover Email Address

10.SIP Settings

Support **cmd = get/set**

Get:

http://<servername>/goform/config?cmd=get&type=sip

Example:

```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P12054>1</P12054>
  <P499>0</P499>
  <P407/>
  <P402/>
  <P2412/>
  <P403/>
  <P2433/>
```



```
<P408>0</P408>
<P404/>
<P405/>
<P409>0</P409>
<P76/>
<P412>60</P412>
<P413>5060</P413>
<P39>5004</P39>
<P10451>300</P10451>
<P14847>15</P14847>
<P448>0</P448>
<P8000>1</P8000>
<P8004>0</P8004>
<P2402>1</P2402>
<P2403>0</P2403>
<P1309>0</P1309>
<P10453>1</P10453>
<PIpCallSave>1</PIpCallSave>
<P10454>0</P10454>
<P8001>0</P8001>
<P8003>0</P8003>
<P411>1</P411>
<P443>0</P443>
<P15427>0</P15427>
<P424>100</P424>
<P406/>
<P281>s1pphone</P281>
</Configuration>
```



Set:

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

<parameter>=<value>	Values	Description
SIP Basic Setting		
P407=<string>		Account Name: Max. Length = 64
P402=<string>		SIP Server: Max. Length = 255
P403=<string>		Outbound Proxy: Max. Length = 255
P404=<string>		SIP User ID: Max. Length = 255
P405=<string>		Authenticate ID: Max. Length = 255
P409=<int>	<0 1 2>	TEL URI 0: Forbidden 1: User = Phone 2: Enable
P406=<string>		Authenticate Password: Max. Length = 255
SIP Advanced Setting		
P76=<string>		STUN Server
P412=<int>	60 - 64800	Registration Expiration (Minutes)
P413=<int>	1 - 65535	Local SIP Port



P39=<string>	1024 - 65400	Local RTP Port
P10451=<int>	0 - 65535	Auto On-Hook Timer (Seconds)
P14847=<int>	0-90	Ring Timeout (Seconds)
P448=<int>	<UDP TCP TLS/TCP>	SIP Transport Method: 0: UDP 1: TCP 2: TLS/TCP
P8000=<int>	<0 1 2>	Stream 0: Stream 1 (Primary, for FHD recording) 1: Stream 2 (2 nd stream, for SIP and other usage) 2: Stream 3 (3 rd stream, for Mobile data)
P280=<string>		SIP TLS Certification
P279=<string>		SIP TLS Private Key
P281=<string>		SIP TLS Private Key Password
P2402=<int>	<0 1>	DTMF Function: RFC2833 0: Disable 1: Enable
P2403=<int>	<0 1>	DTMF Function: SIP INFO 0: Disable 1: Enable
P1309=<int>	<0 1>	Enable Keep Alive / NAT Traversal Heartbeat 0: Disable 1: Enable
P10453=<int>	<0 1>	Enable Direct IP Call / IP Peering 0: Disable 1: Enable



P8003=<int>	<0 1>	SIP Proxy Compatible Mode: 0: Disable 1: Enable
P411=<int>	<0 1>	Unregister On Reboot 0: Disable 1: Enable
P443=<int>	<0 1>	SRTP 0: Disable 1: Enable
P15427=<int>	<0 1>	Enable Multi-channel Call Mode 0: Disable (default) 1: Enable
P424=<int>	<100 102>	Special Feature 100: Standard 102: Broadsoft
P2495	<0 1>	Enable Session Timer 0: Disable 1: Enable

11. White List

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

Get:

http://<servername>/goform/config?cmd=get&type=sip

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
```



```

<P10460>1111</P10460>
<P10460>2222</P10460>
<P10460>3333</P10460>
</Configuration>

```

Set:

```
http://<servername>/goform/config?cmd=set&P10460=num
```

Add:

```
http://<servername>/goform/config?cmd=add&P10460=num
```

Del:

```
http://<servername>/goform/config?cmd=del&P10460=num1,num2,num3, ...
```

<parameter>=<value>	Values	Description
P10454=<int>	<0 1>	Enable White List 0: Disable 1: Enable
P10460=<string>		Use (,) as separator when deleting multiple numbers.

Example:

```

<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
</Configuration>

```



12. Video Settings

Support **cmd = get/set**

Get:

```
http://<servername>/goform/config?cmd=get&type=video
```

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P10572>1</P10572>
  <P12306>96</P12306>
  <P12313>1</P12313>
  <P12307>1025</P12307>
  <P12315>4096</P12315>
  <P12904>30</P12904>
  <P12924>0</P12924>
  <P12311>2</P12311>
  <P12312>80</P12312>
  <P12706>96</P12706>
  <P12713>1</P12713>
  <P12707>1022</P12707>
  <P12708>512</P12708>
  <P12709>25</P12709>
  <P12710>0</P12710>
  <P12711>2</P12711>
  <P12712>80</P12712>
  <P13106>96</P13106>
  <P13113>1</P13113>
  <P13107>0</P13107>
  <P13108>256</P13108>
  <P13109>30</P13109>
  <P13110>0</P13110>
  <P13111>2</P13111>
```



```
<P13112>80</P13112>
</Configuration>
```

Set:

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

<parameter>=<value>	Values	Description
<i>Stream 1</i>		
P12306=<int>	<26 96>	Video Codec: 26: H.264 96: MJPEG
P12313	<0 1 2>	Profile: 0: Baseline 1: Main Profile 2: High Profile
P12307=<int>	<1022 1025>	Resolution: 1025: 1920*1080 (16:9) 1022: 1280*720 (16:9)
P12315=<int>	<1024 2048 4096>	Video Bit Rate (kbps) 1024: 1024kb 2048: 2048kb 4096: 4096kb
P12904=<int>	<5 10 15 20 25 30>	Max. Frame Rate (fps) 5: 5fps 10: 10fps 15: 15fps 20: 20fps 25: 25fps 30: 30fps



