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KENO

IP КАМЕРА KENO СЕРИЯ BR

API

Modify record:

Date	Revised Version	Modify Sec No.	Modify Description	Author
2016.08.07	V1.0.0	Draft protocol	1.First draft complete	Wang haifeng
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2017.09.01	V1.1.0	Modify upgrade part.	1,Modify some api.	Wanghaifeng Yuliang
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2017.11.03	V1.1.2	Add 3Dposition.	1,frmPTZExtend_3DPosition	Yuliang
2018.02.27	V1.2.0	Sync the API documentation to the latest support	1.Add WIFI 2.modifi facedetect 3.add New alarmException	Yang xingyi
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2018. 03. 22	V1. 2. 2	Add instructions on authentication. Add some api	1.　add frmReqIframe 2.　add frmNetUPNPPara 3.　modify frmVideoParaEx	Yang xingyi
2018. 03. 26	V1. 2. 3	Add some api	1. add frmvideoformat_V2 2. add frmGetFormatAbility	Yang xingyi

Catalogue

Preposition specifications

About http authorization and https

API Server realized basic Http Authorization，and support http&https access meantime.

There are three authentication methods supported by this API server, cleartext, token and digest. Each API should accept these authentications if there are no specific notes. It is recommended that do not use cleartext authentication because of less security.
Cleartext authentication fill username and password in param segment of URL in this format, s_username=<UserName>&s_psw=<Password>, e.g., http://192.168.0.82//digest//frmUserLogin?s_username=admin&s_psw=admin。
Token authentication fill encrypted key words in param segment of URL, in this format, Username=用户名&PasswordDigest=xxx&Created=xxx&Nonce=xxx
Digest authentication fill information in HTTP head.

https supports TLS version 1.1 and 1.2.(Version lower than 1.1 https access will be fail)
http access only supports digest way authorization.
https access supports basic and digest authorization.

Corresponding API routing prefix is /goform   /basic   /digest
For example url:
https://192.168.0.82:443/basic/GetProtocal
https://192.168.0.82:443/digest/GetProtocal
http://192.168.0.82:443/digest/GetProtocal

Http Basic authorization
- Fcgi Server return
- 401 Unauthorized
   WWW-Authorization: Basic realm="antsvision.com"
   Then client use base64 encryption（username:password）
   Authorization: Basic VXZVX

Digest Auth authorization：
- Fcgi Server return
- 401 Unauthorized
- WWW-Authenticate：X-Digest realm="antsvision.com", domain="::", qop="auth", nonce="OWI1MGMxNzY5ZTQ0NWE1NGJmMmU5MGVjZjJjNGRlMzM6YW50c3Zpc2lvbi5jb206NTdhMmFlOTg6Mg==", opaque="5ccc069c403ebaf9f0171e9517f40e41", algorithm="MD5", stale="FALSE"
- Client calculates new Authorization according to the returned Auth head and user name password

- Authorization：X-Digest username="admin", realm="antsvision.com", nonce="OWI1MGMxNzY5ZTQ0NWE1NGJmMmU5MGVjZjJjNGRlMzM6YW50c3Zp c2lvbi5jb206NTdhMmFlOTg6Mg==", uri="https://192.168.0.86:4433//digest//frmUserLogin", response="80d3ad4f45d10466dc6b25af46a470d6", opaque="5ccc069c403ebaf9f0171e9517f40e41", qop=auth, nc=00000002, cnonce="63518d311e8e"

Note: For browser, standard Digest WWW-Authenticate head will pop up built-in Authorization box. In order to shield browser's built-in authorization behavior, the default returned HTTP headers are the beginning of X-Digest. If need Server returns standard Digest head, please specify UserAgent of http header to libcurl/4.7.1.

In addition: Capture file upgraded API is free of authorization.

~~About session realization~~ (V1.1.0 Abandoned after)

~~API server realizes basic session management.~~
~~Note the session here has nothing to do with the connection, only associated with successfully login user .~~
~~In addition, to speed up the HTTPS + digest access frequency, API server realizes the following strategy to realize free of authorization.~~
~~1.After passing authorization,following the same user requirement within 2 minutes can be free of authorization~~
~~2.After passing authorization,following the same user requirement can be free of authorization for 20 times~~

~~Every successful login server will return a unique hash token (HTTP headers or cookies) to the client as an identification. The later requirement user needs to attain hash value in the HTTP header or in cookie, or API can't identify the session and return 403, forbid this user requirement.~~

~~The Session overtime period is 15 minutes.~~
~~Every successful API access will update the session overtime period (current access time + 15 min).~~
~~In addition,modify device time and time zone may cause the session to lose efficacy.~~

About API interface specification

Almost all of the API are HTTP POST way.
Only interface of obtaining QR code and screen-shot with base64 authorization are GET way.Send the required data, please put in the Http Body according to the agreement specified format.
 In the same way, server will return data in the Http Body   back according to the specified format .

Almost all the API with setting functions provide part of the attribute settings ability.
You only need to fill in part of changing attribute, unfilled attributes will use the default values.

For example: local channel parameters setting

Set ch = 1 the first channel local name and start using state
Complete requirement head:

```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
        "DeviceChannel":  {
            "DeviceChanName":     "CH01",
            "Enable": 1
        },
        "CopyChannels":   [0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0]
    }
}
```

If you just need to set start using state, it can be

```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
        "DeviceChannel":  {
            "Enable": 1
        },
        "CopyChannels":   [1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0]
    }
}
```

If you don't need to copy ch=1 data to other channels

```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
        "DeviceChannel":  {
            "Enable": 1
        },
    }
}
```

About protocol supported data format

Only support JSON at present

Complete requirement examples

As NTP setting for example, the required URL:http://192.168.0.82 //digest//frmNetNtpPara

Obtain NTP setting item

Complete requirement head:
POST http://192.168.0.82//digest//frmNetNtpPara HTTP/1.1
Host: 192.168.0.82
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:48.0) Gecko/20100101 Firefox/48.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: zh-CN,zh;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
DNT: 1
Content-Type: application/json
S-HASH: 5c521abcd087c01cafafce509e0a4d4c
X-HASH: 51e48bc8db33612cd86c1cbede0d9f8f
C-HASH: a97d618c3954bee4ebab3950508387c4
Referer: http://192.168.0.82/public/net_ntp.asp
Content-Length: 27
Cookie: s_Language=zh_cn.js;
s_asptitle=HD-Network%20Real-time%20Monitoring%20System%20V2.0;   s_browsertype=1;
s_ip=192.168.0.82;   s_channum=16;   s_type=2;   s_httpport=80;   s_port=5065;
s_sn=023410106968973b8c34;   s_alarmnum=4;   s_ipcchannum=0;   s_rtspport=554;
s_rtmpport=1935
Connection: keep-alive

{"Ch":0,"Type":0,"Data":{}}

Complete return head:
HTTP/1.1 200 Ok
Server: NVRDVRIPC Web Server
Date: Mon, 08 Aug 2016 18:26:16 GMT
Content-Type: application/json
Transfer-Encoding: chunked
Connection: keep-alive
Cache-Control: no-cache
Pragma: no-cache
Expires: -1
Strict-Transport-Security: max-age=31536000
X-Frame-Options: SAMEORIGIN
X-Content-Type-Options: nosniff
X-XSS-Protection: 1; mode=block

{"Result":0,"Data":{"EnableNTP":0,"NTPServer":"asia.pool.ntp.org","NTPPort":123,"TimeInterval":2,"TimeOffsetHour":0,"TimeOffsetMinute":0}}

Error Code definition

Definition	Value	Specifications
SECURE_WEB_CODE_OK	0	Operate successfully
~~SECURE_WEB_CODE_FAILED~~	~~-1~~	~~Third-party interface calling unsuccessfully~~ V1.1.0 abandoned after
~~SECURE_WEB_CODE_INVALID_JSON_FORMAT~~	~~-2~~	~~Illegal JSON data format~~ V1.1.0 abandoned after
~~SECURE_WEB_CODE_RESOURCE_LIMITED~~	~~-3~~	~~Lack of resources~~ V1.1.0 abandoned after
~~SECURE_WEB_CODE_NO_AUTHORIZE~~	~~-4~~	~~No permission~~ V1.1.0 abandoned after

Requirement head and return data format

The following description all aim at data in Http Body

Requirement head

```
{
    "Ch":    0,
    "Type":  0,
    "Data":  {
    }
}
```

Name	Specifications
Dev	Device number, multiple sensor device serial number, single sensor device may not have this field, API server processing defaults to 1. （V1.2.0 added）
Ch	Channel No. Or alarm output/input serial No.,some meaningless default in API write 0
Type	0 stands for obtaining parameters ,1 stands for setting parameters, other value such as 3, 4, 5 etc are extension value, specific to the API will be meaningful
Data	Put the attained parameters when Posting requirement to Data, default null object when don't need to attain parameters

Note: Ch Type Data is the necessary attribute that agreement stipulates.

Except Dev, Additional other attributes, API server will not process.

Return head

Require successful return head：

```
{
    "Result": 0,
    "Data":   {
    }
}
```

Require fail return head:

```
{
    "Result": -1,
    "ErrorString": "Operation Failed!"
}
```

Name	Specifications
Result	For whole Error Code
Data	Returned data when successful
ErrorString	Fail reminder, some API will have wrong description

Note: If user's requirement route is /goform /basic /digest, server will execute Http Authorization.

Log in and log out

Log in

Require URL: http://192.168.0.82 //digest//frmUserLogin

The login requirement header use the default value

```
{
    "Type":   0,
    "Ch":     0,
    "Data":   {
    }
}
```

Return head:

```
{
    "Result": 0,
    "Data":   {
        "ChanNum":   25,
        "DVRType":   2,
        "HttpPort":   80,
```

```
        "DVRPort":    5050,
        "SerialNumber":    "01560123bc487b8d7c54",
        "AlarmOutPortNum":    1,
        "IPChanNum":    0,
        "RTSPPort":   554,
        "RTMPPort":  1935
    }
}
```

Name	Specifications
ChanNum	Channel No.
DVRType	Device type
HttpPort	http port
DVRPort	Device port
SerialNumber	Device serial No.
AlarmOutPortNum	Alarm output
IPChanNum	Digital channel No.（valid for hybrid NVR）
RTSPPort	RTSP port（Open rtsp service will be valid ）
RTMPPort	RTMP port（Open rtmp service will be valid）

Note： (V1.1.0 abandoned after)

Once log in successfully, server returns Session relevant hash value to client through two ways,

Way 1: user-defined http header in the middle of return head, need to attain these hase value in the later each requirement

Way 1: return attain in cookie, this situation ,cookie value needs to attain these hase value and send back to server

If server authorize hash value unsuccessfully, will return 403 Forbidden, reminding user illegal session, need to log in again

Log out

Require URL：https://192.168.0.82//digest//frmUserLogout
The login requirement header use the default value

```
{
    "Type":  0,
    "Ch":    0,
    "Data":   {
    }
}
```

Return body：

```
{
    "Result": 0,
    "Data":""
}
```

~~After user logging out, the previous successful login relevant hash value will be invalid. need to log in again.~~ (V1.1.0 abandoned after)

