License plate recognition all-in-one

HTTP Communication Protocol Description Manual

Thank you very much for using our products, we will be happy to provide you with the best service.
This manual may contain technically inaccurate places or text errors that you are welcome to correct.
The contents of this manual will be updated regularly and will be added in the new version of this manual.
We may improve or update the products or procedures described in this manual at any time.

Version change record

Version number	The proposed date	Version description	Archive number
1.8.0	2018.08.23	1. Add http://www.http.//www.http://www.http.//www.http://www.http://www.http	20180823180

timeStamp

I. **HTTP** server configuration

1. Using HTTP push first requires the user to establish an HTTP server and configure the address of the HTTP server to the camera all-in-one;
2. When the all-in-one has an identification result (or other content that needs to be pushed), an HTTP protocol message is sent to the specified server address;
3. On the All-in-One web page, after logging in, click on the menu bar - > Advanced Settings - > HTTP push, and enter the settings interface for HTTP push (slightly different versions);
4. The server that receives HTTP push, configured to include address (ip address or domain name can be filled in), port number, whether to turn on ssl connection,ssl port number, and timeout setting. Please configure according to the condition of the server set up;

5. Http servers can be configured with 1 primary server, up to 3 alternate servers, if the primary server is checked first, the camera is pushed only to the primary server, and only when the primary server is disconnected, to the alternate server, and if the primary service is not checked first, data is pushed to the primary/standby server at the same time;

6. HTTP push specific configuration, i.e. what HTTP needs to push, including license plate recognition results,IO trigger, serial 485 data, needs to be configured for the u rlpush.

7. HTTP heartbeat is divided into cancel heartbeat, normal heartbeat,comet polling;comet polling has been interacting with the server push heartbeat, and the server can carry business processing in reply messages;

8. HTTP offline check, when the offline check is turned on, the camera will check HTTP offline, offline check is divided into heartbeat check and recognition results check, heartbeat check is normal heartbeat time check, recognition results check when the recognition results are generated, push recognition results need to receive a reply from the server during the check time, otherwise the camera will be offline, when the camera is offline, offline related business processing;

9. Configure the number of reisuses, up to 4 times, that is, when a push is generated, if the push is not successful, the camera will reiser the push data;

Second, license plate identification results push

When push license plate recognition results are turned on and push url is configured, the camera sends a message to: when the license plate recognition results are generated

http://192.168.1.106/devicemanagement/php/plateresult.php;

Note: With the addition of **HTTP** retransive, license plate recognition results push messages have increased compared to older versions

3 fields are:plateid,isoffline,gioouts;

Data content:JSON format(utf8 encoding).

```
{
    "AlarmInfoPlate" : {
        "channel" : 0,
        "deviceName" : "IVS",
        "ipaddr" : "192.168.1.100",
        "result" : {
            "PlateResult" : {
                The red font section is the extension information
                "plate_true_width" : 80,
                "plate_distance" : 40,
                "is_fake_plate" : 1, "car_location" :
                {
                    "RECT" : {
                        "bottom" : 545,
                        "left" : 871,
                        "right" : 1365,
                        "top" : 391
                    }
                },
                "car_brand" :
                {
                    "brand" : 6
                    "year" : 2018
                    "type" : 1
                },
                "feature_Code":  "asf", // Extension information ends
                "bright" : 0,
                "carBright" : 0,
                "carColor" : 0,
                "colorType" : 0,
```

```
            "colorValue" : 0,
            "confidence" : 0,
            "direction" : 0, "imagePath" :
"%2Fmmc%2FVzIPCCap%2F2015_09_09%2F1714224504__%CE%DE_.jpg",
             "license": "No "
            "location" : { "RECT" : {
                    "bottom" : 0,
                    "left" : 0,
                    "right" : 0,
                    "top" : 0
                }
            },
            "timeStamp" : {
                "Timeval" : {
                    "decday" : 8,
                    "dechour" : 10,
                    "decmin" : 26,
                    "decmon" : 6,
                    "decsec" : 28,
                    "decyear" : 2018,
                    "sec" : 1441815171,
                    "usec" : 672241
                }
            },
            "timeUsed" : 0,
            "triggerType" : 4,
            "type" : 0,
            "plateid" : 123,
            "isoffline" : 0, "gioouts" :[
                    {"ionum" : 1, "ctrltype": 0} ...
                ]
        }
    },
    "serialno" : "eff50e18-e3d3862b"
  }
}
```


Depending on the level of content detail, the content of the data will vary, and All will be passed back to the full content, including only some of the important content in a nutritious way, please select the detail as needed. When the alarm is turned on to send a picture, the image data in json will be included.