P12924=<int>	<0 1>	Video Bit Rate Control 0: Constant Bit Rate (CBR) 1: Variable Bit Rate (VBR)
P12311=<int>	<0 1 2 3 4>	Image Quality (Valid only when VBR selected) 0: Very High 1: High 2: Normal 3: Low 4: Very Low
P12312=<int>	1 - 100	I-Frame Interval
Stream 2		
P12706=<int>	<26 96>	Video Codec: 26: H.264 96: MJPEG
P12713	<0 1 2>	Profile: 0: Baseline 1: Main Profile 2: High Profile
P12707=<int>	<1022 1 1010>	Resolution: 1022: 1280*720 (16:9) 1: 640*480 (4:3) 1010: 480*272 (16:9)
P12708=<int>	<256 512 1024>	Video Bit Rate (kbps) 256: 256kb 512: 512kb 1024: 1024kb
P12709=<int>	<5 10 15 20 25>	Max. Frame Rate (fps) 5: 5fps 10: 10fps 15: 15fps



		20: 20fps 25: 25fps
P12710=<int>	<0 1>	Video Bit Rate Control 0: Constant Bit Rate (CBR) 1: Variable Bit Rate (VBR)
P12711=<int>	<0 1 2 3 4>	Image Quality (Valid only when VBR selected) 0: Very High 1: High 2: Normal 3: Low 4: Very Low
P12712=<int>	1 - 100	I-Frame Interval
Stream 3		
P13106=<int>	<26 96>	Video Codec: 26: H.264 96: MJPEG
P13113=<int>	<0 1 2>	Profile: 0: Baseline 1: Main Profile 2: High Profile
P13107=<int>	<0 1008>	Resolution: 1008: 352*240 (CIF) 0: 320*240 (4:3)
P13108=<int>	<128 256 512>	Video Bit Rate (kbps) 128: 128kb 256: 256kb 512: 512kb



P13109=<int>	<5 10 15 20 25 30>	Max. Frame Rate (fps) 5: 5fps 10: 10fps 15: 15fps 20: 20fps 25: 25fps 30: 30fps
P13110=<int>	<0 1>	Video Bit Rate Control 0: Constant Bit Rate (CBR) 1: Variable Bit Rate (VBR)
P13111=<int>	<0 1 2 3 4>	Image Quality (Valid only when VBR selected) 0: Very High 1: High 2: Normal 3: Low 4: Very Low
P13112=<int>	1 - 100	I-Frame Interval

13. On Screen Display (OSD) Settings

Support **cmd = get/set**

Get:

<http://<servername>/goform/config?cmd=get&type=osd>

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
```



```

<P10044>1</P10044>
<P10045>0</P10045>
<P10001>1</P10001>
<P10007>0</P10007>
<P10040/>
<P10041>0</P10041>
<P10046>0</P10046>
</Configuration>

```

Set:

http://<servername>/goform/config?cmd=set<parameter>=<value>...

<parameter>=<value>	Values	Description
P10044=<int>	<0 1>	Display Time 0: Disable 1: Enable
P10045=<int>	<0 1>	Display Text 0: Disable 1: Enable
P10001=<int>	<0 1 2>	OSD Date Format 0: Year – Month - Date 1: Month – Date - Year 2: Date – Month - Year
P10007=<int>	<0 1>	OSD Time Format 0: 24 hours 1: 12 hours
P10040=<string>		OSD Text Length Max. Length = 32



P10041=<int>	<0 1 2 3>	OSD Position for Date/Time 0: Top Left 1: Bottom Left 2: Top Right 3: Bottom Right
P10046=<int>	<0 1 2 3>	OSD Position for Text 0: Top Left 1: Bottom Left 2: Top Right 3: Bottom Right

14. CMOS Settings

Support **cmd = get/set**

Get:

<http://<servername>/goform/config?cmd=get&type=cmos>

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P10572>1</P10572>
  <P10573>0</P10573>
  <P14565>10</P14565>
  <P12314>1</P12314>
  <P10503>0</P10503>
</Configuration>
```



Set:

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

<parameter>=<value>	Values	Description
P10572=<int>	<1 2>	Mode: 1: Normal 2: Low Light
P10573=<int>	<0 1>	LDC (Lens Distortion Correction) 0: Disable / OFF 1: Enable / ON
P12314=<int>	<0 1>	Power Frequency (For Avoiding Video Flicker) 0: 50HZ 1: 60HZ
P10503=<int>	<0 30 60 125 250 500 1000 2000 5000 10000>	Shutter Speed: 0: Auto 30: (1/30)s 60: (1/60)s 125: (1/125)s 250: (1/250)s 500: (1/500)s 1000: (1/1000)s 2000: (1/2000)s 5000: (1/5000)s 10000: (1/10000)s

15. Audio Settings

Support **cmd = get/set**

Get:

<http://<servername>/goform/config?cmd=get&type=audio>



Example:

```

<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P14000>1</P14000>
  <P14002>13</P14002>
  <P14003>4</P14003>
  <P14836>4</P14836>
  <P14835>4</P14835>
</Configuration>
  
```

Set:

http://<servername>/goform/config?cmd=set<parameter>=<value>...

<parameter>=<value>	Values	Description
P14000=<int>	<1 2 4>	Audio Codec: 1: PCMU 2: PCMA 4: G722
P14003=<int>	GDS3710: 0 – 6	System Volume
P14835=<int>	GDS3710: 0 – 6	Door Bell Volume



16. Privacy Masks

Support **cmd = get/set**

Get:

<http://<servername>/goform/config?cmd=get&type=privacy>

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P14225>0@0,0,0,0;0@0,0,0,0;0@0,0,0,0;0@0,0,0,0;</P14225>
</Configuration>
```

Set:

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

<parameter>=<value>	Values	Description
P14225=<string>		Region for Privacy Masks <u>Format:</u> Enable @Top Left x1 coordinates, Top Left y1 coordinates; Bottom Right x2 coordinates, Bottom Right y2 coordinates. e.g.: 0@0,0,0,0; 0@0,0,0,0; 0@0,0,0,0; 0@0,0,0,0;



Digit before @ represents function, 0: Disable/Hide
1: Enable/Display

Coordinates are separated by (,)
Region is separated by (;)

Please Do remember the last ; and configure the 4 regions at the same time all at once.

Rules:

0 <= x1, x2 <= 704; 0 <= y1, y2 <= 576; x1 <= x2;
y1 <= y2

17. Alarm Config

Support **cmd = get/set**

Get:

```
http://<servername>/goform/config?cmd=get&type=event
```

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P12054>1</P12054>
  <P10250>0</P10250>
  <P14221>0</P14221>
  <P14222>1</P14222>
  <P14223>50</P14223>
```



<P14224>[0,0,0,0],[0,0,0,0],[0,0,0,0],[0,0,0,0],[0,0,0,0],[0,0,0,0],[0,0,0,0],[0,0,0,0],</P14224>

<P14320>0</P14320>

<P14321>0</P14321>

<P14322>1</P14322>

<P14325>0</P14325>

<P14326>0</P14326>

<P14327>1</P14327>

<P903>554</P903>

<P3>admin</P3>

<P2>PzBmH4qQ</P2>

<P14200>schedule1,0@0000@2359,</P14200>

<P14201>schedule2,0@0000@2359,</P14201>

<P14202>schedule3,0@0000@2359,</P14202>

<P14203>schedule4,0@0000@2359,</P14203>

<P14204>schedule5,0@0000@2359,</P14204>

<P14205>schedule6,0@0000@2359,</P14205>

<P14206>schedule7,0@0000@2359,</P14206>

<P14207>schedule8,0@0000@2359,</P14207>

<P14208>schedule9,0@0000@2359,</P14208>

<P14209>schedule10,0@0000@2359,</P14209>

<P14300>profile1@0,0,0,0,0,0,</P14300>

<P14301>profile2@0,0,0,0,0,0,</P14301>

<P14302>profile3@0,0,0,0,0,0,</P14302>

<P14303>profile4@0,0,0,0,0,0,</P14303>

<P14304>profile5@0,0,0,0,0,0,</P14304>

<P14305>profile6@0,0,0,0,0,0,</P14305>

<P14306>profile7@0,0,0,0,0,0,</P14306>

<P14307>profile8@0,0,0,0,0,0,</P14307>




```

<P14308>profile9@0,0,0,0,0,0,0,0,</P14308>
<P14309>profile10@0,0,0,0,0,0,0,0,</P14309>
<P10467>0</P10467>
<P10466/>
<P14341>5</P14341>
<P10468>1</P10468>
<P10469/>
<P14350>0</P14350>
<P14355>1</P14355>
<P14354/>
<P14825>1</P14825>
<P14826>1</P14826>
<P14568>0@0@0@0@0@0</P14568>
</Configuration>

```

Set:

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

<parameter>=<value>	Values	Description
P10250=<int>	<0 1>	Enable Motion Detection Alarm 0 : Disable 1 : Enable
P14223=<int>	0 - 100	Sensitivity of Motion Detection
P14224=<string>		Region of Motion Detection <u>Format:</u> [Top Left x1 coordinates,

		<p>Top Left y1 coordinates, Bottom Right x2 coordinates, Bottom Right y2 coordinates]</p> <p>e.g.:</p> <p>[1,5,7,15],[11,8,16,17],[19,9,26,19],[0,0,0,0], [0,0,0,0],[0,0,0,0],[0,0,0,0],[0,0,0,0]</p> <p>Coordinates are separated by (,) Region is separated by (;) The 8 regions must be configured at the same time all at once.</p> <p>Rules: 0 <= x1, x2 <= 704; 0 <= y1, y2 <= 576; x1 <= x2; y1 <= y2</p>
P14221=<int>	<0 1 2 3 4 5 6 7 8 9 10>	<p>Select Alarm Schedule</p> <p>0: All Day 1: Schedule1 2: Schedule2 3: Schedule3 4: Schedule4 5: Schedule5 6: Schedule6 7: Schedule7 8: Schedule8 9: Schedule9 10: Schedule10</p>
P14222=<int>	<1 2 3 4 5 6 7 8 9 10>	<p>Alarm Action Profile</p> <p>1: profile1 2: profile2 3: profile3 4: profile4 5: profile5 6: profile6</p>



		7: profile7 8: profile8 9: profile9 10: profile10
P14320=<int>	<0 1 2>	Action of Alarm Input Channel 1 0: Disable 1: Alarm Input 2: Open Door
P14321=<int>	<0 1 2 3 4 5 6 7 8 9>	Select Alarm Schedule 1 0: All Day 1: Schedule1 2: Schedule2 3: Schedule3 4: Schedule4 5: Schedule5 6: Schedule6 7: Schedule7 8: Schedule8 9: Schedule9 10: Schedule10
P14322=<int>	<1 2 3 4 5 6 7 8 9 10>	Select Alarm Action Profile 1 1: profile1 2: profile2 3: profile3 4: profile4 5: profile5 6: profile6 7: profile7 8: profile8 9: profile9 10: profile10



P14325=<int>	<0 1 2>	Action of Alarm Input Channel 1 0: Disable 1: Alarm Input 2: Open Door
P14326=<int>	<0 1 2 3 4 5 6 7 8 9>	Select Alarm Schedule 2 0: All Day 1: Schedule1 2: Schedule2 3: Schedule3 4: Schedule4 5: Schedule5 6: Schedule6 7: Schedule7 8: Schedule8 9: Schedule9 10: Schedule10
P14327=<int>	<1 2 3 4 5 6 7 8 9 10>	Select Alarm Action Profile 2 1: profile1 2: profile2 3: profile3 4: profile4 5: profile5 6: profile6 7: profile7 8: profile8 9: profile9 10: profile10
P14341=<int>	<5 10 15 20 25 30>	Alarm Output Duration (Seconds) 5: 5s (Default) 10: 10s 15: 15s 20: 20s



		25: 25s 30: 30s
P10467=<int>	<0 1>	Enable Hostage Code 0: Disable 1: Enable
P10466=<string>		Hostage Code: All digits string Max. Length = 10
P10468=<int>	<1 2 3 4 5 6 7 8 9 10>	Select Alarm Action Profile 1: profile1 2: profile2 3: profile3 4: profile4 5: profile5 6: profile6 7: profile7 8: profile8 9: profile9 10: profile10
P14350=<int>	<0 1>	Enable Tamper Alarm 0: Disable 1: Enable
P14355=<int>	<1 2 3 4 5 6 7 8 9 10>	Select Alarm Action Profile 1: profile1 2: profile2 3: profile3 4: profile4 5: profile5 6: profile6 7: profile7 8: profile8