RTSP address obtaining

Obtain preview RTSP address（Private）

Require URL：http://192.168.0.82//digest//frmGetRtspUrl
Requirement head

```
{
    "Ch":    1,
    "Data":  {
        "Channel":    1,
        "StreamType":0
    },
    "Type":  0
}
```

Return head

```
{
    "Result": 0,
    "Data":  {
        "RtspUrl":    "rtsp://192.168.0.82:554/living_comb01.264"
    }
}
```

Obtain preview RTSP address（Standard）

Require URL：http://192.168.0.82//digest//frmGetRtspUrl
Requirement head

```
{
    "Ch":    1,
    "Data":  {
        "Channel":    1,
        "StreamType":0
    },
    "Type":  10
```

```
}
Return head
{
    "Result": 0,
    "Data":  {
        "RtspUrl":     "rtsp://192.168.0.82:554/ch01.264"
    }
}
```

Obtain bi-direction talk RTSP address

Require URL：https://192.168.0.82//digest//frmGetRtspUrl
Requirement head
```
{
    "Ch":       1,
    "Data":  {
        "Channel":      1,
        "AudioType": 1
    },
    "Type":   1
}
Return head
{
    "Result": 0,
    "Data":  {
        "RtspUrl":      "rtsp://192.168.0.82:554/audioback/ch_01/type_g711u"
    }
}
```

Obtain playback RTSP address（Private）

Require URL：https://192.168.0.82//digest//frmGetRtspUrl
Requirement head
```
{
    "Ch":       1,
    "Data":  {
        "Channel":      1,
        "StreamType":0,
        "StartTime":  "20160725000000",
        "StopTime":  "20160725000000"
    },
```

```
        "Type":  3
}
Return head
{
        "Result": 0,
        "Data":  {

        "RtspUrl":"rtsp://192.168.0.82:554/recording_comb?ch=1&stream=0&start=2016072500000
0&stop=20160725000000&rec_inquiry_type=0"
        }
}
```

Obtain playback RTSP address（**Standard**）

Require URL：https://192.168.0.82//digest//frmGetRtspUrl
Requirement head
```
{
        "Ch":      1,
        "Data":  {
             "Channel":    1,
             "StreamType":0,
             "StartTime":  "20160725000000",
             "StopTime":   "20160725000000"
        },
        "Type":  13
}
Return head
{
        "Result": 0,
        "Data":  {

        "RtspUrl":"rtsp://192.168.0.82:554/recording?ch=1&stream=0&start=20160725000000&sto
p=20160725000000&rec_inquiry_type=0"
        }
}
```

Requirement head specifications：

Name	Specifications
Ip	IP address: code stream required IP address
Channel	Channel No.
StreamType	Code stream: 0-main steam，1-sub-stream
AudioType	Required audio type: 1- bi-direction talk
StartTime	Start time: 20160725000000 expressed as: 2016-year; 07-month;

	25-date; 00-时; 00-minite; 00-secind
StopTime	Finish time: 20160725000000 expressed as: 2016-year; 07-month; 25-date; 00-时; 00-minite; 00-secind
Type	0-live stream url in comb rtsp mode; 10-live stream url in standard rtsp mode(this url can be connected by VLC tool); 1-bi-direction talk; 2-alarm; 3-playback stream in comb rtsp mode; 13-playback stream in standard rtsp mode(this url can be connected by VLC tool);

Return head specifications：

Name	Specification
RtspURL	Required RTSP code stream URL

Web API Version（**V1.1.0 Added**）

Obtain Web API Version

Require URL：http://192.168.0.82//digest// frmWebApiVersion

Requirement head
```
{
    "Ch":      1,
    "Data":   {

    },
    "Type":   0
}
```
Return head
```
{
    "Result": 0,
    "Data":   {
        "Standard":     "V1.1.0"，
        "Build":  "2017-10-10 09:09:01"
    }
}
```
NOTE：This api is defined in version after v1.1.0.

Preview

Preview capture

(1)without authorization(V1.1.0 Abandoned after)

Require URL：http://192.168.0.82 //digest//Capture
Requirement head：
{
    "Type": 0,
    "Ch":   0,
    "Data": {
    }
}
Return JPEG image data

(2)with authorization

Preview capture　requirement with authorization use HTTP GET
Require URL：http://192.168.0.82
//digest//CaptureV2?s_username=admin&s_psw=MTIz&s_ch=1

Name	Specifications
admin	Required device user name
MTIz	Required device user name, use base64 encryption, If the password is empty, the password should be empty, the rest part is the same, display as following: s_username=admin&s_psw=&s_ch=1
Ch	Capture channel, IPC only has one channel

Return JPEG image data

(3)Username Token Authorization（V1.1.0 Added）

Preview capture　requirement with authorization use HTTP GET
Require URL：
http://192.168.0.82//digest//CaptureV2?Username=admin&PasswordDigest=xxxx&Created=xxxxxx&Nonce=xxxxx

Name	Specifications

Username	Required device user name
PasswordDigest	base64(sha1(Nonce + Created + Password)
Created	The datetime that Client created token（DateTime ISO Format）
Nonce	base64（sha1(Created + secret key)）

Forced I-frames（**V1.2.2 Added**）

Require URL：http://192.168.0.82 //digest// frmReqIframe

Requirement head：

```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
        "StreamType":0
    }
}
```

Return head：

```
{
    "Result":0,
    "Data":{
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
StreamType	Stream Type; 0-Main Stream 1-Sub Stream 3-Third Stream

Playback

Video query

frmFlashVideoQuery although it is currently supported but not recommended.

Require URL：http://192.168.0.82//digest//frmVideoRecordsQuery

Requirement head：

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
        "Channels":   [1],
        "QueryType": 255,
        "BeginDateTime": 1470355200,
        "EndDateTime":   1470441599,
        "QueryCondition": 0
    }
}
```

Name	Specifications
Channels	Searched channel list
QueryType	Sum of requires video type, its parameters： 0xFF-All 0-Timing record ~~1-Motion detection~~ ~~2-Alarm trigger~~ ~~3-Alarm or motion detection~~ ~~4-Alarm and motion detection~~ ~~5-Order trigger~~ ~~6-Manual record~~
BeginDateTime	Start time, UTC
EndDateTime	Finish time, UTC
QueryCondition	Query condition; 0-any satisfied; 1-meantime satisfied

Return head：

```
{
    "Result": 0,
    "Data":  {
        "SearchResults":   [{
            "ChannelNo": 1,
            "Records":   [
                [0, 1470268800, 1470281868],
                …
            ]
        }]
    }
}
```

Name	Specifications
SearchResults	Require result data structure
ChannelNo	Channel No.

Records	Require channel records, orderly expressed as video type, start time(UTC), finish time(UTC), video type： 0xFF-all 0-timing video (Non-zero value for the alarm video) ~~1-motion detection~~ ~~2-alarm trigger~~ ~~3-alarm or motion detection~~ ~~4-alarm and motion detection~~ ~~5-order trigger~~ ~~6-manual video~~

Video query by month

Require URL：https://192.168.0.82:443//digest//frmVideoQueryByMonth

Requirement head：

```
{
    "Ch":      1,
    "Data":    {
        "StartYear":   2016,
        "StartMonth": 7,
        "StartDay":    30,
        "DayNum":    1
    },
    "Type":   0
}
```

Name	Specification
StartYear	Start queried year, the value must be greater than zero;
StartMonth	Start month, Starting from 1, 1 stands for January, value range is 1 to 12
StartDay	Start day, Starting from 1，1 stands for 1 day, value range is 1 to 31
DayNum	Query video of the days after starting day, value greater than or equal to 0;

Note: Current StartDay and DayNum invalid, stands for querying current month video；

Return head：

```
{
    "Result": 0,
    "Data":   {
        "QueryResult":    2130706432
    }
}
```

Name	Specification

QueryResult	Query result is 32bit，the 0 bit stands for 1，the 1 bit stands for 2，and so forth, the 30 bit stands for 31, if there is video that day，corresponding position is 1，if there is none, it will be 0;

PTZ control

PTZ control

Require URL：http://192.168.0.82 //digest//frmPTZControl

Order character

Specification	Value
upper	21
under	22
left	23
right	24
upper left	25
upper right	26
left lower	27
right lower	28
zoom+	11
zoom-	12
focus+	13
focus-	14
iris+	15
iris-	16

Requirement head：
```
{
    "Type":  1,
    "Ch":    1,
    "Data":  {
        "Cmd":  26,
        "IsStop": 0,
        "Speed": 5
    }
}
```
Return head：
```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
```

}

Name	Specifications
Cmd	Control order character
IsStop	PTZ control state：0-start； 1-stop；
Speed	OTZ speed

Preset

Require URL：http://192.168.0.82 //digest//frmPTZPreset
Order character：

Specifications	Value
Set preset	8
Calling preset	39
Delete preset	

Requirement head：
{
    "Type"： 1,
    "Ch"：   1,
    "Data"： {
        "Cmd"： 8,
        "Index"： 1
    }
}
Return head：
{
    "Result"： 0,
    "Data"： {
        "StatusCode"： "Operation Ok"
    }
}

Name	Specifications
Cmd	Control order character
Index	Preset serial No. Starting from 0

Cruise

Obtain cruise settings

Require URL：http://192.168.0.82 //digest//frmPTZCruise
Requirement head：

```
{
    "Type":  0,
    "Ch":     1,
    "Data":  {
        "CruisePath": 1
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "Cruise": [
            {
                "PresetNo":    1,
                "Dwell": 1,
                "Speed": 1
            }
            …
        ]
    }
}
```

Add cruise preset

Require URL：http://192.168.0.82 //digest//frmPTZCruise
Requirement head：

```
{
    "Type":  1,
    "Ch":     1,
    "Data":  {
        "CruisePath": 1,
        "PresetNo":    1,
        "Dwell": 1,
        "Speed": 1
    }
}
```

Return head：
```
{
    "Result": 0,
    "Data":  {
         "StatusCode": "Operation Ok"
    }
}
```

Delete one preset from cruise

Require URL：http://192.168.0.82 //digest//frmPTZCruise
Requirement head：
```
{
    "Type":  2,
    "Ch":      1,
    "Data":  {
         "CruisePath":  1,
         "CruiseItemNo":    5
    }
}
```
Return head：
```
{
    "Result": 0,
    "Data":  {
         "StatusCode": "Operation Ok"
    }
}
```

Delete cruise preset

Require URL：http://192.168.0.82 //digest//frmPTZCruise
Requirement head：
```
{
    "Type":  3,
    "Ch":      1,
    "Data":  {
         "CruisePath": 1,
    }
}
```
Return head：
```
{
    "Result": 0,
    "Data":  {
```

```
        "StatusCode": "Operation Ok"
    }
}
```