The json data that contains all (extended) content is as follows, with option "All" removing the first-class extension information and "location" removed "in more detail" TimeUsed,"Shorter Options" also remove "colorValue","confidence", "bright", "carBright" , "carColor"and the option "briefly" further remove the "timeStamp"
illustrate:

The name of the field	type	The range of values	Whether it is necessary	description
AlarmInfo Plate	json	not	be	The push result is the license plate recognition result
serialno	string	not	be	Device serial number, device unique
channel	int	[0, 100]	be	Default channel number (reserved)
deviceName	string	not	be	The device name
ipaddr	string	not	be	Device ip address
result	json	not	be	The actual data
PlateResult	json	not	be	License plate recognition result information
license	string	not	be	License plate number string, such as "King AAAAAAA"
colorValue	int	[0, 32]	be	(Reserved)
colorType	int	[0, 5]	be	License plate color 0:unknown, 1:blue,2:yellow,3:white,4:black,5:green

type	int	[0, 19]	be	License plate type 0:Unknown license plate :, 1:blue car,2: black car, 3: single row yellow card,4:double row yellow card, 5:police car license plate,6:armed police license plate,7:personalized license plate,8:single row military licenseplate,9 : Double row military license plate, 10: Embassy license plate, 11:Hong Kong in and out of Chinese mainland license plate, 12:agricultural vehicles

The name of the field	type	The range of values	Whether it is necessary	description
				License plate, 13:coach license plate, 14:Macau in and out of Chinese mainland license plate, 15:double-decker armed police license plate, 16:armed policeheadquarters license plate, 17:double-decker armed police unit license plate, 18:Civil aviation license plate, 19:new energy license plate
confidence	int	[0, 100]	be	Identify the confidence of the results 1-100
bright	int	not	be	Brightness rating (reserved)
direction	int	[0, 4]	be	Direction of travel of the car,0:Unknown, 1:Left,2:Right,3:Up, 4:Down
location	json	not	be	The position of the license plate in the picture
RECT	json	not	be	The position is rectangular;left-right-top-bottom: The license plate is in the middle of the picture place
timeUsed	int	not	be	Identify the time taken
carBright	int	not	be	Body brightness (reserved)

carColor	int	not	be	Body color (reserved)
timeStamp	json	not	be	Identify the timestamp of the corresponding frame for the result
Timeval	json	not	be	The type of timestamp structure
sec	uint32	not	be	Seconds from January 1, 1970 to the corresponding frame
dechour	int	[0, 60]	be	Time, hour
decmin	Int	[0, 60]	be	Time, minutes

The name of the field	type	The range of values	Whether it is necessary	description
decsec	Int	[0, 60]	be	Time, seconds
decday	Int	[0, 31]	be	Time, day
decmon	Int	[0, 12]	be	Time, month
decyear	Int	[0, 2038]	be	Time, year
usec	uint32	not	be	Milliseconds from January 1, 1970 to the corresponding frame

triggerType	int	[1, 8]	be	The type of trigger for the current result:1:Automatic trigger type,2:External input trigger(IO input),4:software trigger(SDK),8:virtual coil trigger
imagePath	string	not	be	Recognizes the path to a large picture, and there is no such field when pushing a large picture is turned on
imageFile	string	not	be	Identify the string after the large picture content passes base64
imageFileLen	int	not	be	Identify the length of the large picture content, noting that it is not the length after base64
imageFragmentFile	string	not	be	A string that identifies the contents of a small picture of the license plate after base64
imageFragmentFileLen	int	not	be	Identify the length of the content of the small picture, noting that it is not the length after base64
plateid	unsigned int	not	not	Identify the resulting license plate ID
The name of the field	type	The range of values	Whether it is necessary	description
isoffline	int	[0,1]]	be	Device offline status,0:online, 1:offline
ionum	int	[0, 3]	be	IO OUT serial number, currently up to 4 IOouts
ctrltype	int	[0, 2]	be	Type of open gate:HTTP_IO_OUT_STATUS
plate_true_width	int	[10, 1000]	be	The true width of the license plate

