Grandstream Door System

GDS37xx HTTP API

Version 1.0.0.2

www.grandstream.com

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Grandstream GDS37xx HTTP API

DOCUMENT HISTORY

Version	Date	Description
1.0.0.0	August 23, 2017	Initial Version
1.0.0.1	2017/10/26	Card Issuing State Expire Time(m) -- P15423(value:1-1440)
1.0.0.2	2017/11/03	Add HTTP API open door

OVERVIEW

Grandstream Door System Interface H T T P API (Application Programming Interface) supports RFC3550 (RTP).

This document explains in details 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.

Software Version Requirement

- *All current official firmware of the Grandstream GDS37xx are supported.*

Syntax: **Client ➔ Server**

---

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

---

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

NOTE:

➢ *<**param**> is used to identify the different parameter of function.*
➢ *<**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>
```

NOTE:

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

- ➢ authcodestring = md5(ChallengeString:GDS3710lZpRsFzCbM:password);
  - o ChallengeString is the reply strings from *Server* by **Step 1**
  - o 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

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 passwd
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>
```

```xml
      <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
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,...*

<parameter>=<value>	Values	Description
ID=<string>		Delete ID number. "," used as separator; max. 20 can be deleted one time.

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>...*

Example:

<parameter>=<value>	Values	Description
P14100=<int>	0 - 20	Delay (in second) before strike operation
P14101=<int>	1 - 20	Hold time (in second) for strike opening status
P14829=<int>	0 - 2000	Interval of RFID card swipe operation (in millisecond)
P14103=<int>	<0|1>	Take snapshot when strike operated: 0: No 1: Yes
P15420=<int>	<0|1>	Take snapshot when press keypad: 0: No 1: Yes
P14856=<int>	<0|1|>	Type of Dialing: 0: Virtual Number (Or Room Number) 1: SIP Number

P14827=<int>	<0|1|2>	Mode of Door Bell: 0: Call programmed Number 1: Send signal to connected device (e.g.: analogue doorbell) 2: Both above
P10462=<string>		Called number (numeric digits or IP address) when doorbell button 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 digits value)
P14858=<int>	<0|1>	Enable DTMF Open Door (Insecure Method) 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 0: Disable (Default) 1: Enable
P15422	\<0|1\>	Enable Unlock to On Hook 0: Disable (Default) 1: Enable
P10465=\<int\>	\<0|1\>	Enable Card Issuing Mode 0: Disable (Default) 1: Enable

P15423=<int>	1-1440	Card Issuing State Expire Time(m)
P14800=<int>	<0|1>	Enable Blue Light when Key Pressed 0: Disable 1: Enable
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 schid: 1-10	groupname Max. Length=64 schid:　Time Schedule Index 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&<paramter>=<value>...

<parameter>=<value>	Values	Description
P15200=<string> P15201=<string> P15202=<string> P15203=<string> P15204=<string> P15205=<string> P15206=<string> P15207=<string> P15208=<string> P15209=<string>		Value format: name@holiday_mode,weekday0@start_time0@end_time0, weekday1@start_time1@end_time1,... Use (,) as separator when set multiple numbers. e.g.: AAA@0,0@0830 @1459 ,0@1600@1800, AAA is a revisable name for a schedule, Max. Length = 64 1st @ represent holiday mode, 0-10. 2st @ represent date of the week, 0-6, Sunday to Saturday 3nd @ the pre-four digits represent start time of that period, 0830 represent 08:30 in 24 hour format; 2nd @ the post-four digits represent end time of that period, 1459 represent 14:59 in 24 hour format.

- 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. 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></P246/>
  <P5006>1</P5006>
  <P30>pool.ntp.org</P30>
  <P10006>1440</P10006>
  <P10004>0</P10004>
  <P10005></P10005/>
  <P10008>0</P10008>
  <P14040>2017</P14040>
  <P14041>6</P14041>
  <P14042>3</P14042>
  <P14043>9</P14043>
  <P14044>37</P14044>
  <P14045>33</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)

6. 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:AB:CC:BA</P67>

  <P8>0</P8>

  <P9>192</P9>

  <P10>168</P10>

  <P11>86</P11>

  <P12>3</P12>

  <P13>255</P13>

  <P14>255</P14>

  <P15>255</P15>

  <P16>0</P16>

  <P17>192</P17>

  <P18>168</P18>

  <P19>86</P19>

  <P20>1</P20>

  <P10107>0</P10107>

  <P21>192</P21>
```

```
<P22>168</P22>

<P23>84</P23>

<P24>217</P24>

<P25>192</P25>

<P26>168</P26>

<P27>10</P27>

<P28>253</P28>

</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: P17.P18.P19.P20
P18=<int>	0 - 255	
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	

7. 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>0</P12054>

  <P901>80</P901>

  <P903>554</P903>

  <P12056>60</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>...*

<parameter>=<value>	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

8. 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: New Password Max. Length = 32
Newpwd=<string>		cfmnewpwd: Confirmed New Password; Max. Length = 32
cfmnewpwd=<string>		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.

9. 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>
  <P499>0</P499>
  <P407></P407>
  <P402></P402>
    <P2412></P2412>
  <P403></P403>
 <P2433></P2433>
  <P404></P404>
  <P405></P405>
  <P409>0</P409>
  <P76></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>0</P411>

<P443>0</P443>

<P424>100</P424>

    <P406>N</P406>

    <P281>Y</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
P2412		(Reserve) Secondary SIP Server: Max. Length = 255

P403=<string>		Outbound Proxy: Max. Length = 255
P2433=<string>		Secondary 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 (2nd stream, for SIP and other usage) 2: Stream 3 (3rd 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
P8001=<int>	<0|1>	Enable two-way SIP Calling 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
P424=<int>	<100|102>	Special Feature 100: Standard 102: Broadsoft
P2495	<0|1>	Enable Session Timer 0: Disable 1: Enable

10. 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>
```