Call cruise preset

Require URL：http://192.168.0.82 //digest//frmPTZCruise

Requirement head：

```
{
    "Type":  4,
    "Ch":    1,
    "Data":  {
        "CruisePath": 1,
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
CruisePath	Cruise route starting from 1
PresetNo	Preset serial No.start from 0,range is 0 - 255
Dwell	Cruise time
Speed	Cruise speed
CruiseItemNo	Cruise sub-item serial No. Only support to delete the final one, currently is only the final item serial No. , Starting from 1
Type	0-parameters obtaining；1-parameters setting；2-delete preset from cruise route; 3-delete cruise; 4-call cruise;

Note: Cruise preset can only ordinal setting and delete form the last setting preset serial No., for example, already set the preset 1, 2, 3, when adding cruise preset again, can only ordinal add the preset 4; if already set preset point 1, 2, 3, 4 when deleting, can only delete the preset point 4 firstly; Otherwise return errors.

Pattern

Set pattern route

Require URL：http://192.168.0.82 //digest//frmPTZTrack
Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
        "Run":    1,
        "TrackIndex": 1
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Calling pattern

Require URL：http://192.168.0.82 //digest//frmPTZTrack
Requirement head：

```
{
    "Type":  1,
    "Ch":    1,
    "Data":  {
        "TrackIndex": 1
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications

TrackIndex	Tracking route starting from 1
Run	Running state：1-Start tracking record 0-Stop tracking record

PTZ enhance API

Linear Scan

Require URL：http://192.168.0.82 //digest//frmPTZExtend_SetScan

Start setting linear scan

Requirement head：
```
{
    "Type":0,
    "Ch":1,
    "Data":{
        "Index":1
    }
}
```
Return body：
```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Stop setting linear scan

Requirement head：
```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "Index":1
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Calling setting linear scan

Requirement head：

```
{
    "Type":2,
    "Ch":1,
    "Data":{
        "Index":1
    }
}
```

Return body：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Type	0-Set linear scan start
	1-Set linear scan stop
	2-Calling linear scan
Index	Linear scan route serial No., Starting from 1
Ch	Channel serial NO. IPC is 1 forever

Idle operation

Require URL：http://192.168.0.82 //digest//frmPTZExtend_IdleOperation

Obtain idle operation

Requirement head：

```
{
    "Type":0,
    "Ch":1,
    "Data":{
    }
}
```

Return body：

```
{
    "Result": 0,
    "Data":   {
        "Type":0,
        "Index":0,
        "IdleTime":0
    }
}
```

Set idle operation

Requirement head：

```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "Type":0,
        "Index":0,
        "IdleTime":0
    }
}
```

Return body：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Calling idle operation

Requirement head：

```
{
    "Type":2,
    "Ch":1,
    "Data":{
    }
}
```

Return body：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Type	0-Obtain idle operation 1-Set idle operation 2-Calling idle operation
Data.Type	0-none 1-preswet 2-cruise 3-pattern 4-linear scan
Data.Index	Set to which group (which group preset or cruise, etc.), starting from 0
Data.IdleTime	How long the free time trigger PTZ watch, unit time is second
Ch	Channel serial NO. IPC is 1 forever

IR fill-in light

Require URL：http://192.168.0.82 //digest//frmPTZExtend_IrlightCtrl

Obtain IR fill-in light configuration

```
{
    "Type":0,
    "Ch":1,
    "Data":{
```

```
    }
}
Return body：
{
    "Result": 0,
    "Data":  {
        "Mode":  0,
        "Lighting":0
    }
}
```

Set IR fill-in light configuration

```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "Mode":  0,
        "Lighting":0
    }
}
Return body：
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Type	0-Obtain idle operation 1-Set idle operation
Data.Mode	0-Auto 1-Manual
Data.Lighting	Bit stands fro every light, bit0~bit2 stands for near,middle,far light respectively.
Ch	Channel serial NO. IPC is 1 forever

Privacy mask

Require URL：http://192.168.0.82 //digest//frmPTZExtend_SetCover

Obtain privacy mask start using state

```
{
    "Type":0,
    "Ch":1,
    "Data":{
    }
}
Return body：
{
    "Result": 0,
    "Data":   {
            "CoverEnable":[0,0,0,0,0,0,0,0]
        }
    }
}
```

Set privacy mask start using state

```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "Enable":0,
        "Index":1
    }
}
Return body：
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Set privacy mask area start

```
{
    "Type":2,
    "Ch":1,
    "Data":{
        "Index":1
    }
}
Return body：
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Set privacy mask area stop

```
{
    "Type":3,
    "Ch":1,
    "Data":{
        "Index":1
    }
}
Return body：
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Type	0-Obtain privacy mask start using state
	1-Set a certain privacy mask start using state
	2-Start setting a certain privacy mask
	3-Stop setting a certain privacy mask
Data.Enable	0-Fobidden
	1-Start using
Data.Index	Privacy mask serial No.0-7

Ch	Channel serial NO.　IPC is 1 forever

Windshield wiper

Require URL：http://192.168.0.82 //digest//frmPTZExtend_Wiper

Windshield wiper open

```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "Enable":0,
    }
}
Return body：
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Windshield wiper close

```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "Enable":0,
    }
}
Return body：
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Type	1-Set windshield wiper state

Data.Enable	0-Off
	1-On
Ch	Channel serial NO.　IPC is 1 forever

Spray position

Require URL：http://192.168.0.82 //digest//frmPTZExtend_SprayPos

Set position

```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "Code":  0,
    }
}
Return body：
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Delete position

```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "Code":  1,
    }
}
Return body：
{
    "Result": 0,
    "Data":   {
```

```
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Type	1-Spray position setting
Data.Code	0-Set
	1-Delete
Ch	Channel serial NO. IPC is 1 forever

Spray mode

Require URL：http://192.168.0.82 //digest//frmPTZExtend_SprayMode

Set mode

```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "Code":  0,
    }
}
```
Return body：
```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Type	1-Spray mode setting
Data.Code	0-Auto
	1-Mnaual（default）
Ch	Channel serial NO. IPC is 1 forever

Dome 3D Position

Require URL：http://192.168.0.82 //digest//frmPTZExtend_3DPosition

Set 3D Position

Requirement head of zoom in example. Note that StartY should be smaller than StopY.

```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "StartX":62010,"StartY":60690,"StopX":65175,"StopY":64642,
    }
}
```

Requirement head of zoom out example. Note that StartY should be greater than StopY.

```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "StartX":62010,"StartY":64642,"StopX":65175,"StopY":60690,
    }
}
```

Requirement head of redirection example. Note that StartX should be equal with StopX, and StartY should be equal with StopY.

```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "StartX":62010,"StartY":60690,"StopX":62010,"StopY":60690,
    }
}
```

Return：
```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

名称	说明
Type	1-Setting mode.
Ch	Always be 1.
Data.StartX	Horizontal coordinate of start point with variety 0~65535.
Data.StartY	Vertical coordinate of start point with variety 0~65535.
Data.StopX	Horizontal coordinate of end point with variety 0~65535.
Data.StopY	Vertical coordinate of end point with variety 0~65535.

Alarm information（Flash）

Obtain alarm information(V1.1.0 Abandoned after)

Require URL：http://192.168.0.201 //digest//frmGetAlarmInfo
Requirement head

```
{
    "Type":  0,
    "Ch":    0,
    "Data":  {
    }
}
```

Name	Specifications
Type	0—Obtain alarm information； 1—arming；2—disarming；

Return head

```
{
    "Result": 0,
    "Data":  {
        "IsAlarming": 1,
        "AlarmInfoList":   [
            [5, 0, "2016-07-25 11:05:53", "2016-07-26 11:49:49"]
            …
        ]
    }
}
```

Name	Specifications
IsAlarming	Whether arming：0-disarming；1-arming
AlarmInfoList	Alarm information list
AlarmInfoList[0]	Channel NO.；
AlarmInfoList[1]	Event type expression：0-Semaphore alarm； 1-HDD full；2-Signal loss； 3－Motion detection； 4－HDD unformatting；5-Read-write HDD errors； 6-Tampering alarm； 7-Format mismatch； 8-Illegal access； 9-Video signal exception；10-video exception； 20-Network disconnect； 21-IP conflict
AlarmInfoList[2]	Start time YYYY-MM-DD hh:mm:ss
AlarmInfoList[3]	Finish time YYYY-MM-DD hh:mm:ss

Obtain alarm information（V1.1.0 Added）

Require URL：http://192.168.0.201 //digest// frmQueryAlarmInfo
Requirement head

```
{
    "Type": 0,
    "Ch":   0,
    "Data": {
    }
}
```

Name	Specifications
Type	0—Obtain alarm information；

Return head

```
{
    "Result": 0,
    "Data": {
            "AlarmInfo": [
            {
                "MajorType":0,
                "MinorType":3,
                "Source":1,
                "StartTime":1501167966,
                "StopTime":1501168003,
                "State":1
            },
            …
        ]
    }
}
```

Name	Specifications
AlarmInfo	Alarm information list
AlarmInfo[idx].Source	Channel No.；
AlarmInfo[idx].MinorType	Event type expression：0-Alarm input； 1-HDD full； 2-Signal loss； 3－Motion detection； 4－HDD unformatting； 5-Read-write HDD errors； 6-Tampering alarm； 7-Format mismatch；8-Illegal access；9-Video signal exception；10-video exception； 20-Network disconnect； 21-IP conflict 22-Target count 23-Virtual cordon 24-Area detection 25-Object detection 26-Audio exception 27-Plate detection 28-Face detection 29-Fire detection 30-Image color cast 31-Over brightness 32-Image fuzzy 33-Intelligent motion detection alarm 34-Video over darkness
AlarmInfo[idx].MajorType	0- Meaningless
AlarmInfo[idx].State	0 – Stop 1-Continue
AlarmInfo[idx].StartTime	UTC time alarm start time
AlarmInfo[idx].StopTime	UTCtime alarm finish time

Arming (V1.1.0 Abandoned after)

Require URL：http://192.168.0.82 //digest//frmGetAlarmInfo
Requirement head

```
{
    "Type":  1,
    "Ch":    1,
    "Data":  {
    }
}
```

Return head：

```
{
    "result":  0,
    "data":    {
        "StatusCode": "Save Ok"
    }
}
```

Disarming (V1.1.0 Abandoned after)

Require URL：http://192.168.0.82 //digest//frmGetAlarmInfo
Requirement head

```
{
    "Type":  2,
    "Ch":    1,
    "Data":  {
    }
}
```

Return head：

```
{
    "result":  0,
    "data":    {
        "StatusCode": "Save Ok"
    }
}
```

Log

Obtain log

Require URL：http://192.168.0.201 //digest//frmLogCtrl
Requirement head：

```
{
    "Type":  0,
    "Ch":    0,
    "Data":  {
        "MajorType": 0,
        "StartTime":  1469030400,
        "EndTime":    1469116799,
        "Step":    0,
        "CurrentPage":    1,
        "PageNum":  22
    }
}
```

Name	Specifications
MajorType	Query log main type：0-all；1-alarm；2-Exception；3-Operation；
StartTime	UTC time start time
EndTime	UTC time finish time
Step	Paging parameters：0-Query 1-page turning
CurrentPage	Paging parameters: which page the current page is
PageNum	Paging parameters ,No.of each page

Return head：

```
{
    "Result": 0,
    "Data":  {
        "LogResults": {
            "Items":  [
                {
                    "No":      1,
                    "LogDateTime":     "2016-08-03 15:46:34",
                    "MajorType": 3,
                    "MinorType": 112,
                    "ChannelOrPort":   1,
                    "IP":"192.168.0.200"
                }
                …
            ] ,
            "LogItemCount":    2992,
            "TotalPages": 136
        }
    }
}
```