plate_distance	int	[0, 1000]	be	License plate distance
is_fake_plate	int	[0, 1]	be	Whether the license plate,0:real license plate, 1:fake license plate
car_location	not	not	be	The position of the head
car_brand	not	not	not	Vehicle brand
brand	int	[0, 128]	be	Vehicle brand
year	int	[0, 65535]	be	The year of the vehicle
type	int	[0, 128]	be	Vehicle type
feature_Code	string	length [0, 20]	be	Vehicle signature

Note: After adding **http** retranslation, you need to use this feature, the server's reply must carry the **plateid** field, consistent with the value pushed by the camera;
Center server replies:

```
{
  "Response_AlarmInfoPlate": {
    "info":"ok",/ Reply to ok open the gate
"plateid": 123,// Current license plate id
    "channelNum": 0, / Reply to open port number, or 0 by default if not
    "manualTrigger": "ok",/ Reply ok for manual triggering
    (Optional, no screenshots are triggered but the field is not added).
    "TriggerImage" : {
      Reply to the screenshot content port number (optional, do not fill in the default use http
      page configuration port).
      "port":80,
      Reply to the relative path of the screenshot content (optional, no screenshot is triggered but
      the field is not added).
      "snapImageRelativeUrl" : "/devicemanagement/php/receivedeviceinfo.php",
      Reply to the absolute path of the screenshot content (optional, no screenshot is triggered
      but the field is not added).

"snapImageAbsolutelyUrl":"http://192.168.1.106/devicemanagement/php/receivedevicein fo.php"
    },
    "is_pay":"true",
    Reply serial data can be sent to the corresponding serial port
    "serialData" :[
      {
        "serialChannel":0,
        "data" : "...",
        "dataLen" : 123
      },
      Data 1,which can or may not be received, will be sent to the corresponding serial port upon
      receipt
        "serialChannel": 1,
        "data" : "....",
        "dataLen" : 123
      / Data 2,which can or may not be received, will be sent to the corresponding serial port
    ]
  }
}
```

2.1 Broken Retransm

1. When the HTTP server is disconnected from the server for some reason, the camera records the identification results of the push failure as offline records, and when the server is reconnected, the camera determines whether an offline record needs to be pushed according to the configuration, while sending an offline record;

2. Configuration in the web page configuration, turn on the disconnect retransive function, note that when the cancellation of the disconnect retranspiration function, will empty the current camera offline records;

3. The camera push recognition results, compared to the older version of the push message, add three new fields:plateid, isoffline, gioouts, offline record isoffline with a value of 1;

4. When the server replies to the camera recognition results, the online record needs to reply the plateid field value to the camera message;

5. When the server replies to offline recognition results, it needs to reply to whether it continues to receive offline records and receives the latest plateid;