		9: profile9 10: profile10
P14825=<int>	<0 1>	Enable Keypad Input Error Alarm 0: Disable 1: Enable
P14826=<int>	<1 2 3 4 5 6 7 8 9 10>	Select Alarm Action Profile 1: profile1 2: profile2 3: profile3 4: profile4 5: profile5 6: profile6 7: profile7 8: profile8 9: profile9 10: profile10

18. Alarm Schedule Configuration

Support **cmd = get/set**

Get:

http://<servername>/goform/config?cmd=get&type=alarm_schedule

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P14200>schedule1,0@0000@2359,</P14200>
```



```

<P14201>schedule2,0@0830@1459,0@1500@1820,</P14201>

<P14202>schedule3,0@0000@2359,</P14202>

<P14203>schedule4,0@0000@2359,</P14203>

<P14204>schedule5,0@0000@2359,</P14204>

<P14205>schedule6,0@0000@2359,</P14205>

<P14206>schedule7,0@0000@2359,</P14206>

<P14207>schedule8,0@0000@2359,</P14207>

<P14208>schedule9,0@0000@2359,</P14208>

<P14209>schedule10,0@0000@2359,</P14209>

</Configuration>

```

Set:

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

<parameter>=<value>	Values	Description
P14200=<string>		e.g.: <P14201>schedule2,0@0830@1459,0@1500@1820,</P14201>
P14201=<string>		schedule2 is a revisable name for a time period, Max. Length = 20
P14202=<string>		1 st @ represent date of the week, 0-6, Sunday to Saturday
P14203=<string>		2 nd @ the pre-four digits represent start time of that period, 0830 represent 08:30 in 24 hour format;
P14204=<string>		2 nd @ the post-four digits represent end time of that period, 1459 represent 14:59 in 24 hour format.
P14205=<string>		
P14206=<string>		
P14207=<string>		<u>NOTE:</u>
P14208=<string>		There should be NO overlap in any time period configured in the same day.
P14209=<string>		(< >) should be used to separate the different time period configured.

19. Alarm Action Configuration

Support cmd = get/set

Get:

```
http://<servername>/goform/config?cmd=get&type=alarm_profile
```

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P14827>0</P14827>
  <P14300>profile1@0,0,0,0,0,0,0</P14300>
  <P14301>profile2@0,0,0,0,0,0,0</P14301>
  <P14302>profile3@0,0,0,0,0,0,0</P14302>
  <P14303>profile4@0,0,0,0,0,0,0</P14303>
  <P14304>profile5@0,0,0,0,0,0,0</P14304>
  <P14305>profile6@0,0,0,0,0,0,0</P14305>
  <P14306>profile7@0,0,0,0,0,0,0</P14306>
  <P14307>profile8@0,0,0,0,0,0,0</P14307>
  <P14308>profile9@0,0,0,0,0,0,0</P14308>
  <P14309>profile10@0,0,0,0,0,0,0</P14309>
</Configuration>
```

Set:

```
http://<servername>/goform/config?cmd=set<parameter>=<value>...
```



<parameter>=<value>	Values	Description
P14300=<string>		e.g.: <P14300>profile1 @0,0,0,0,0,0</P14300>
P14301=<string>		profile1 is revisable name of alarm action, Max. Length = 20
P14302=<string>		1 st digit after @ represents whether "Upload to Alarm Center":
P14303=<string>		0: Disable 1: Enable
P14304=<string>		2 nd digit after @ represents whether "Sound Alarm"
P14305=<string>		0: Disable 1: Enable
P14306=<string>		3 rd digit after @ represents whether "Voice Alarm to SIP Phone"
P14307=<string>		0: Disable 1: Enable
P14308=<string>		4 th digit after @ represents whether "Alarm Output"
P14309=<string>		0: Disable 1: Enable
P14309=<string>		5 th digit after @ represents whether "Send Email"
P14309=<string>		0: Disable 1: Enable
P14309=<string>		6 th digit after @ represents whether "Upload JPEG" snapshot
P14309=<string>		0: Disable 1: Enable

20. Alarm Phone List

Support **cmd = get/add/del**

Get:

<http://<servername>/goform/config?cmd=get&type=sip>

Example:

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



```
<ResCode>0</ResCode>
<RetMsg>OK</RetMsg>
<P10459>111</P10459>
<P10459>aaa</P10459>
</Configuration>
```

Add:

```
http://<servername>/goform/config?cmd=add&P10459=num1,num2, ...
```

<parameter>=<value>	Values	Description
P10459=<string>		Alarm Phone

Del:

```
http://<servername>/goform/config?cmd=del&P10459=num1,num2,num3, ...
```

<parameter>=<value>	Values	Description
P10459=<string>		(,) used as a separator when multiple alarm numbers deleted.

21. Email Settings

Support **cmd = get/set**

Get:

```
http://<servername>/goform/config?cmd=get&type=sntp
```



Example:

```

<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P10120>0</P10120>
  <P10121>smtp.google.com</P10121>
  <P10122>25</P10122>
  <P10123>kevin@google.com</P10123>
  <P10124>kevin@google.com</P10124>
  <P14348>kevin@google.com</P14348>
  <P14349>kevin@google.com</P14349>
  <P10127>kevin</P10127>
  <P10129>0</P10129>
  <P10128r>123</P10128r>
  <P10128>Y</P10128>
</Configuration>
  
```

Set:

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

<parameter>=<value>	Values	Description
P10121=<string>		SMTP Mail Server
P10122=<string>		Port of SMTP Server
P10123=<string>		Sender's email address. Max. Length = 127
P10127=<string>		Sender's User Name, Max. Length = 63
P10128=<string>		Sender's email password, Max. Length = 63



P10124=<string>		Password Recovery Email, Max. Length = 63
P14348=<string>		Alarm to email address 1, Max. Length = 127
P14349=<string>		Alarm to email address 2, Max. Length = 127
P10129=<int>	<0 1>	SSL Encryption 0: Disable 1: Enable

22.FTP Settings

Support **cmd = get/set**

Get:

<http://<servername>/goform/config?cmd=get&type=ftp>

Example:

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

```
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P12054>1</P12054>
  <P10140>1</P10140>
  <P14113>1</P14113>
  <P14114/>
  <P14115>21</P14115>
  <P14116/>
  <P14118>/</P14118>
  <P14330/>
  <P14332/>
  <P14117/>
</Configuration>
```



Set:

```
http://<servername>/goform/config?cmd=set<parameter>=<value>...
```

<parameter>=<value>	Values	Description
P14113=<int>	<0 1>	Storage Server Type 0: FTP 1: Central Storage (GDSManager Configure)
P14114=<string>		FTP Server IP or FQDN, Max. Length = 255
P14115=<int>		FTP Server Port, Max. Length = 5
P14116=<string>		FTP User Name, Max. Length = 63
P14118=<string>		FTP Path, Max. Length = 255

23. Upgrade Configuration

Support **cmd = get/set**

Get:

```
http://<servername>/goform/config?cmd=get&type=upgrade
```

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P12054>1</P12054>
  <P6767>1</P6767>
  <P192>fm.grandstream.com/g</P192>
```



```
<P6768/>

<P232/>

<P233/>

<P212>2</P212>

<P237>fm.grandstream.com/gs</P237>

<P1360/>

<P234/>

<P235/>

<P6769/>

<P1361/>

<P1359/>

<version_limit>1.0.3.1</version_limit>

<P193>10080</P193>

<P194>1</P194>

<P145>1</P145>

<P1414>0</P1414>

<P8463>0</P8463>

</Configuration>
```

Set:

```
http://<servername>/goform/config?cmd=set<parameter>=<value>...
```



<parameter>=<value>	Values	Description
P212=<int>	<0 1 2>	Upgrade Method: 0: TFTP 1: HTTP 2: HTTPS
P192=<string>		Firmware Server Path
P6768=<string>		Firmware HTTP/HTTPS User Name
P6769=<string>		Firmware HTTP/HTTPS Password
P232=<string>		Firmware Upgrade File Prefix
P233=<string>		Firmware Upgrade File Postfix
P212=<int>	<0 1 2>	Config Upgrade Method 0: TFTP 1: HTTP 2: HTTPS
P237=<string>		Config Server Path
P1360=<string>		Config HTTP/HTTPS User Name
P1361=<string>		Config HTTP/HTTPS Password
P1359=<string>		XML Config File Password
P234=<string>		Config Upgrade File Prefix
P235=<string>		Config Upgrade File Postfix
P193=<int>	60 - 525600	Automatic Upgrade Interval (Minutes)
P145=<int>	<0 1>	DHCP Option 66 Override Server 0: Disable 1: Enable

P1414=<int>	<0 1>	Zero Config (for UCM Provisioning) 0: Disable 1: Enable
P194=<int>	<0 1>	Automatic Upgrade 0: Disable 1: Enable
P8463=<int>	<0 1>	Validate Server Certificates 0: Disable 1: Enable

24.Reboot & Reset

Support **cmd = reboot/reset**

Reboot:

http://<servername>/goform/config?cmd=reboot

Reset:

http://<servername>/goform/config?cmd=reset&P12055=<value>

<parameter>=<value>	Values	Description
P12055=<int>	<0 1 2 3>	Type of Reset Operation: 0: Clear All Data 1: Retain Network Data Only 2: Retain Only Card Information 3: Retain Network Data and Card Information



25.Syslog or Debug

Support **cmd = get/set**

Get:

`http://<servername>/goform/config?cmd=get&type=debug`

Example:

```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P207>192.168.1.10</P207>
  <P208>0</P208>
</Configuration>
```

Set:

`http://<servername>/goform/config?cmd=set<parameter>=<value>...`

<parameter>=<value>	Values	Description
P207=<string>		Debug Log Server IP or FQDN
P208=<int>	<0 1 2 3 4>	Debug Log Level: 0: None 1: Debug 2: Info 3: Warning 4: Error



26. Data Maintenance

Support **cmd = export/upload**

Export:

```
http://<servername>/goform/config?cmd=export&type=0&data_type=0
```

<parameter>=<value>	Values	Description
data_type=<int>	<0 1>	The type of system config file. 0: System Config Data(No include password) 1: System Config Data(No include password)

Upload:

```
http://<servername>/goform/config?cmd=upload&type=1
```

27. Event Notification

Support **cmd = get/set**

Get:

```
http://<servername>/goform/config?cmd=get&type=log
```

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
```



```

<RetMsg>OK</RetMsg>

<P15410>1</P15410>

<P15413>http://192.168.1.2:80/</P15413>

<P15414>admin</P15414>

<P15415>admin</P15415>

</Configuration>
  
```

Set:

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

<parameter>=<value>	Values	Description
P15410=<int>	<0 1>	Enable Event Notification 0: Disable 1: Enable
P15417=<int>	<1 2>	Via Type 1: HTTP 2: HTTPS
P15413=<string>		HTTP Server URL: Format ip:port/path . Example: 192.168.1.2:80/ Max. Length=256
P15414=<string>		HTTP Server Username: If don't need the Username & Password to access the HTTP server, please keep empty. Max. Length=128
P15415=<string>		HTTP Server Password: If don't need the Username & Password to access the HTTP server, please keep empty. Max. Length=128



P15416=<string>

URL Template

Default:

```
{"mac":"${MAC}","content":"${WARNING  
_MSG}"}
```

28. Trusted CA Certificates

Support **cmd = get/set**

Get:

```
http://<servername>/goform/config?cmd=get&type=trustedca
```

Example:

```
<?xml version="1.0"encoding="UTF-8" ?>  
<Configuration>  
  <ResCode>0</ResCode>  
  <RetMsg>OK</RetMsg>  
  <P8433></P8433>  
  <P8433></P8434>  
  <P8433></P8435>  
  <P8433></P8436>  
  <P8433></P8437>  
  <P8433></P8438>  
</Configuration>
```

Set:

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



<parameter>=<value>	Values	Description
P8433=<string>		
P8434=<string>		
P8435=<string>		
P8436=<string>		Trusted CA Certificates
P8437=<string>		
P8438=<string>		

29. System Status

Support **cmd = get**

Get:

`http://<servername>/goform/config?cmd=get&type=sysinfo`

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P89>GDS3710</P89>
  <P917>V1.6A</P917>
  <P1397>9650001416A</P1397>
  <P70>1.0.3.31</P70>
  <P45>1.0.3.31</P45>
  <P68>1.0.3.31</P68>
  <P15009>2 hours 44 minutes</P15009>
  <P499>0</P499>
</Configuration>
```



<parameter>=<value>	Values	Description
P89=<string>		Product Model
P208=<int>	<0 1 2 3 4>	Hardware Version
P1397=<string>		Part Number
P70=<string>		Kernel Version
P45=<string>		RootFS Version
P68=<string>		Program Version
P15009=<string>		System Up Time
P499=<int>	<0 1>	SIP Registered Status 0 : Unregistered 1 : Registered

30. Network Status

Support **cmd = get**

Get:

```
http://<servername>/goform/config?cmd=get&type=net
```

Example:

```
<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P67>00:0B:82:B9:A9:1C</P67>
  <P8>0</P8>
  <P9>192</P9>
  <P10>168</P10>
```



```

<P11>5</P11>
<P12>202</P12>
<P13>255</P13>
<P14>255</P14>
<P15>255</P15>
<P16>0</P16>
<P17>192</P17>
<P18>168</P18>
<P19>5</P19>
<P20>1</P20>
<P10107>0</P10107>
<P21>192</P21>
<P22>168</P22>
<P23>5</P23>
<P24>1</P24>
<P25>192</P25>
<P26>168</P26>
<P27>5</P27>
<P28>1</P28>
<P1684>1</P1684>
<P51>0</P51>
<P87>0</P87>
</Configuration>

```

<parameter>=<value>	Values	Description
P8=<int>	<0 1>	IP Address Mode 0: DHCP 1: Static IP



P9=<int>	0 - 255	IP Address: P9. P10. P11. P12.
P10=<int>	0 - 255	
P11=<int>	0 - 255	
P12=<int>	0 - 255	
P13=<int>	0 - 255	Subnet Mask: P13. P14. P15. P16.
P14=<int>	0 - 255	
P15=<int>	0 - 255	
P16=<int>	0 - 255	
P17=<int>	0 - 255	Gateway: P17. P18. P19. P20.
P18=<int>	0 - 255	
P19=<int>	0 - 255	
P20=<int>	0 - 255	
P10107=<iint>	<0 1>	DNS
P21=<int>	0 - 255	DNS Server 1 P21. P22. P23. P24.
P22=<int>	0 - 255	
P23=<int>	0 - 255	
P24=<int>	0 - 255	
P25=<int>	0 - 255	DNS Server 2 P25. P26. P27. P28.
P26=<int>	0 - 255	
P27=<int>	0 - 255	
P28=<int>	0 - 255	



HTTP API APPLICATION EXAMPLES

Now we provide two examples for reference:

- 1) General parameter revision, e.g.: change the “Unlocking Latency”
- 2) Obtain MJPEG stream

General Parameter Revision

Login Authentication: The authentication is using Challenge / Response encryption mode. After the successful authentication by the administrator, each later on operations will be accepted and successful ONLY when the correct authentication information is included inside the request header.

The authentication process is as following:

Step 1:

Client → Server

```
https://<servername>/goform/login?cmd=login&user=admin&type=0
```

The Wireshark Capture Listed Below:

```
POST /goform/login HTTP/1.1
Host: 192.168.86.3
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:51.0) Gecko/20100101
Firefox/51.0
Accept: application/xml, text/xml, */*; q=0.01
Accept-Language: zh-CN,zh;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Content-Type: application/x-www-form-urlencoded; charset=UTF-8
If-Modified-Since: 0
X-Requested-With: XMLHttpRequest
Referer: http://192.168.1.3/login.html
Content-Length: 27
Connection: keep-alive
```

```
cmd=login&user=admin&type=0
```



Server → Client (Server sending ChallengeCode to Client after receiving the request from Client)

```
HTTP/1.0 200 OK Content-Type: text/xml;charset=UTF-8

<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <ChallengeCode>6243b032c7468a9e384e49933914e880</ChallengeCode>
  <LoginType>0</LoginType>
  <RetMsg>OK</RetMsg>
</Configuration>
```

Step 2: Client → Server (Client received ChallengeCode, via **authcodestring** = md5(**ChallengeString**:GDS3710IZpRsFzCbM:password); generating the **authcodestring**.

Then sending this authcode string back to the Server)

```
https://<servername>/goform/login?cmd=login&user=admin&authcode=<authcodestring>&type=0
```

The Wireshark Capture Listed Below:

```
POST /goform/login HTTP/1.1
Host: 192.168.86.3
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:51.0)
Gecko/20100101 Firefox/51.0
Accept: application/xml, text/xml, */*; q=0.01
Accept-Language: zh-CN, zh; q=0.8,en-US; q=0.5,en; q=0.3
Accept-Encoding: gzip, deflate
Content-Type: application/x-www-form-urlencoded; charset=UTF-8
If-Modified-Since: 0
X-Requested-With: XMLHttpRequest
Referer: http://192.168.1.3/login.html
Content-Length: 69
Connection: keep-alive

cmd=login&user=admin&authcode=6d990a5f8f4f7e61635732febae3496f&type=0
```



NOTE:

The rule for authcodestring listed below:

authcodestring = md5(ChallengeString:GDS3710IZpRsFzCbM:password);

- The "ChallengeString" is the returned string from Server in **Step 1**.
- Password is the login password of the device (GDS37xx)

Server → Client

```
HTTP/1.0 200 OK
Content-Type: text/xml;charset=UTF-8
Set-Cookie: session=6d990a5f8f4f7e61635732febae3496f;path=/;
Set-Cookie: uname=admin; path=/;
Set-Cookie: level=1; path=/;

<?xml version="1.0"encoding="UTF-8" ?>
  <Configuration>
    <ResCode>0</ResCode>
    <LoginType>0</LoginType>
    <RetMsg>OK</RetMsg>
  </Configuration>
```

Note:

- The red part is the authentication information returned by the Server after successful authentication.
- This part of the information must exist in the message header before all later on operations can run normally.



Example: Adjust “Unlocking Latency” and “Unlock Hold Time” via HTTP API:

Client → Server