Name	Specifications
No	Log item serial No.
LogDateTime	Log record time
MajorType	Log main type：0-ALL； 1-alarm； 2-exception； 3-operstion；
MinorType	Log sub-type：0-all；
ChannelOrPort	The lower 16 bits indicate the channel number, the upper 16 bits represent the area code
IP	Operation associated IP address
LogItemCount	Total Log Item
TotalPages	Total Pages

Parameters configuration

Device parameters

Device information

Obtain device information

Require URL：http://192.168.0.82 //digest//frmDevicePara
Requirement head：
```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head：
```
{
    "Result": 0,
    "Data":   {
"WebApiVersion":{
        "Standard":    "V1.1.0"，
        "Build":   "2017-10-10 09:09:01"
    }
        "SoftwareVersion": "V1.2[20160722]",
"HardwareVersion": "V1.2",
"SerialNumber": "028b09000074089b0373",
"DVRName": "ipc",
"DVRType": 3,
"AlarmInPortNum": 2,
"AudioSource": 0,
"AudioInVol": 50,
"AudioOutVol": 50
    }
}
```
Note (audio-related parameter settings are no longer supported)

Set device information

Require URL：http://192.168.0.82 //digest//frmDevicePara
Requirement head：
```
{
```

```
    "Type":   1,
    "Ch":     1,
    "Data":  {
        "DVRName": "ipc",
"AudioSource": 0,
"AudioInVol": 50,
"AudioOutVol": 50
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
SerialNumber	Serial No.
DVRName	DVR name
SoftwareVersion	Software version No., high 16 bit is main version, low 16 bit is sub version Software version, presented by a string.（V1.1.0）
DSPSoftwareVersion	DSP software version, high 16 bit is main version, low 16 bit is sub version
HardwareVersion	Hardware version, high 16 bit is main version, low 16 bit is sub version Hardware version, presented by a string.（V1.1.0）
AlarmInPortNum	DVR alarm input No.
DVRType	DVR type, 1:DVR 2:NVR 3:DVS/IPC…
AudioSource	Audio source, 0 LineIn(line in, default), 1 MicIn(microphone).
AudioInVol	Input volume(MIC or Line In). Value 0~100. Default value is 50.
AudioOutVol	Output volume. Value 0~100. Default value is 50.
WebApiVersion	Web api version　（V1.1.1 added）
Standard	Web api version　（V1.1.1 added）
Build	Build date　（V1.1.1 added）

Video format

Obtain video format

Require URL：http://192.168.0.82 //digest//frmVideoFormatPara

Requirement head：

{

```
    "Type":   0,
    "Ch":      1,
    "Data":   {
    }
}
```

Return head:

```
{
    "Result": 0,
    "Data":   {
        "VideoFormat":      1
    }
}
```

Set video format

Require URL：http://192.168.0.82 //digest//frmVideoFormatPara

Requirement head：

```
{
    "Type":   1,
    "Ch":      1,
    "Data":   {
        "VideoFormat":      1
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
VideoFormat	Video format:1-NTSC;2-PAL

Get PN Format Ability（**V1.2.3 Added**）

请求 URL：http://192.168.0.82 //digest//frmGetPNFormatAbility

请求头：

```
{
    "Type":   0,
    "Ch":      1,
```

```
        "Data":    {
        }
}
```

返回头：

```
{
    "Result": 0,
    "Data": {
        "FormatList": [{
            "W": 1920,
            "H": 1080,
            "Fps": 30,
            "Format": 0
        },
        ……
        ]
    }
}
```

名称	说明
FormatList	视频制式列表
W	宽
H	高
Fps	视频帧数
Format	视频制式序号

Obtain video format V2（**V1.2.3 Added**）

Require URL：http://192.168.0.82 //digest//frmVideoFormatPara_v2
Requirement head:

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head:

```
{
    "Result": 0,
    "Data":   {
        "VideoFormat":    0
    }
}
```

Set video format V2（**V1.2.3 Added**）

Require URL：http://192.168.0.82 //digest//frmVideoFormatPara_v2
Requirement head：

```
{
    "Type":  1,
    "Ch":     1,
    "Data":  {
        "VideoFormat":     0,
        "Fps":     30
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
VideoFormat	Video Format，Refer to "Format" in PN Format Ability
Fps	Fps，Refer to "Fps" in PN Format Ability

Device time

Obtain device time

Require URL：http://192.168.0.82 //digest//frmDeviceTimeCtrl
Requirement head：

```
{
    "Type":  0,
    "Ch":     1,
    "Data":  {
    }
}
```

Return head：

```
{
    "Result": 0,
```

```
    "Data":  {
        "Time":  [2016,8,16,15,40,8]
    }
}
```

Set device time

Require URL：http://192.168.0.82 //digest//frmDeviceTimeCtrl

Requirement head：

```
{
    "Type":  1,
    "Ch":    1,
    "Data":  {
        "Time":  [2016,8,16,15,40,8]
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Time	Time array：[2016, 7, 7, 17, 6, 25] expressed as ：2016-year；7-month；7-day；17-hour；6-minute；25-second；

System information

Obtain system information (V1.1.0 Abandoned after)

The old device is the directly requested factoryinfo.xml under the web directory.

```
<!DOCTYPE DeviceInfo>
<DeviceInfo>
    <DeviceName content="HIDC-M4300VI"/>
    <Web content="www.asia.security.honeywell.com"/>
    <Tel content="0086-021-22196888"/>
    <Copyright content="Honeywell Security China Co., Ltd."/>
    <ManufacturerName content="Honeywell Security Group"/>
```

```
<Brand content="Super HD Series"/>
<Customer content="HONEY"/>
<SensorModel content="IMX123"/>
<SwVersion content="V3.0.20170711"/>
<HwVersion content="V01.00"/>
<IsofDome content="n"/>
<IsofIr content="y"/>
<IsSupportAutoLens content="y"/>
<AutoLensType content="R2A30440"/>
<EventCodecSup content="y"/>
<Platform content="HI3516D"/>
<Hardware content="FSAN_HI3516D_D1607_HBB55"/>
<Project content="HONEYIPC"/>
<Subversion content="SUPERHD"/>
<IsofCard content="n"/>
<City content=""/>
<Country content=""/>
</DeviceInfo>
```

Name	Specifications
DeviceName	Device Name
Brand	Brand
Customer	Customer
SensorModel	Sensor Model
SwVersion	Software Version
HwVersion	Hardware Version
IsofDome	Whether dome camera y-yes n-no
IsofIr	Whether support IR leds y-yes n-no
IsSupportAutoLens	Whether to support auto lens
AutoLensType	Lens Type
EventCodecSup	-
Platform	Platform
Hardware	Hardware
IsofCard	Whether to support sd card

Obtain system information (V1.1.0 Added)

Require URL：http://192.168.0.82 //digest//frmGetFactoryInfo
Requirement head：
{
    "Type": 0,
    "Ch":   1,

```
        "Data":    {
        }
}
Return head：
{
        "Result": 0,
        "Data":
        {
                "DeviceName": "HICC-1600T",
                "ProductName":"",
                "DeviceType":"IPC",
                "DeviceModel":"",
                "Web": "www.asia.security.honeywell.com",
                "Tel": "0086-021-22196888",
                "Copyright": "Honeywell Security China Co., Ltd.",
                "ManufacturerName": "Honeywell Security Group",
                "Brand": "Super HD Series",
                "Customer": "HONEY",
                "SensorModel": "FS6305",
                "SwVersion": "V1.2.20160722",
                "HwVersion": "V01.00",
                "BuildDate":"",
                "ProductDate":"20170725150000",
                "IsofDome": "y",
                "IsofIr": "y",
                "AutoLens":
                {
                        "LensSupport":0,
                        "LensDrvType":"RSA30440",
                        "LensType":"DISABLE_LENS"
                },
                "AutoIris":
                {
                        "IrisSupport":1,
                        "IrisType":"DC-IRIS",
                        "IrisAddtion":""
                },
                "Project":"OVFS",
                "Platform": "HI3516D",
                "Hardware": "FSAN_HI3516D_D1605",
                "OptionalDevChanStreams":[[2, 3, 4], [2, 3, 4]],
                "IsOfFishEye":"y"
        }
}
```

Note (this interface is free of authentication)

Name	Specifications
Web	Product website
Tel	Contact telephone
Copyright	Copyright
ManufacturerName	Manufacture name
Brand	Brand
Customer	Customer
SensorModel	Sensor model
SwVersion	Software version
HwVersion	Hardware version
IsofDome	Whether dome camera y-yes n-no
IsofIr	Whether support IR leds y-yes n-no
AutoLens.LensSupport	Whether support auto focus y-yes n-no
AutoLens.LensDrvType	Chip type
AutoIris	-
Platform	Platform
Hardware	Hardware
OptionalDevChanStreams	The number of real-time streams in each channel of each device
IsOfFishEye	Whether fisheye camera y-yes n-no

FishEye Camera（**V1.1.3 Added**）

FishEye Camera Ability

The ability to describe the set of fisheye capabilities, including display modes, respectively describes how many channels each of the fisheye / panorama / ptz modes support in each mode.

Require URL：http://192.168.0.82 //digest// frmFisheyeAbility
Requirement head：

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
    }
}
```
Return head：

```
{
    "Result": 0,
```

```
    "Data":
    {
        "ViewMode": [{
            "FisheyeView": 1,
            "FullView": 0,
            "PtzView": 4
        },
        {
            "FisheyeView": 1,
            "FullView": 1,
            "PtzView": 2
        }]
    }
}
```

Name	Specifications
ViewMode	The channel number of each view mode
FisheyeView	The number of fisheye channel
FullView	The number of panorama channel
PtzView	The number of ptz channel

FishEye Function Mode

Parameters describing fisheye function mode, including installation method, display method, each channel type and serial number

Obtain Fisheye Function Parameter

Require URL：http://192.168.0.82 //digest// frmFisheyeMode
Requirement head：

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data": {
        "InstallMode": 2,
        "ViewMode": {
            "FisheyeView": 1,
```

```
            "FullView": 1,
            "PtzView": 3
        },
        "FullViewMode": 0
    }
}
```

Set Fisheye Function Parameter

Require URL：http://192.168.0.82 //digest//frmFisheyeMode

Requirement head：

```
{
    "Type":   0,
    "Ch":      1,
    "Data": {
        "InstallMode": 2,
        "ViewMode": {
            "FisheyeView": 1,
            "FullView": 1,
            "PtzView": 3
        },
        "FullViewMode": 0
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
InstallMode	Install Mode 0-Top， 1-Wall，2-Ground
ViewMode	View Mode
FisheyeView	The number of fisheye channel
FullView	The number of panorama channel
PtzView	The number of ptz channel
FullViewMode	Panorama Mode 0-180° 1-360°

Obtain Fisheye Channel's Location

It describes the position of the fisheye channel, including horizontal angle, vertical angle, magnification (determines the angle of view).

Require URL：http://192.168.0.82 //digest//frmFisheyeChanPos

Requirement head：

```
{
    "Type":  0,
    "Ch":     1,
    "Data":  {
        "ChanNum":2
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data": {
        "PanAngle": 0,
        "TiltAngle": 90,
        "ZoomRate": 5000
    }
}
```

Name	Specifications
ChanNum	Channel Number
PanAngle	Horizontal Angle：-180~+180(Top and Ground), -90~+90(Wall)
TiltAngle	Vertical Angle：0-90(Top and Ground), -90~+90(Wall)
ZoomRate	Magnification (determines the angle of view): 1~9999.