6. Offline offline records theoretically support the re-push of up to 9000 offline records;

7. In the process of pushing offline records, if a new recognition result occurs, priority push new recognition results, at this time the push of offline records is not completed, will directly terminate processing, when the new identification results are pushed out, the party starts pushing offline records again; Note: When pushing offline records, the camera has not yet received a response from the server, a new recognition result is generated, the camera terminates the push processing of the previous offline record, directly pushes the new identification results, when the new recognition results are pushed, Push on to an offline record, so the server may receive two identical offline records at this time, the server can filter according to plateid;

```
{
    "AlarmInfoPlate" : {
        "channel" : 0,
        "deviceName" : "IVS",
        "ipaddr" : "192.168.1.100",
        "result" : {
            "PlateResult" : {
                "bright" : 0,
                "carBright" : 0,
                "carColor" : 0,
                "colorType" : 0,
                "colorValue" : 0,
                "confidence" : 0,
                "direction" : 0, "imagePath" :
"%2Fmmc%2FVzIPCCap%2F2015_09_09%2F1714224504__%CE%DE_.jpg",
                "license": "No "
                "location" : { "RECT" : {
                    "bottom" : 0,
                    "left" : 0,
                    "right" : 0,
                    "top" : 0
                }
            },
            "timeStamp" : {
                "Timeval" : {
                    "decday" : 8,
                    "dechour" : 10,
                    "decmin" : 26,
                    "decmon" : 6,
                    "decsec" : 28,
                    "decyear" : 2018,
```

```
                "sec" : 1441815171,
                "usec" : 672241
            }
        },
        "timeUsed" : 0,
        "triggerType" : 4,
        "type" : 0,
        "plateid" : 123,
        "isoffline" : 0,
        "gioouts" :[
                {"ionum" : 1, "ctrltype": 0} ]
      }
    },
    "serialno" : "eff50e18-e3d3862b"
  }
}
```


The name of the field	type	The range of values	Whether it is necessary	description
plateid	unsigned int	not	not	Identify the resulting license plate ID
isoffline	int	[0,1]]	be	Device offline status,0:online, 1:offline
ionum	int	[0, 3]	be	IO OUT serial number, currently up to 4 IOouts
ctrltype	int	[0, 2]	be	Type of open gate:HTTP_IO_OUT_STATUS

server Reply:

```
{
    "Response_AlarmInfoPlate"    :  {
    ...//     Other data
        "ContinuePushOffline"     :{
            "plateid"     :   123,
            "continue"   :   1
        }
    }
}
```

The name	type	The range	Whether it	descr

The name of the field	type	The range of values	Whether it is necessary	description
plateid	unsigned int	not	be	Pushed offline license plate record ID
continue	unsigned int	[0, 1]	be	Whether to continue pushing offline records,0:No, 1:Yes

Note: The next offline record continues to be pushed only if the server replies to an offline record message and the continue field is 1;

2.2 Series Cameras For the Series cameras,the HTTP push protocol adds vehicle information as well as pseudo license plate information:

```
{
    "AlarmInfoPlate" :
    {
        .../Other fields
        "result" :
        {
            "PlateResult" : {
                .../
                "plate_true_width" : 80,
                "plate_distance" : 40,
                "is_fake_plate" : 1, "car_location" :
                {
                    "RECT" : {
                        "bottom" : 545,
                        "left" : 871,
                        "right" : 1365,
                        "top" : 391
                    }
                },
                "car_brand" :
                {
                    "brand" : 6
                    "year" : 2018
                    "type" : 1
                },
                "feature_Code" : "asf"
            }
        }
```

```
    }
}
```

The name	type	The range	Whether it	descr
plate_true_width	int	[10, 1000]	be	The true width of
plate_distance	int	[0, 1000]	be	License
is_fake_plate	int	[0, 1]	be	Whether it's a0: Real license1: br
car_location	no	no	be	The
car_brand	no	no	no	Vehicle
brand	int	[0, 128]	be	Vehicle
year	int	[0, 65535]	be	The year of
type	int	[0, 128]	be	Vehicle
feature_Code	string	lengt[0, 20]	be	Vehicle

Third, the port triggers the information push

When on, if an external input 1 trigger or 2 trigger is turned on in the input and output page -> license plate trigger mode, the json format data is pushed when there is a change in the input, as follows:

Data content:JSON format(utf8 encoding).

```
{
    "AlarmGioIn" :{
        "deviceName" : "IVS", "ipaddr" :
        "192.168.109.40", "result" :
        {
            "TriggerResult" :
            {


                "source" : 3,.
               "value" : 1
            }
        },
        "serialno" : "d85b1269-8f942256" }
}
```


Among them,TriggerResult:
"Source=0 means IO input 1;
source=1 means IO input 2; and
source=2 means yes." IO input 3;
source=3 represents input TCP
trigger input;
Source=4 means IO input 4;
Value represents the state entered at the time of trigger;