11. 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>
```

Get:

http://<servername>/goform/config?cmd=set&<parameter>=<value>...		
<parameter>=<value>	**Values**	**Description**
Stream 1		
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

12. 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></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

13. 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>
  <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

14. 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>	0 - 6	System Volume
P14835=<int>	0 - 6	Door Bell Volume

15. 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>
```

Get:

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

<parameter>=<value>	Values	Description
P14225=<string>		Region for Privacy Masks *Format:* 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

16. 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>
  <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>123</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,</P14308>

<P14309>profile10@0,0,0,0,0,0,</P14309>

<P10467>0</P10467>

<P10466>N</P10466>

<P14341>5</P14341>

<P10468>1</P10468>

<P10469></P10469>

<P14350>0</P14350>

<P14355>1</P14355>

<P14354></P14354>

<P14825>1</P14825>

<P14826>1</P14826>

</Configuration>

Get:

> *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 *Format:* [Top Left x1 coordinates, Top Left y1 coordinates, Bottom Right x2 coordinates, Bottom Right y2 coordinates] e.g.: [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] Coordinates are separated by (**,**) Region is separated by (**;**) The 8 regions must be configured at the same time all at once. **Rules:** **0 <= x1, x2 <= 704; 0 <= y1, y2 <= 576;**

		x1 <= x2; y1 <= y2
P14221=<int>	<0|1|2|3|4|5|6|7|8|9|10>	Select Alarm Schedule 0: All Day 1: Schedule1 2: Schedule2 3: Schedule3 4: Schedule4 5: Schedule5 6: Schedule6 7: Schedule7 8: Schedule8 9: Schedule9 10: Schedule10
P14222=<int>	<1|2|3|4|5|6|7|8|9|10>	Alarm Action Profile 1： profile1 2： profile2 3： profile3 4： profile4 5： profile5 6： profile6 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

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

18. 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</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,</P14308>
  <P14309>profile10@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.:*
P14301=<string>		
P14302=<string>		<P14300>profile1@0,0,0,0,0,0</P14300>
P14303=<string>		
P14304=<string>		profile1 is revisable name of alarm action, Max. Length = 20
P14305=<string>		
P14306=<string>		1st digit after @ represents whether "Upload to Alarm Center":
P14307=<string>		0: Disable 1: Enable
P14308=<string>		2nd digit after @ represents whether "Sound Alarm"
P14309=<string>		0: Disable 1: Enable
		3rd digit after @ represents whether "Voice Alarm to SIP Phone"
		0: Disable 1: Enable
		4th digit after @ represents whether "Alarm Output"
		0: Disable 1: Enable
		5th digit after @ represents whether "Send Email"
		0: Disable 1: Enable
		6th digit after @ represents whether "Upload JPEG" snapshot
		0: Disable 1: Enable

19. 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.

20. Email Settings

Support **cmd = get/set**

Get:

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

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

21. 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>
  <P10140>1</P10140>
  <P14113>0</P14113>
  <P14114>192.168.1.10</P14114>
  <P14115>21</P14115>
  <P14116>kevin</P14116>
  <P14118>/</P14118>
</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

22. Upgrade Configuration

Support **cmd = get/set**

Get:

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

Example:

```
<?xml version="1.0" encoding="utf-8"?>
<Configuration>
  <ResCode>0</ResCode>
  <RetMsg>OK</RetMsg>
  <P6767>1</P6767>
<P192>fm.grandstream.com/gs</P192>
<P6768></P6768>
<P232></P232>
<P233></P233>
<P212>1</P212>
<P237>fm.grandstream.com/gs</P237>
<P1360></P1360>
<P234></P234>
<P235></P235>
<P6769></P6769>
<P1361></P1361>
<P1359></P1359>
<version_limit>1.0.3.1</version_limit>
<P193>10080</P193>
<P194>1</P194>
<P145>0</P145>
<P1414>0</P1414>
</Configuration>
```