Fisheye Channel PTZ Operation

It describes the fisheye channel operation and parameters, including relative movement, absolute movement, continuous movement. Only PTZ channel supported .

Require URL：http://192.168.0.82 //digest//frmFisheyeChanMove

Requirement head：

```
{
    "Ch": 1,
    "Type": 1,
    "Data": {
        "ChanNum": 2,
        "Operation": "ContinousMove",
        "PanAngle": 1,
```

```
        "PanSpeed": 0.5,
        "TiltAngle":1,
        "TiltSpeed ": 0.5,
        " ZoomRate ":1,
        " ZoomSpeed ": 0.5
    }
}
```
Return head：
```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
ChanNum	Channel Number
Operation	PTZ Operation ： "RelativeMove"/"AbsoluteMove"/"ContinousMove"
PanAngle	Horizontal Angle： -180~+180(Top and Ground); -90~+90(Wall); -1-left ,0-stop ,1-right (ContinousMove)
PanSpeed	Horizontal Angle Speed：0~1.0
TiltAngle	Vertical Angle： 0-90(Top and Ground) ; -90~+90(Wall) ; -1-bottom ,0-stop ,1-top (ContinousMove)
TiltSpeed	Vertical Angle Speed：0~1.00~1.0
ZoomRate	Magnification：1~9999; -1-ZoomOut ,0-stop ,1-ZoomIn (ContinousMove)
ZoomSpeed	Magnification Speed：0~1.0

Fisheye Channel Preset Point Operation

It describes the fisheye channel preset operation, including the Obtain / set / call / delete of preset points

Obtain Location of Preset

Require URL：http://192.168.0.82 //digest//frmFisheyeChanPreset

Requirement head：

```
{
    "Ch": 1,
    "Type": 0,
    "Data": {
        "ChanNum": 2,
        "Preset": 0
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data": {
        "ChanNum": 2,
        "Preset": 0,
        "PanAngle": 32,
        "TiltAngle": 90,
        "ZoomRate": 5440
    }
}
```

Set / Call / Delete of Preset

Require URL：http://192.168.0.82 //digest//frmFisheyeChanPreset

Requirement head：

```
{
    "Ch": 1,
    "Type": 1/2/3,
    "Data": {
        "ChanNum": 2,
        "Preset": 0
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Type	0-Obtain 1-Set 2- Call 3- Delete
ChanNum	Channel Number

Preset	Preset Number
PanAngle	Horizontal Angle： -180~+180(Top and Ground); -90~+90(Wall); -1-left ,0-stop ,1-right (ContinousMove)
TiltAngle	Vertical Angle： 0-90(Top and Ground) ; -90~+90(Wall) ; -1-bottom ,0-stop ,1-top (ContinousMove)
ZoomRate	Magnification：1~9999; -1-ZoomOut ,0-stop ,1-ZoomIn (ContinousMove)

PTZ setting

Obtain PTZ protocol（frmGetPTZProtocal）

Require URL：http://192.168.0.82 //digest//frmGetPTZProtocal
Requirement head：

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "PTZProtocal":    [
            {
                "Describe":    "pelcoD",
                "Type":  1
            },
            {
                "Describe":    "pelcoP",
                "Type":  2
            }
        ]
    }
}
```

Name	Specifications
Describe	PTZ protocol No.
Type	PTZ protocol serial No.

Decoding parameters

Obtain decoding parameters

Require URL：http://192.168.0.82 //digest//frmDecoderPara
Requirement head：

```
{
    "Type":  0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head

```
{
    "Result": 0,
    "Data":   {
        "BaudRate":   8,
        "DecoderAddress": 1,
        "DecoderType":    1
    }
}
```

Set decoding parameters

Require URL：http://192.168.0.82 //digest//frmDecoderPara
Requirement head：

```
{
    "Type":  1,
    "Ch":     1,
    "Data":   {
        "BaudRate":   8,
        "DecoderAddress": "1",
        "DecoderType":    1
    }
}
```

Return head：

```
{
```

```
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
BaudRate	Baud rate (bps)
DecoderAddress	Decoder address
DecoderType	Decoder type

QR code

Obtain QR code procedure figure
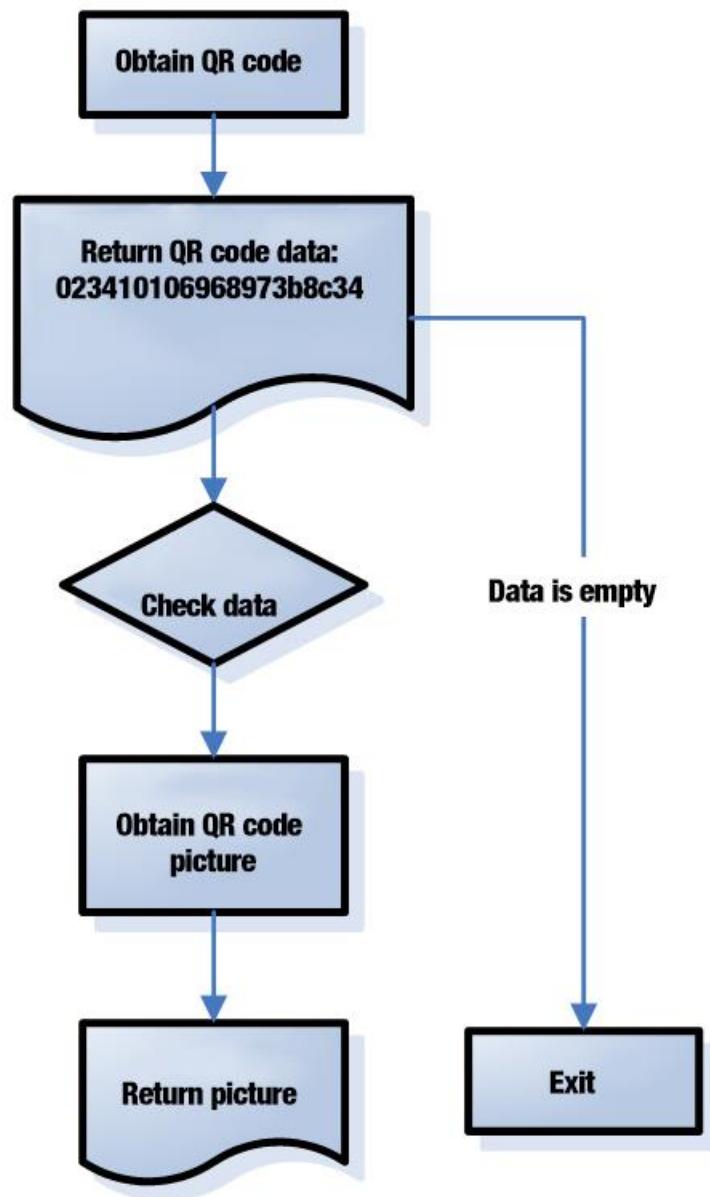
Obtain QR code (V1.1.0 Abandoned after）

Require URL：http://192.168.0.82 //digest//frmGetQRCode
Requirement head：

```
{
    "Type":  0,
    "Ch":      1,
```

```
    "Data"：  {
    }
}
```
Return head：
```
{
    "Result": 0,
    "Data":  {
        "QRSelects":  [["AECloud", "023410106968973b8c34"]]
    }
}
```

Obtain QR code (V1.1.0 Added)

Require URL：http://192.168.0.82 //digest//frmGetQRCode
Requirement head：
```
{
    "Type":  0,
    "Ch":     1,
    "Data":  {
    }
}
```
Return head：
```
{
    "Result": 0,
    "Data":  {
        "QRSelects":  [
        [
                "Fseye",
                [
                    "APPLE",
                    "https://itunes.apple.com/cn/app/fseye/id1069292577?mt=8"
                ],
                [
                    "ANDROID",
                    "http://a.app.qq.com/o/simple.jsp?pkgname=com.Fseye"
                ],
                [
                    "DEVICE",
                    "023410106968973b8c34"
                ]
            ]

        ]
```

```
    }
}
```

Obtain QR code picture

This requirement use HTTP GET way
Requirement exampled as URL：
http://192.168.0.82//goform/frmGetQRCodePicture?Pid=023410106968973b8c34

Return head information：
HTTP/1.1 200 OK
Server: NVRDVRIPC Web Server
Date: Fri, 05 Aug 2016 10:24:34 GMT
Content-Type: image/bmp
Content-Length: 30758
Connection: keep-alive
strict-transport-security: max-age=31536000
X-Frame-Options: SAMEORIGIN
x-content-type-options: nosniff
X-Xss-Protection: 1; mode=block

Audio Settings（**V1.1.0 Added**）

Obtain Audio params

Requirement exampled as URL：   http://10.3.0.79:8080/digest/frmAudioPara
Request Body：
```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
```

```
}
Response Body：
{
    "Result":0,
    "Data":{
        "AudioSource":1,
        "AudioInVol":51,
        "AudioOutVol":52
        }
    }
```

Set Audio params

```
Request Body：
{
    "Type":1,
    "Ch":1,
    "Data":{
        "AudioSource":1,
        "AudioInVol":51,
        "AudioOutVol":52
        }
}
Response Body：
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Description
AudioSource	Audio source
AudioInVol	Audio input volume
AudioOutVol	Audio output volume

UUID

Burning UUID

Support TUTK, GooLink, FSEYE.

Requirement URL： http://10.3.0.79:8080/digest/frmSetUuid

Requirement Head：

```
{
    "Type":1,
    "Ch":1,
    "Data":{
        "BurnParam":[{"Name": "TUTK_UID", "Uuid": "abcd123456"}] – tutk
        "BurnParam":[{"Name": "GOOLINK_UID", "Uuid": "abcd123456"}] –goolink
        "BurnParam":[{"Name":  "DeviceID",  "Uuid":  "abcd123456",  "HostIp":"app.umeye.cn",
        "HostPort": 5800}] – fseye
        }
}
```

Return head：

```
{
    "result":0,
    "data":{
        "BurnRes":[
            {"BurnResult" : -2,
             "Name": "TUTK_UID",
             "Uuid": "abcd123456"
            }
        ]
    }
}
```

Name	Specifications
BurnResult	0-Success -1-Failed 2-Already had a uuid.