Central server reply content: any legitimate data, the camera does not reply to messages business processing

Fourth, serial data push

When serial data push is turned on, the urlis configured to actively push 485 data to the server address when the camerareceives 485 data;

Data content:JSON format(utf8 encoding).

```
{
    "SerialData":{
        "channel":   0,  / channel number, currently 0
        "serialno":   "cead13eb-1a198cd7",  / device serial number
        "ipaddr":   "192.168.1.100",  / Device ip
          "deviceName":   "IVS",          / Device name
        "serialChannel":   0,  / Channel number for serial port, channel 0 for 485 port
1,channel 1 depending on jumper mode 485 mouths 2 or 232
        "data":  "Y2guY29tFw",/ serial data, encoded with base64
        "dataLen":   7/ Actual length of serial data
    }
}
```

Central server reply content: any legitimate data, the camera does not reply to messages business processing

V. Screenshot data

The device makes the current video when the user has a screenshot in the comet poll or in the reply field that receives the identification results

Screenshot and upload,imageFile field encoded after picture base64, imageFileLen for pre-encoding picture length Data content:JSON format(utf8 encoding)

```
Push screenshot data
{
    "ipaddr" :  "192.168.1.100",
    "TriggerImage": {
        "imageFile":"Y2guY29tFw", // Image data(base64 encoding).
          "imageFileLen":7                          /The actual length of the picture data
    }
}
```

Central server reply content: any legitimate data, the camera does not reply to messages business processing

Sixth, equipment registration

6.1 Normal heartbeat

1. When the camera web page configuration device enrollment status is normal heartbeat, the camera regularly pushes a heartbeat message to the primary server:
2. When the main service connection is normal, turn on offline checking, the camera every 5S or so to push the heartbeat;
3. When the primary service is connected properly and offline checking is not turned on, a heartbeat message is pushed by 30S;

4. When the main service heartbeat is lost, the camera tries to connect every 1S;
5. Heartbeat push uses http://www.heartbeat push using http://www.heartbeat push

Data content, in formpost format:

```
192.168.109.40----------caa771fe4a61f3d9Content-Disposition: form-data;
name="device_name"IVS----------caa771fe4a61f3d9Content-Disposition: form-data;

name="ipaddr"192.168.109.40----------caa771fe4a61f3d9Content-Dispos ition: form-data;
name="port"80----------caa771fe4a61f3d9Content-Disposition:
form-data; name="user_name"admin----------caa771fe4a61f3d9Content-Disposition:
form-data; name="pass_wd"admin----------caa771fe4a61f3d9Content-Disposition: form-data;

name="serialno"d85b1269-8f942256----------caa771fe4a61f3d9Content-D isposition: form-
data; name="channel_num" 1----------caa771fe4a61f3d9--
```


6.2 Comet Polling

1. When comet polling is turned on, the camera will always interact with the HTTP server, keep the connection request, the camera actively send the device registration message, the content is consistent with the normal heartbeat content, receive a reply, immediately send the next message;
2. Send a device registration message, consistent with a normal heartbeat message;
3. Comet polling will be handled accordingly based on server replies;

Seven, business processing

1. The camera carries on the corresponding business processing according to the reply message of the server.
2. Currently only support push replies for license plate recognition results, as well as comet poll message replies, the camera will do business based on the responses;

7.1 Control IO open gate

When the server receives a push of license plate recognition results, or a comet poll, it replies to a message from the following structure that triggers an open gate

```
{
    "Response_AlarmInfoPlate":
    {
        "info":"ok",/ Reply to ok open the gate
        /.... Other data
    }
}
```

7.2 Control serial push 485 data

When the server receives a license plate recognition result push, or comet poll, it replies to a message from the following structure that sends 485 data

```
{
    "Response_AlarmInfoPlate": {
        "serialData" :[


            {
                "serialChannel":0,
                "data" : "...",
                "dataLen" : 123
            },
            Data 1,which can or may not be received, will be sent to the corresponding serial port upon receipt
                "serialChannel":1,
                "data" : "....",
                "dataLen" : 123
            /Data 2,which can or may not be received, will be sent to the corresponding serial port
        ]
        /.... Other data
    }
}
```