```
POST /goform/config HTTP/1.1
Host: 192.168.86.3
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:51.0)
Gecko/20100101 Firefox/51.0
Accept: application/xml, text/xml, */*; q=0.01
Accept-Language: zh-CN, zh; q=0.8, en-US; q=0.5,en; q=0.3
Accept-Encoding: gzip, deflate
Content-Type: application/x-www-form-urlencoded; charset=UTF-8
If-Modified-Since: 0
X-Requested-With: XMLHttpRequest
Referer: http://192.168.86.3/Pages/doorbasic.html?t=1496977082292
Content-Length: 299
Cookie: session=6d990a5f8f4f7e61635732febae3496f; uname=admin;
level=1; gdsauthkey80=6d990a5f8f4f7e61635732febae3496f;
curpage=doorbasic.html
Connection: keep-alive

cmd=set&P14100=2&P14101=5
```

Note:

- The “P14100=2” means adjusting “Unlocking Latency” to 2 seconds.
- The “P14101=5” means adjusting “Unlock Hold Time” to 5 seconds.
- The red part is the message header in each request after the successful authentication.



Example: Request snapshot via HTTP API:

Step 1: Client → Server (Client sending request to Server, trying to get ChallengeCode)

```
POST /goform/login HTTP/1.1
Host: 192.168.86.3
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:51.0)
Gecko/20100101 Firefox/51.0
Accept: application/xml, text/xml, */*; q=0.01
Accept-Language: zh-CN, zh; q=0.8, en-US; q=0.5,en; q=0.3
Accept-Encoding: gzip, deflate
Content-Type: application/x-www-form-urlencoded; charset=UTF-8
If-Modified-Since: 0
X-Requested-With: XMLHttpRequest
Referer: http://192.168.86.3/jpeg/view.html
Content-Length: 27
Connection: keep-alive

cmd=login&user=admin&type=1
```

Step 2: Server → Client (Server sending ChallengeCode to Client after receiving the request)

```
HTTP/1.0 200 OK
Content-Type: text/xml; charset=UTF-8

<?xml version="1.0" encoding="UTF-8" ?>
  <Configuration>
    <ResCode>0</ResCode>
    <ChallengeCode>b00cb908497b74848f94760d6a76c4aa</ChallengeCode>
    <RetMsg>OK</RetMsg>
  </Configuration>
```

Step 3: Client → Server (Client received ChallengeCode,
via `authcodestring = md5(ChallengeString:GDS3710IZpRsFzCbM:password)`; generating
`authcodestring`,
then sending back the `authcodestring` to Server)



```
POST /goform/login HTTP/1.1
Host: 192.168.86.3
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:51.0) Gecko/20100101
Firefox/51.0
Accept: application/xml, text/xml, */*; q=0.01
Accept-Language: zh-CN, zh; q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Content-Type: application/x-www-form-urlencoded; charset=UTF-8
If-Modified-Since: 0
X-Requested-With: XMLHttpRequest
Referer: http://192.168.86.3/jpeg/view.html
Content-Length: 69
Connection: keep-alive

cmd=login&user=admin&authcode=931b58c7d24800e9d4b1aa39a01dc04a&type=1
```

Step 4: Server → Client (Server received the authcode from Client, successfully verified, Server will send below information to Client)

```
HTTP/1.0 200 OK
Content-Type: text/xml; charset=UTF-8
Set-Cookie: mjpeg_sess=d5e3f029fb7334b2bebd737ea77d09f7; path=/;
Set-Cookie: mjpeg_uname=admin; path=/;
Set-Cookie: mjpeg_level=1; path=/;

<?xml version="1.0" encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
</Configuration>
```

Step 5: Later on interactions between Client and Server, the HTTP header should contain strings like “mjpeg_sess, mjpeg_uname, mjpeg_level”.



For example:

```
GET /snapshot/view0.jpg?0.9801228921400826 HTTP/1.1
Host: 192.168.86.3
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:51.0)
Gecko/20100101 Firefox/51.0
Accept: */*
Accept-Language: zh-CN, zh; q=0.8,en-US; q=0.5,en; q=0.3
Accept-Encoding: gzip, deflate
Referer: http://192.168.86.3/jpeg/view.html
Cookie: mjpeg_sess=931b58c7d24800e9d4b1aa39a01dc04a;
mjpeg_uname=admin; mjpeg_level=1
Connection: keep-alive
```

Note:

- “mjpeg_sess” is string from Server to Client after successful authentication, used for all later on request.
- “mjpeg_uname” is User Name or ID
- “mjpeg_level” is fixed as “1”



MJPEG Stream

Login Authentication: The authentication is using Challenge / Response encryption mode. After the successful authentication by the administrator, each later on operations will be accepted and successful ONLY when the correct authentication information is included inside the request header.

The authentication process is as following:

Step 1:

Client → Server

```
https://<servername>/goform/login?cmd=login&user=admin&type=1
```

Server → Client

```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <ChallengeCode>ChallengeString</ChallengeCode>
  <LoginType>0</LoginType>
  <RetMsg>OK</RetMsg>
</Configuration>
```

Step2:

Client → Server

```
https://<servername>/goform/login?cmd=login&user=admin&authcode=<authcodestring>&type=1
```

NOTE:

The rule for authcodestring listed below:

- **authcodestring** = md5(ChallengeString:GDS3710IZpRsFzCbM:password);
- The "ChallengeString" is the returned string from Server in **Step 1**.
- password is the login password of the device (GDS37xx)

Server → Client

```
HTTP/1.0 200 OK Content-Type: text/xml;charset=UTF-8
Set-Cookie: mjpeg_sess=396a6328e70f3b1b984f7d6f08159a49;path=/;
Set-Cookie: mjpeg_uname=admin;path=/;
```




```
Set-Cookie: mjpeg_level=1;path=;/;

<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
</Configuration>
```

Note:

- The red part is the authentication information returned by the Server after successful authentication.
- This part of the information must exist in the message header before all later on operations can run normally.

Below is an Example:

Step 1: Client → Server (Client sending login request to Server, trying to get ChallengeCode)