Channel parameters

Display setting

DateTime OSD   Single Line OSD   Without lattice (compatible with old client)

Obtain Datetime OSD, single Line OSD and display position

Require URL：http://192.168.0.82 //digest//frmSingleLineOSD

Requirement head：

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "OSD":  {
            "FirstStreamOsdSize": 0,
            "SecondStreamOsdSize": 0,
            "ThirdStreamOsdSize": 0,
            "ChanName": "007",
            "IsShowChanName":    1,
            "ChanNameTopLeftX": 0,
            "ChanNameTopLeftY": 0,
            "IsShowOSD":      1,
            "OSDTopLeftX":   316,
            "OSDTopLeftY":   40,
            "OSDType":   2,
            "OSDHourType":   0,
            "ChanNameLocation":0,
            "TimeLocation":0,
            "BitColor":"f8f8f8"
        }
    }
}
```

Set single Line OSD and display position

Require URL：http://192.168.0.82 //digest//frmSingleLineOSD

Requirement head：

```
{
    "Type":  1,
    "Ch":    1,
    "Data":  {
        "OSD":  {
            "FirstStreamOsdSize": 10,
            "SecondStreamOsdSize": 10,
            "ThirdStreamOsdSize": 10,
```

```
                    "ChanName": "哈哈",
                    "IsShowChanName": 1,
                    "ChanNameTopLeftX": 0,
                    "ChanNameTopLeftY": 0,
                    "IsShowOSD": 1,
                    "OSDTopLeftX": 316,
                    "OSDTopLeftY": 0,
                    "OSDType": 0,
                    "OSDHourType": 0,
                    "ChanNameLocation":0,
                    "TimeLocation":0,
                    "BitColor":"f8f8f8"
                }
            }
    }
Return head：
{
        "Result": 0,
        "Data":  {
            "StatusCode": "Operation Ok"
        }
}
```

Name	Specifications
FirstStreamOsdSize	Main stream OSD size
SecondStreamOsdSize	Sub-stream OSD size
ThirdStreamOsdSize	Third stream OSD size （v1.1.0 added）
ChanName	Channel name
ChanNameLocation	SingleLine OSD location （v1.1.1 added） 0- Custom , The coordinates are（PosX，PosY） 1- Top-left 2- Top-right 3- Bottom-left 4- Bottom-right
TimeLocation	Date OSDlocation （v1.1.1 added） 0- Custom , The coordinates are（DateOSDPosX, DateOSDPosY） 1- Top-left 2- Top-right 3- Bottom-left 4- Bottom-right
IsShowChanName	Whether display channel name
ChanNameTopLeftX	Abscissa of channel name upper left corner (0-352)
ChanNameTopLeftY	Ordinate of channel name upper left corner (0-288)

IsShowOSD	Whether display OSD
OSDTopLeftX	Abscissa of OSD upper left corner
OSDTopLeftY	Ordinate of OSD upper left corner
OSDType	Date format
OSDHourType	Time format 0-- 24-hour system 1-- 12-hour system

DateTime SingleLine OSD (With Lattice)

Obtain DateTime SingleLine OSD and Display Position

Required URL：http://192.168.0.82 //digest//frmSingleLineOSD

Request Head：

```
{
    "Type":  10,
    "Ch":    1,
    "Data":  {
    }
}
```

Return Head：

```
{
    "Result": 0,
    "Data":  {
        "OSDLattice": {
            "MainStreamFontSize": 0,
            "SubStreamFontSize": 0,
            "ThirdStreamFontSize": 0,
            "Text":   "007",
            "Enable": 1,
            "PosX":   0,
            "PoxY":   0,
            "EnableDateOSD": 1,
            "DateOSDPosX": 0,
            "DateOSDPosY": 0,
            "DateOSDType": 0,
            "DateOSDHourType": 0,
            "FontName":"SongTi",
            "ChanNameLocation":0,
            "TimeLocation":0,
            "BitColor ":"f8f8f8"
        }
    }
```

}

Set DateTime SingleLine OSD and Display Position

Required URL：http://192.168.0.82 //digest//frmSingleLineOSD

Request Head：

```
{
    "Type":   11,
    "Ch":     1,
    "Data":   {
        "OSDLattice": {
            "MainStreamFontSize": 0,
            "SubStreamFontSize": 0,
            "ThirdStreamFontSize": 0,
            "Text":    "007",
            "Enable": 1,
            "PosX":   0,
            "PoxY":   0,
            "EnableDateOSD": 1,
            "DateOSDPosX": 0,
            "DateOSDPosY": 0,
            "DateOSDType": 0,
            "DateOSDHourType": 0,
            "FontName":"SongTi",
            "ChanNameLocation":0,
            "TimeLocation":0,
            "BitColor ":"f8f8f8"，
            "Main":{
                "BytesArray":"AAAAAAA…",
                "BytesLength":250,
                "Width":72,
                "Height":288
            },
            "Sub":{
                "BytesArray":"AAAAAAA…",
                "BytesLength":250,
                "Width":72,
                "Height":288
            },
            "Third":{
                "BytesArray":"AAAAAAA…",
                "BytesLength":250,
                "Width":72,
                "Height":288
```

```
                }

            }
        }
}
Return Head：
{
      "Result": 0,
      "Data":  {
            "StatusCode": "Operation Ok"
      }
}
```

名称	说明
MainStreamFontSize	Main stream OSD size （10, 15, 20, 30, 40, 50, 60, 70, 80)
SubStreamFontSize	Sub stream OSD size （10, 15, 20, 30, 40)
ThirdStreamFontSize	Third stream OSD size （v1.1.0 added）
Enable	Enable SingleLine OSD
PosX	SingleLine OSD Topleft x(0-1000)
PosY	SingleLine OSD Topleft y (0-1000)
Text	SingleLine OSD Text
FontName	SingleLine OSD Font （v1.1.1 added） （"SongTi"，"YaHei"，"HeiTi"，"YouYuan"，"Arial"）
ChanNameLocation	SingleLine OSD location （v1.1.1 added） 0--Custom ，The coordinates are（PosX，PosY） 1--Top-left 2--Top-right 3--Bottom-left 4--Bottom-right
TimeLocation	Date OSDlocation （v1.1.1 added） 0--Custom ，The coordinates are（DateOSDPosX，DateOSDPosY） 1--Top-left 2--Top-right 3--Bottom-left 4--Bottom-right
BitColor	OSD Color
Main.BytesArray	Dot matrix data (base64)
Main.BytesLength	Dot matrix data length
Main.Width	Pixel width
Main.Height	Pixel height
EnableDateOSD	Enable DateTime OSD
DateOSDPosX	DateTime OSD TopLeft x(0-1000)
DateOSDPosY	DateTime OSD TopLeft y(0-1000)

DateOSDType	Date Format
DateOSDHourType	Time format 0-- 24-hour system 1-- 12-hour system

Multi-Line OSD   Without lattice (compatible with old client)

Obtain multi-Line OSD and display position

Require URL：http://192.168.0.82 //digest//frmMultiLineOSD

Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "MultiOSD": {
            "TopLeftX": 350,
            "TopLeftY": 287,
            "Location": 0,
            "BitColor": "000000",
            "IsShowMultiOSD": 0,
            "Text": "Line1\nLine2",
            "TextSize": 12,
            "FirstStreamOsdSize": 40,
            "SecondStreamOsdSize": 20,
            "ThirdStreamOsdSize": 20
        }
    }
}
```

Set multi-Line OSD and display position

请求 URL：http://192.168.0.82 //digest//frmMultiLineOSD

请求头：

```
{
    "Type":   1,
    "Ch":     1,
```

```
"Data":   {
      "MultiOSD": {
            "TopLeftX": 350,
            "TopLeftY": 287,
            "Location": 0,
            "BitColor": "000000",
            "IsShowMultiOSD": 0,
            "Text": "Line1\nLine2",
            "TextSize": 12,
            "FirstStreamOsdSize": 40,
            "SecondStreamOsdSize": 20,
            "ThirdStreamOsdSize": 20
      }
   }
}
```

返回头：

```
{
   "Result": 0,
   "Data":   {
      "StatusCode": "Operation Ok"
   }
}
```

名称	说明
IsShowMultiOSD	Show multi-Line OSD
FirstStreamOsdSize	First Stream Osd Size
SecondStreamOsdSize	Second Stream Osd Size
ThirdStreamOsdSize	Third Stream Osd Size （v1.1.0 added）
TopLeftX	multi-Line OSD TopLeft x（0-352）
TopLeftY	multi-Line OSD TopLeft y（0-288）
Text	multi-Line OSD text
TextSize	multi-Line OSD length
BitColor	multi-Line OSD font color
Location	multi-Line OSD location （v1.1.1 added） 0--Custom ，The coordinates are（TopLeftX，TopLeftY） 1--Top-left 2--Top-right 3--Bottom-left 4--Bottom-right

Multi-Line OSD （With Lattice）

Obtain multi-Line OSD and display position

Required URL：http://192.168.0.82 //digest//frmMultiLineOSD

Request Head：

```
{
    "Type":   10,
    "Ch":     1,
    "Data":   {
    }
}
```

Return Head：

```
{
    "Result": 0,
    "Data":   {
        "MultiOSDLattice":      {
            "MainStreamFontSize": 0,
            "SubStreamFontSize": 0,
            "ThirdStreamFontSize": 0,
            "Enable": 0,
            "PosX":   0,
            "PosY":   0,
            "Text":    "123456\n32423432\n454",
            "Location": 0,
            "FontName": "SongTi",
            "BitColor": "000000"
        }
    }
}
```

Set multi-Line OSD and display position

Required URL：http://192.168.0.82 //digest//frmMultiLineOSD

Request Head：

```
{
    "Type":   11,
    "Ch":     1,
    "Data":   {
        "MultiOSDLattice":      {
            "MainStreamFontSize": 0,
            "SubStreamFontSize": 0,
```

```
                    "ThirdStreamFontSize": 0,
                "Enable": 0,
                "PosX":  0,
                "PosY":  0,
                "Text":   "",
                "TextLength": 0，
                "Location": 0,
                "FontName": "SongTi",
                "BitColor ":"f8f8f8"，
                "Main":{
                    "BytesArray":"AAAAAA…",
                    "BytesLength":250,
                    "Width":72,
                    "Height":288
                },
                "Sub":{
                    "BytesArray":"AAAAAA…",
                    "BytesLength":250,
                    "Width":72,
                    "Height":288
                },

            }
        }
}
Return Head：
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

名称	说明
Enable	Show multi-Line OSD
MainStreamFontSize	Main Stream Font Size
SubStreamFontSize	Sub Stream Font Size
ThirdStreamFontSize	Third Stream Font Size　（v1.1.0 added）
TextLength	Length of multi-Line OSD （This parameter generally do not need to set）
PosX	multi-Line OSD TopLeft x(0-1000)
PosY	multi-Line OSD TopLeft y(0-1000)
Text	multi-Line OSD text
Location	multi-Line OSD location　（v1.1.1 added）

	0- Custom , The coordinates are（PosX，PosY） 1- Top-left 2- Top-right 3- Bottom-left 4- Bottom-right
FontName	multi-Line OSD Font
Main.BytesArray	Dot matrix data (base64)
Main.BytesLength	Dot matrix data length
Main.Width	Pixel width
Main.Height	Pixel height

Brightness, contrast, hue, saturation

Obtain Brightness, contrast, hue, saturation of front-end IPC

Require URL：http://192.168.0.82 //digest//frmVideoEffect

Requirement head：

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "VideoEffect":{
            "Brightness": 128,
            "Contrast":    128,
            "Saturation":  128,
            "Hue":    128
        }
    }
}
```