7.3 Screenshot

When the server receives a push of license plate recognition results, or a comet poll, it replies to a message from the following structure that triggers a screenshot:

The camera triggers the current video screenshot and then pushes the screenshot data to the server address specified in the SnapImage AbsolutelyUrl field;

```
{
    "Response_AlarmInfoPlate":
    {
        "TriggerImage" : {
            Reply to the screenshot content port number (optional, do not fill in the default use
            http page configuration port).
            "port":80,
            Reply to the relative path of the screenshot content (optional, no screenshot is
            triggered but the field is not added).
            "snapImageRelativeUrl" : "/devicemanagement/php/receivedeviceinfo.php",
            Reply to the absolute path of the screenshot content (optional, no screenshot is
            triggered but the field is not added).

"snapImageAbsolutelyUrl":"http://192.168.1.106/devicemanagement/php/receivedevicein fo.php"
        }
        /.... Other data
    }
}
```

7.4 Manual trigger recognition

When the server receives a push of license plate recognition results, or a comet poll, it replies to a message from the following structure that triggers manual identification:

```
{
    "Response_AlarmInfoPlate": {
        "manualTrigger":   "ok",/ Reply ok for manual triggering
        /.... Other data
    }
}
```

Or reply only to the following data:

```
{
   "type": "AVS_TRIGGER",
}
```

This triggers the manual identification of the camera, and the device pushes the identification result data to the http service side, provided that the service side is configured to push the identification data;

7.5 Whitelist operation

When the central server receives the identification results of HTTP push, it carries the whitelist operation information in the identification result message of the reply **Note: Single reply message, up to 5 whitelist data;**

1. Reply messages are in JSON format, as follows

```
{
    "Response_AlarmInfoPlate": {
    ...// Other data
        "white_list_operate":{
            "operate_type" : 0,
            "white_list_data": [
                {
                    "plate": "King A12345",

                    "enable": 1,
                    "need_alarm": 1,
                        "enable_time": "2018-01-01 11:11:11",
                        "overdue_time": "2018-01-01 11:11:11"
                }, {
                    "plate": "Kawa A12345",
                    "enable": 1,
                    "need_alarm": 1,
                        "enable_time": "2018-01-01 11:11:11",
                    "overdue_time": "2018-01-01 11:11:11" }
            ]
        }
    }
}
```

2. The field means something like this:

The name of the field	type	The range of values	Whether it is necessary	description
operate_type	int	[0,1]	be	Type of action (0: increase, 1: delete)

white_list_data	not	Number of units	be	Whitelist array: Single operation, up to 5 supported
plate	string	Lengths of 7, 15]	be	License plate (GB2312)
enable	int	[0, 1]	be	Whether the current list is valid (0: invalid, 1,: valid)
need_alarm	int	[0, 1]	be	Is the current list blacklisted (0:No, 1: Blacklist)
The name of the field	**type**	**The range of values**	**Whether it is necessary**	**description**
enable_time	string	Fixed format, fixed length: 19	not	The current list is effective at 11:1:1 on 2018-01-01 1:11
overdue_time	string	Fixed format, fixed length: 19	not	Current list expiration time, e.g. 2018-01-01 11:1 1:11

3. Message example:

Add two whitelist data at the same time (multiple data, in the same format):

Article 1 If there is no valid time for whitelisting, the default white list shall be valid permanently;

Article 2 A whitelist is valid for a period of time, indicating that the current whitelist is valid for that period of time;

```
{
    "Response_AlarmInfoPlate": {
    ...// Other data
        "white_list_operate":{
            "operate_type" : 0,
            "white_list_data": [
                {
                    "plate": "King A12345",
                    "enable": 1,
                    "need_alarm": 0
                },

                {
                    "plate": "Kawa A12345",
                    "enable": 1,
                    "need_alarm": 0,
                    "enable_time": "2018-01-01 11:11:11",
                    "overdue_time": "2019-01-01 11:11:11" }
            ]
        }
    }

}
```