```
POST /goform/login HTTP/1.1
Host: 192.168.86.3
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:51.0)
Gecko/20100101 Firefox/51.0
Accept: application/xml, text/xml, */*; q=0.01
Accept-Language: zh-CN, zh; q=0.8,en-US; q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Content-Type: application/x-www-form-urlencoded; charset=UTF-8
If-Modified-Since: 0
X-Requested-With: XMLHttpRequest
Referer: http://192.168.86.3/jpeg/mjpeg.html
Content-Length: 27
Connection: keep-alive

cmd=login&user=admin&type=1
```

Step 2: Server → Client (Server sending ChallengeCode to Client after receiving the request from Client)

```
HTTP/1.0 200 OK
Content-Type: text/xml; charset=UTF-8
```



```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <ChallengeCode>c1cd724b1fc2d552652bba09a56f6f3c</ChallengeCode>
  <RetMsg>OK</RetMsg>
</Configuration>
```

Step 3: Client → Server (Client receiving ChallengeCode,
via **authcodestring** = md5(**ChallengeString**:GDS3710lZpRsFzCbM:password);
generating **authcodestring**, then sending this **authcodestring** back to Server)

```
POST /goform/login HTTP/1.1
Host: 192.168.86.3
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:51.0)
Gecko/20100101 Firefox/51.0
Accept: application/xml, text/xml, */*; q=0.01
Accept-Language: zh-CN, zh; q=0.8,en-US; q=0.5,en; q=0.3
Accept-Encoding: gzip, deflate
Content-Type: application/x-www-form-urlencoded; charset=UTF-8
If-Modified-Since: 0
X-Requested-With: XMLHttpRequest
Referer: http://192.168.86.3/jpeg/mjpeg.html
Content-Length: 69
Connection: keep-alive

cmd=login&user=admin&authcode=a7539fbd022664d07c23f736a643be55&type=1
```

Step 4: Server → Client (Server received the authcode from Client, successfully verified,
Server will send below information to Client)

```
HTTP/1.0 200 OK
Content-Type: text/xml; charset=UTF-8
Set-Cookie: mjpeg_sess=a7539fbd022664d07c23f736a643be55; path=/;
Set-Cookie: mjpeg_uname=admin; path=/;
Set-Cookie: mjpeg_level=1; path=/;
```



```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
</Configuration>
```

Step 5: Later on interactions between Client and Server, the HTTP header should contain strings like “mjpeg_sess, mjpeg_uname, mjpeg_level”.

For example as shown below:

```
GET /snapshot/view0.jpg?0.9801228921400826 HTTP/1.1
Host: 192.168.86.3
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:51.0)
Gecko/20100101 Firefox/51.0
Accept: */*
Accept-Language: zh-CN, zh; q=0.8,en-US; q=0.5,en; q=0.3
Accept-Encoding: gzip, deflate
Referer: http://192.168.86.3/jpeg/mjpeg.html
Cookie: mjpeg_sess=a7539fbd022664d07c23f736a643be55;
mjpeg_uname=admin; mjpeg_level=1
Connection: keep-alive
```

NOTE:

- “mjpeg_sess” is string from Server to Client after successful authentication, used for all later on request.
- “mjpeg_uname” is User Name or ID
- “mjpeg_level” is fixed as “1”
- The red part is the authentication information header that the cookie must be carried during the operation.



HTTP API to Open Door

HTTP API Open Door Authentication: The authentication is using Challenge/Response encryption mode. After the successful authentication by the administrator, each later on operations will be accepted and successful ONLY when the correct authentication information is included inside the request header.

The authentication process is as following:

Step 1:

Client → Server

```
[http/https]://<servername>/goform/apicmd?cmd=0&user=admin
```

Server → Client

```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg></RetMsg>
  <ChallengeCode>5c0e1f55b54be2d0c56004ba349fb726</ChallengeCode>
  <IDCode>UM1NWDJYC19LOEYQRWNA</IDCode>
</Configuration>
```

Step2:

Client → Server

```
[http/https]://<servername>/goform/apicmd?cmd=1&user=admin&authcode=<authcodes
tring>&idcode=<idcodestring>&type=opt_type
```

NOTE:

The rule for authcodestring listed below:

authcodestring = md5(ChallengeString:remote_pin:password);

idcodestring = The node value of "IDCode", such as "UM1NWDJYC19LOEYQRWNA"
above example.



opt_type = 1: open door, **2:** close door

- - The “**ChallengeString**” is the returned string from Server in **Step 1**.
- - Remote_pin must be set before and no null.
- - password is the login password of the device (GDS37xx).

If authentication OK, the return message like this:

```
HTTP/1.0 200 OK Content-Type: text/xml;charset=UTF-8
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
    <ResCode>0</ResCode>
    <RetMsg>Authentication OK</RetMsg>
</Configuration>
```

If authentication Failed, the return message like this:

```
HTTP/1.0 200 OK Content-Type: text/xml;charset=UTF-8
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
    <ResCode>1</ResCode>
    <RetMsg>Authentication error</RetMsg>
</Configuration>
```

If the HTTP API to open door disable, then the return message like this:

```
HTTP/1.0 200 OK Content-Type: text/xml;charset=UTF-8
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
    <ResCode>1</ResCode>
    <RetMsg>HTTP API open door function is disable</RetMsg>
</Configuration>
```

If the remote open door PIN is null, then the return message like this:



```
HTTP/1.0 200 OK Content-Type: text/xml;charset=UTF-8
```

```
<?xml version="1.0"encoding="UTF-8" ?>
<Configuration>
    <ResCode>1</ResCode>
    <RetMsg>Authentication error. Remote PIN is null</RetMsg>
</Configuration>
```

Notes:

- The **RED** part is the authentication information returned by the Server after successful authentication.
- This part of the information must exist in the message header before all later on operations can run normally.
- The user must be “admin”, others do not have the privilege.
- Validity of the **idcodestring** come from step 1 is 30 seconds, it is mean that user must finish the step 2 in 30 seconds, or the idcodestring will timeout and invalid. (This parameter can be configured under **Door System Settings → Basic Settings → Open Door Valid Time**)
- The “type=1” means that the HTTP API is for open door.