Set Brightness, contrast, hue, saturation of front-end IPC

Require URL：http://192.168.0.82 //digest//frmVideoEffect
Requirement head：

```
{
    "Type":  1,
    "Ch":    1,
    "Data":  {
        "VideoEffect":{
            "Brightness":  128,
            "Contrast":    128,
            "Saturation":  128,
            "Hue":     128
        }
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Brightness	Brightness 0-255
Contrast	Contrast 0-255
Saturation	Saturation 0-255
Hue	Hue 0-255

Encoding settings

Video compress ability

Obtain all parameters of video compress ability

Require URL：http://192.168.0.82 //digest//frmVideoCompressAbility
Requirement head：

```
{
    "Type":  0,
```

```
        "Ch":     1,
        "Data":   {
              "AbilityType":0
        }
}
Return head
{
        "Result": 0,
        "Data":   {
                  "BaudRate":   [
                        ["MainStream", 0],
                        ["AuxStream", 1],
                        ["EventStream", 2]
                        ["Third Stream", 3]
                  ],
                  "Resolution":  [
                        ["D1", 3, 25],
                        …
                  ],
                  "FrameRate":  [
                        ["FULL", 0],
                        …
                  ],
                  "BitrateType": [
                        ["VBR", 0],
                        ["CBR", 1]
                  ],
                  "Bitrate": [
                        ["16Kbps", 1]
                        …
                  ],
                  "VideoEncType":  [
                        ["H264", 1],
                        …
                  ],
                  "H264PROFILE":  [
                        ["MainProfile", 1],
                        ["Baseline", 0],
                        ["HighProfile", 2]
                  ]
        }
}
```

Name	Specifications

AbilityType	Encoding type ability：0-main stream；1-sub-stream 2-abandon 3-the third stream
BaudRate	Stream compression type：0-main stream（timing）；1-sub-stream Aux Stream 2-Event Stream；3-Third Stream
Resolution	Stream compression resolution；["D1",3]expressed as：”D1”resolution description； 3-corresponding resolution value；resolution parameters： ["D1",3,25], ["Q1080P(960*540)", 7,25], ["960P(1280*960)",9,25], ["HD720p(1280*720)",19,25], ["HD1080p(1920*1080)",27,25], Note(If the array length is 2, frame rate to FrameRate, if the array length is 3, array [2] is the maximum frame rate at this resolution,just ignore FrameRate)（v1.1.0 added） Can't modify parameters description and its corresponding value；
FrameRate	Video frame rate ability；["FULL",0]expressed as："FULL"-frame rate description，stands for whole frame rate； 0-corresponding value；frame rate parameters： ["FULL",0], ["22",16], ["20",13], ["18",15], ["16",12], ["15",14], ["12",11], ["10",10], ["8",9], ["6",8], ["4",7], ["2",6], ["1",5]， Can't modify parameters description and its corresponding value
BitrateType	Bit rate type ability；["VBR",0]expressed as："VBR"-Variable bit rate；0-corresponding value；["CBR",1]expressed as："CBR"-Constant bit rate；1-corresponding value；Can't modify parameters description and its corresponding value
Bitrate	Bit rate upper limit，stands for the choosing bit rate for current channel，determine advisable value by bit rate type ；["16Kbps",1]expressed as："16Kbps"bit rate description；1-corresponding value，advisable bit rate type： ["16Kbps",1], ["32Kbps",2], ["48Kbps",3], ["64Kbps",4], ["80Kbps",5],

	["96Kbps",6],
	["128Kbps",7],
	["160Kbps",8],
	["192Kbps",9],
	["224Kbps",10],
	["256Kbps",11],
	["320Kbps",12],
	["384Kbps",13],
	["448Kbps",14],
	["512Kbps",15],
	["640Kbps",16],
	["768Kbps",17],
	["896Kbps",18],
	["1024Kbps",19],
	["1280Kbps",20],
	["1536Kbps",21],
	["1792Kbps",22],
	["2048Kbps",23],
	["3072Kbps",24],
	["4096Kbps",25],
	["5120Kbps",26],
	["6144Kbps",27],
	["7168Kbps",28],
	["8000Kbps",29],["Self-Define(16-8000kbps)",-1]；
VideoEncType	Current channel encoding type ability； ["H264",1]expressed as： "H264 encoding description； 1-corresponding value； encoding type： 0 –Private h.264 ; 1-Standard h.264; 2-Standard mpeg4; 3-MJPEG; 4 – H265 5- SVAC
H264PROFILE	H264 profile: "0" –Base line "1" –Main "2"-High

Current video encoding parameters

Obtain current video encoding parameters

Require URL：http://192.168.0.82 //digest//frmVideoIPCSetPara
Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
        "AbilityType":0
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
            "AbilityType":0,
            "StreamType":1,
            "Resolution":  3,
            "BitrateType": 0,
            "VideoBitrate":     25,
            "VideoEncType":    1,
            "VideoFrameRate":0,
            "PicQuality":  0,
            "IFrameInterval":   25,
            "VideoH264Profile":     0
    }
}
```

Set current video encoding parameters

Require URL：http://192.168.0.82 //digest// frmVideoIPCSetPara
Requirement head：

```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
            "AbilityType":0,
            "StreamType":1,
            "Resolution":  3,
            "BitrateType": 0,
```

```
            "VideoBitrate":      25,
            "VideoEncType":   0,
            "VideoFrameRate":0,
            "PicQuality":   0,
            "IFrameInterval":   25,
            "VideoH264Profile":      0,
            "Bit":       0
        }
    }
}
Return head：
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
AbilityType	Encoding type ability：0-main stream；1-sub-stream 3-the third stream
StreamType	Stream type：0-video stream；1-video&audio stream（composite）
Resolution	Stream compression resolution；value range is frmVideoCompressAbility middle stream compression resolution
BitrateType	Bit rate type；value range is frmVideoCompressAbility middle bit rate type parameters，bit rate type determines bit rate upper limit and image quality；
VideoBitrate	Bit rate upper limit；value range is frmVideoCompressAbility middle bit rate upper limit parameters
VideoEncType	Encoding type；value range is frmVideoCompressAbility middle encoding type；
VideoFrameRate	Current channel video frame rate for setting table；["FULL",0]expressed as："FULL"-frame rate description；0-corresponding value；value range is frmVideoCompressAbility middle video frame parameters；
PicQuality	Image quality, when the bit rate type is constant bit rate, image quality determined by bit rate；0-Best；1-Better；2-good；3-Common；4-Worse；5-Worst
IFrameInterval	Frame Interval
VideoH264Profile	H264 profile: "0" –Base line, "1" —Main, "2"-High
Bit	When upper limit value is user-defined，Bit is user-defined bit rate value

Video parameters&zoom module settings

Obtain video parameters&zoom module settings (V1.1.0

Abandoned after)

Require URL：http://192.168.0.82 //digest//frmVideoParaEx
Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head：

```
{
    "Result": 0,
        "Data":   {
            "DayNightMode": {
                "DayNightMode": 0,
                "Delay": 3,
                "NightToDayThreshold": 35,
                "DayToNightThreshold": 20
            },
            "MinorMode": 0,
            "GainMode": 3,
            "PicQualityMode": 0,
            "WBMode": 0,
            "BacklightMode": 0,
            "ShutterMode": 0,
            "IrisMode": 0,
            "SharpnessLevel": 128,
            "NRMode": 1,
            "NRLevel": 1,
            "NRTfode": 1,
            "WDMode": 0,
            "ShowZoomRate": 0,
            "ShowCoordinate": 0,
            "ShowStatus": 0,
            "FocusSpeed": 0,
            "ZoomSpeed": 0,
            "GammaMode": 2,
            "FreqMode": 0,
```

```
            "CameraType": -1,
            "EnableAutoConfig": -1,
            "AuxSupported": 7,
            "LightCorrectMode": 0,
            "LightCorrectLevel": 64,
            "DarkCompensation": 0,
            "DnrMode": 1,
            "ElecAntiQuake": 0,
            "AutoSlowShutter": 0,
            "Defog": 0,
            "DefogLevel": 2,
            "NRTfodeNight": 0,
            "ExtInTrig": 0,
            "IcrOutTrig": 0,
            "WdrType": 1,
            "AutoLensMode": 1,
            "IcrLightMode": 2,
            "IcrLightAue": 0
        }
}
```

Set video parameters&zoom module settings (V1.1.0 Abandoned after)

Require URL：http://192.168.0.82 //digest//frmVideoParaEx
Requirement head：

```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
            "DayNightMode": {
                "DayNightMode": 0,
                "Delay": 3,
                "NightToDayThreshold": 35,
                "DayToNightThreshold": 20
            },
            "MinorMode": 0,
            "GainMode": 3,
            "PicQualityMode": 0,
            "WBMode": 0,
            "BacklightMode": 0,
            "ShutterMode": 0,
```

```
            "IrisMode": 0,
            "SharpnessLevel": 128,
            "NRMode": 1,
            "NRLevel": 1,
            "NRTfode": 1,
            "WDMode": 0,
            "ShowZoomRate": 0,
            "ShowCoordinate": 0,
            "ShowStatus": 0,
            "FocusSpeed": 0,
            "ZoomSpeed": 0,
            "GammaMode": 2,
            "FreqMode": 0,
            "CameraType": -1,
            "EnableAutoConfig": -1,
            "AuxSupported": 7,
            "LightCorrectMode": 0,
            "LightCorrectLevel": 64,
            "DarkCompensation": 0,
            "DnrMode": 1,
            "ElecAntiQuake": 0,
            "AutoSlowShutter": 0,
            "Defog": 0,
            "DefogLevel": 2,
            "NRTfodeNight": 0,
            "ExtInTrig": 0,
            "IcrOutTrig": 0,
            "WdrType": 1,
            "AutoLensMode": 1,
            "IcrLightMode": 2,
            "IcrLightAue": 0
        }
    }
Return head：
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Obtain video parameters&zoom module settings（**V1.1.0**

Added）

Require URL：http://192.168.0.82 //digest//frmVideoParaEx
Requirement head：
{
    "Type":   0,
    "Ch":   1,
    "Data":   {
    }
}
Return head：
{
    "Result": 0,
    "Data":   {
        "VideoType": 1,
        "DayNightMode": {
            "DayNightMode": 1,
            "Delay": 3,
            "NightToDayThreshold": 35,
            "DayToNightThreshold": 20
        },
        "WhiteBalance":{
            "Mode":"Custom",
            "Gain":{"R":255,"G":255,"B":255}
        },

        "MinorMode": 0,
        "GainMode": 3,
        "PicQualityMode": 0,
        "WBMode": -1,
        "ShutterMode": 0,
        "IrisMode": 1,
        "SharpnessLevel": 128,
        "NRTfode": 0,
        "WDMode": 0,
        "ShowZoomRate": 0,
        "ShowCoordinate": 0,
        "ShowStatus": 0,
        "FocusSpeed": 1,
        "ZoomSpeed": 0,
        "GammaMode": 2,

```
        "FreqMode": 0,
        "CameraType": 0,
        "EnableAutoConfig": -1,
        "LightCorrectMode": 1,
        "LightCorrectLevel": 64,
        "DarkCompensation": 0,
        "ElecAntiQuake": 0,
        "AutoSlowShutter": 0,
        "Defog": 0,
        "DefogLevel": 1,
        "ExtInTrig": 20,
        "IcrOutTrig": 20,
        "WdrType": 0,
        "AutoLensMode": 0,
        "IcrLightMode": 2,
        "IcrLightAue": 0,
        "SnMode": 1,
        "AeRouteMode":0
    }
}
```