Set:

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

<parameter>=<value>	Values	Description
P6767=<int>	<0|1|2>	Firmware Upgrade Method 0: TFTP 1: HTTP 2: HTTPS
P192=<string>		Firmware Server Path
P6768=<string>		Firmware HTTP/HTTS User Name
P6769=<string>		Firmware HTTP/HTTS Password
P232=<strng>		Firmware Upgrade File Prefix
P233=<strng>		Firmware Upgrade File Postfix
P193=<int>	60 - 525600	Automatic Upgrade Interval (Minutes)
P212=<int>	<0|1|2>	Config Upgrade Method 0: TFTP 1: HTTP 2: HTTPS
P237=<string>		Config Server Path
P1360=<string>		Config HTTP/HTTS User Name
P1361=<string>		Config HTTP/HTTS Password
P234=<strng>		Config Upgrade File Prefix
P235=<strng>		Config Upgrade File Postfix

P1359=<string>		XML Config File Password
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

23. 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

24. 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

25. 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*

---

26. Log Manager

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 Log Reporting 0: Disable

		1: Enable
P15413=<string>		HTTP Server URL: Format http://ip:port/path . Example: http://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

27. 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>V1.5A</P917>
  <P1397>9650001415A</P1397>
  <P70>1.0.2.61</P70>
  <P45>1.0.2.61</P45>
  <P68>1.0.2.61</P68>
  <P15009>1 hour 31 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

28. 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:AB:CC:BA</P67>
  <P8>0</P8>
  <P9>192</P9>
  <P10>168</P10>
  <P11>86</P11>
  <P12>3</P12>
  <P13>255</P13>
  <P14>255</P14>
  <P15>255</P15>
  <P16>0</P16>
  <P17>192</P17>
  <P18>168</P18>
  <P19>86</P19>
  <P20>1</P20>
  <P10107>0</P10107>
  <P21>192</P21>
  <P22>168</P22>
  <P23>84</P23>
  <P24>217</P24>
```

```
    <P25>192</P25>

    <P26>168</P26>

    <P27>10</P27>

    <P28>253</P28>

</Configuration>
```

<parameter>=<value>	Values	Description
P8=<int>	<0|1>	IP Address Mode 0: DHCP 1: Static IP
P9=<int>	0 - 255	IP Address：
P10=<int>	0 - 255	P9.
P11=<int>	0 - 255	P10. P11.
P12=<int>	0 - 255	P12.
P13=<int>	0 - 255	Subnet Mask:
P14=<int>	0 - 255	P13.
P15=<int>	0 - 255	P14. P15.
P16=<int>	0 - 255	P16.
P17=<int>	0 - 255	Gateway:
P18=<int>	0 - 255	P17.
P19=<int>	0 - 255	P18. P19.
P20=<int>	0 - 255	P20.

P10107=<iint>	<0|1>	DNS
P21=<int>	0 - 255	DNS Server 1
P22=<int>	0 - 255	P21.
P23=<int>	0 - 255	P22. P23.
P24=<int>	0 - 255	P24.
P25=<int>	0 - 255	DNS Server 2
P26=<int>	0 - 255	P25.
P27=<int>	0 - 255	P26. P27.
P28=<int>	0 - 255	P28.

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:GDS3710lZpRsFzCbM: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:GDS3710lZpRsFzCbM:password);

➢ The "ChallengeString" is the returned string from Server in **Step 1**.

➢ password is the login password of the device (GDS37xx)

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:GDS3710lZpRsFzCbM: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 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/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:GDS3710lZpRsFzCbM: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
```

- ➢ "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 (NOTE: reserve)

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://<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://<servername>/goform/APICMD?cmd=1&user=admin&authcode=<authcodestring>&idcode=<idcodestring>&type=1*

NOTE:

The rule for authcodestring listed below:

authcodestring = md5(ChallengeString:remote_pin:password);

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

➢ The "ChallengeString" is the returned string from Server in *Step 1*.

➢ Remote_pin must be seted before and no null.

➢ password is the login password of the device (GDS37xx).

Server ➜ Client

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>
```

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.
- ➢ The user must be "admin", others no the right.
- ➢ validity of the idcodestring come from step 1 is 10 second, it is mean that user must finish the step 2 in 10 second, or the idcodestring will timeout and invalid.
- ➢ The "type=1" mean that the HTTP API is for open door.

HTTP SIP DIAL

cmd=<string>	call	http sip call cmd
call_type=<int>	<0|1>	0:end call 1:call
call_num=<string>		call num or IP

REFERENCES

HTTP Protocol

- [Hypertext Transfer Protocol -- HTTP/1.0](#)

External application programming interfaces (Client side)