4. Example of a reply message that removes two whitelists:

```
{
    "Response_AlarmInfoPlate": {
    ...// Other data
        "white_list_operate":{
            "operate_type" :  1,
            "white_list_data": [
                {
                    "plate":  "King  A12345"
                }, {
                    "plate":  "Kawa A12345"
                }
            ]
        }
    }
}
```

5. Example of a reply message that removes all whitelists:

```
{

    "Response_AlarmInfoPlate": {
    ...// Other data
        "white_list_operate":{
            "operate_type" :  1,
            "white_list_data": [
                {
                    "plate":  ""
                }
            ]
        }
    }
}
```


Eight, frequently asked questions

Q:What is device registration?
A:When turned on, the device information is automatically sent to the central server at regular intervals, including device ip,port, serial number, and so on.

Q:Set up, request can not be received, what problem?
A:Make sure that the all-in-one has access to the appropriate address for the central server. Common problems such as, within the local area network, whether the network line is connected, ip address conflicts, whether in the accessible segment, if the central server is on the public network, make sure

that the all-in-one can access the public network, need to set up the all-in-one gateway and dns address. Check that the central server is running.

Q:The request was received, but no data (data format is not correct)?
A:The license plate recognition result push request sends json data, http's body content such as
{"AlarmInfoPlate":{...}}
Reception methods such as:

php:

```
$doc = file_get_contents("php://input"); java:
StringBuffer jb = new StringBuffer(); String
line = null;
try {
  BufferedReader reader = request.getReader();
  while ((line = reader.readLine()) != null)
  jb.append(line);
```

http://stackoverflow.com/questions/3831680/httpservletrequest-get-post-data Catch (Exception e) . .

Q:What is the format of device enrollment?
A:The data sent by the device enrollment request is as follows:

```
----------cd9a1a32759bContent-Disposition: form-data; name="device_name" IVS----------
----------cd9a1a32759bContent-Disposition: form-data; name="ipaddr"19 2.168.0.100----------
----------cd9a1a32759bContent-Disposition: form-data; name="po rt"80----------
cd9a1a32759bContent-Disposition: form-data; name="user_na me"admin----------
cd9a1a32759bContent-Disposition: form-data; name="pas s_wd"admin----------
cd9a1a32759bContent-Disposition: form-data; name="se rialno"fcb68a83-ee8409dd----------
---cd9a1a32759bContent-Disposition: form-d ata; name="channel_num"1----------
cd9a1a32759b--
```

As you can see, in formpost format, the receiving method is such as:java is received using request.getQueryString, andphp is received using the $_POST variable

Q:How do I reply to a request to open the floodgates?
A:Reply to the "Response_AlarmInfoPlate":"info":"ok", "content":"...",
"is_pay":"true"""info" if ok means open the gate

Q: Can content be Chinesein a reply?
A:All requests are encoded with utf8 and replies are encoded with utf8.

Q: Can I sendusing **the ssl** connection, our central server is **ssl?**
A: Set the ssl portin the settings (typically 443),then select On, and the setting is fine, note that if the central server does not support ssl connectivity, do not choose to turn on the item.

Q: How do I get screenshots?
A:The result of the push is "imagePath": "/snapshot/lpr/tri_snap_24.jpg",followed by an http path tothe screenshot, followed by an all-in-one URL to get the screenshot address such as http://192.168.1.100:8080/snapshot/lpr/tri_snap_24.jpg

Q: Why did the same license plate return the result twice?

A: There is a trigger type, trigger Type,in the results of a push that filters the results based on the trigger type.

Q:Central server, received push results, reply to all-in-one, but do not see the specific content returned, how to debug the central server?

A:You can view the logs of the access center server on the Web page, and you can see what the central server replies to the all-in-one.

Q: When multiple cameras are polling with **comet** at the same time, the central server is under too much pressure, causing the server to fail to respond?

A: comet polling mechanism, for the camera loop to the center server to push the heartbeat package data, when the server received a push, reply response, the camera immediately started the next heartbeat package push, there is no timer in the middle and other delays;

So when the number of cameras is large, use comet to push to a server at the same time, pay attention to server performance;