Set video parameters&zoom module settings（**V1.1.0 Added**）

请求 URL：http://192.168.0.82 //digest//frmVideoParaEx
请求头：

```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
        "VideoType": 1,
        "DayNightMode": {
            "DayNightMode": 1,
            "Delay": 3,
            "NightToDayThreshold": 35,
            "DayToNightThreshold": 20
        },
        "WhiteBalance":{
            "Mode":"Custom",
            "Gain":{"R":255,"G":255,"B":255}
        },

        "MinorMode": 0,
        "GainMode": 3,
        "PicQualityMode": 0,
```

```
        "WBMode": -1,
        "ShutterMode": 0,
        "IrisMode": 1,
        "SharpnessLevel": 128,
        "NRTfode": 0,
        "WDMode": 0,
        "ShowZoomRate": 0,
        "ShowCoordinate": 0,
        "ShowStatus": 0,
        "FocusSpeed": 1,
        "ZoomSpeed": 0,
        "GammaMode": 2,
        "FreqMode": 0,
        "CameraType": 0,
        "EnableAutoConfig": -1,
        "LightCorrectMode": 1,
        "LightCorrectLevel": 64,
        "DarkCompensation": 0,
        "ElecAntiQuake": 0,
        "AutoSlowShutter": 0,
        "Defog": 0,
        "DefogLevel": 1,
        "ExtInTrig": 20,
        "IcrOutTrig": 20,
        "WdrType": 0,
        "AutoLensMode": 0,
        "IcrLightMode": 2,
        "IcrLightAue": 0,
        "SnMode": 1,
        "AeRouteMode":0
    }
}
Return head：
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
DayNightMode	1--Don't support;0--External IR control;1--Auto mode;2--Force day;3--Force night
Delay	Auto switch delay，auto mode valid. 0-30

NighttoDayThreshold	Auto switch D/N threshold 0-255，default 0xEE
DaytoNightThreshold	Auto switch D/N threshold 0-255，default 0x57
MinorMode	Mirror:1-Don'tsupport; 0-Normal; 1-Horizontal turnover; 2-vertical turnover; 3-180°turnover
GainMode	Gain：1-Don't support; 0-low;1-lower;2-middle 3-higher ;4-high
PicQualityMode	Image effect：1-Don't support; 0-normal; 1-gerous; 2-nature
WBMode	White balance -1--Don't support; 0--Auto WB;1--indoor mode;2--outdoor mode; 3--ATW
LightCorrectMode	Backlight mode 0-off 1-WDR 2-HLC 3-BLC
LightCorrectLevel	Backlight mode correction level low-64 middle-128 high-192
DarkCompensation	Dark compensation 0-off 1-low 2-middle 3-high
DnrMode	DNR 0-off 1-low 2-middle 3-high
ShutterMode	Shutter mode： 1-Don't support; 0-Auto shutter，manual gain； Other mode ： 0x1~0x7f:shutter preference,manual shutter,auto gain ； 0x01:1/30(1/25)， 0x02:1/60(1/50)， 0x03:Flicker， 0x04:1/250， 0x05:1/500， 0x06:1/1000， 0x07:1/2000， 0x08:1/5000， 0x09:1/10000， 0x0A:1/50000， 0x0B:x2， 0x0C:x4， 0x0D:x6， 0x0E:x8， 0x0F:x10， 0x10:x15， 0x11:x20， 0x12:x25， 0x13:x30， 0x100:All auto,shutter auto, gain auto(Max.)， 0x101~:All auto,shutter auto, gain auto(gain value is lGainMode)， 0x200:Iris preference， 0x300~0x3ff:Don't analysis shutter time, corresponding interface value:0~0xff, transmission of shutter value to zoom module
IrisMode	Lens iris mode:-1 Don't support; 0auto iris; 1 manual or fixed iris
SharpnessLevel	Sharpness level 0-255
NRTfode	3DNR time domin-1--Don'tsupport ;0--off ; 1--low; 2--middle; 3--higher; 4--high
WDMode	WDR mode-1--Don'tsupport 0--off ; 1--low; 2--middle; 3--high

ShowZoomRate	Display zoom 0-hide, 1-display
ShowCoordinate	Display coordinate 0-hide, 1-display
ShowStatus	Display state 0-hide, 1-display
FocusSpeed	Focus speed 0-low, 1-middle, 2-high
ZoomSpeed	Zoom speed 0- low, 1-middle, 2-high
ElecAntiQuake	Electric anti-shake 0-off 1-on
GammaMode	Gamma mode-1--Don'tsupport 0--Curve_1_6;1--Curve_1_8;…
FreqMode	Anti- flash : 1--Don'tsupport; 0--auto; 1--50HZ; 2--60HZ
CameraType	MDI camera type, only obtain
EnableAutoConfig	Whether open camera auto configuration, -1Don'tsupport
AutoSlowShutter	Auto slow-shutter- 0-off N-N second
ExtInTrig	When D/N mode is external trigger, trigger switch while signal input level is high or low. Default, 0-1 - low level, 2 - high level
IcrOutTrig	IR filter trigger way. 0-forward ,1-reverse
WdrType	WDR mode
AutoLensMode	=1 can auto focus
Defog	Defog function 0-off 1-on
DefogLevel	Defog level
IcrLightMode	Icr Light Mode，=0 OFF =1 Manual =2 Auto
IcrLightAue	Icr Light brightness 0-100
VideoType	0：video parameters 1： zoom module settings
BacklightMode	Backlight compensation mode -1—no supported; 0-OFF 1-LOW 2-MID 3-HIGH （v1.1.2 added）
NRMode	3D noise reduction mode -1-- no supported;0-- OFF;1—ON （v1.1.2 added）
NRLevel	3D noise reduction level 0-100 （v1.1.2 added）
AuxSupported	bit0: Whether to support the bad pixel detection (0-no supported,1- supported); bit1: Whether to support aperture correction; bit2: Whether to support remote restart; bit3: Whether to support to restore the default （v1.1.2 added）
DnrMode	Digital noise reduction 0-OFF 1-LOW 2-MID 3-HIGH （v1.1.2 added）
NRTfodeNight	Night 3d noise reduction time domain -ff—No supported 0-OFF 1-LOW 2-MID 3-HIGHER 4-HIGHEST （v1.1.2 added）
WhiteBalance.Mode	"Custom" （v1.1.2 added） "IncandescentLamp" "ColorTemperatureLamp4000K" "ColorTemperatureLamp5000K" "SunShine" "DarkCloud" "FlashLight" "DaylightLamp" "HighDaylightLamp" "UnderWater"
WhiteBalance.Gain	R:0-255 G:0-255 B:0-255 （v1.1.2 added）

SnMode	SNR(signal-to-noise ratio) 0-1 （v1.1.2 added）
AeRouteMode	AE Route：0-shutter first 1-gain first（v1.2.2 added）

Auto aperture correction (V1.1.0 Abandoned after)

Require URL：http://192.168.0.82 //digest//frmAutoApertureCorrection

Requirement head：

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Bad pixel test (V1.1.0 Abandoned after)

Require URL：http://192.168.0.82 //digest//frmBadPixelTest

Requirement head：

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "PixNum":    1,
        "CloseTh":   1
    }
}
```

Name	Specifications

PixNum	Bad pixel No.
CloseTh	Finish threshold value

ROI

Obtain RegionOfInterest params

Require URL：http://192.168.0.82 //digest//frmVideoRegionOfInterest

Request Body：

```
{
    "Type":  0,
    "Ch":     1,
    "Data":  {
    }
}
```

Response Body：

```
{
    "Result":0,
    "Data":{
        "ROI":[
            {"Enable":1,"League":4,"X":0,"Y":0,"Width":0,"Height":0},
            {"Enable":1,"League":3,"X":0,"Y":0,"Width":0,"Height":0},
            {"Enable":1,"League":2,"X":0,"Y":0,"Width":0,"Height":0},
            {"Enable":1,"League":1,"X":0,"Y":0,"Width":0,"Height":0}
        ]
    }
}
```

Set ROI params

Required URL：http://192.168.0.82 //digest// frmVideoRegionOfInterest

Request Body：

```
{
    "Type":1,
    "Ch":1,
    "Data":{
```

```
        "ROI":[
            {"Enable":1,"League":4,"X":0,"Y":0,"Width":0,"Height":0},
            {"Enable":1,"League":3,"X":0,"Y":0,"Width":0,"Height":0},
            {"Enable":1,"League":2,"X":0,"Y":0,"Width":0,"Height":0},
            {"Enable":1,"League":1,"X":0,"Y":0,"Width":0,"Height":0}
        ]
    }
}
```

Response Body：
```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Description
Enable	Enable a Region
League	Level
X	TopLeft Point x
Y	TopLeft Point y
Width	Region width
Height	Region height

PTZ linkage

Obtain PTZ linkage

Require URL：http://192.168.0.82 //digest//frmPTZLinkCFG
Requirement head：
```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
        "PTZLinkType":1
    }
}
```

Return head：
```
{
```

```
"Result": 0,
"Data": {
"PresetEnable": 1,
"PresetNo": 3
    }
}
```

Set PTZ linkage

Require URL：http://192.168.0.82 //digest//frmMotionDetection

Requirement head：

```
{
"Type": 1,
"Ch": 1,
"Data": {
"PresetEnable": 1,
"PresetNo": 3,
"PTZLinkType": 1
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
PTZLinkType	Alarm linkage type 1-motion detection alarm linkage 2-tampering alarm linkage
PresetEnable	Whether calling preset 0-no, 1-yes
PresetNo	The calling PTZ preset serial No.，0xff stands for don't calling preset. (0-255) The preset point starts from 0

Motion detection

Motion detection alarm linkage please check alarm linkage.
frmMotionDetPara has been removed in V1.1.0.

Obtain motion detection

Require URL：http://192.168.0.82 //digest//frmMotionDetection
Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
        "AlarmTimeType":1
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "Enable": 1,
        "Sensitive":    0,
        "HandleType":       4,
        "AlarmTime": [
            [
                [0, 0, 23, 59],
                …
            ]
            …
        ],
        "SnapCount": 1,
        "SnapInterval":     1,
        "MotionScope":    [
            [0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0],
            …
        ]
    }
}
```

Set motion detection

Require URL：http://192.168.0.82 //digest//frmMotionDetection
Requirement head：

```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
```

```
        "Enable": 1,
        "Sensitive":    0,
        "HandleType":      4,
        "AlarmTime": [
            [
                [0, 0, 23, 59],
                …
            ]
            …
        ],
        "SnapCount": 1,
        "SnapInterval":      1,
        "MotionScope":    [
            [0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0],
            …
        ] ,
        "AlarmTimeType":      1
    }
}
Return head：
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Enable	Whether start using motion detection：0-don't start using；1-start using；
Sensitive	Sensitivity：range is 0-5, the higher the sensitivity the more sensitive, "oxff" – off
HandleType	Alarm type：,"0x00"–Don't trigger alarm; "0x01"-alarm on monitor; "0x02"-audio warning; "0x04"-upload to center; "0x08"-trigger alarm output; "0x10"-email linkage; "0x20"-trigger alarm video; "0x40"-Screen shot
AlarmTime	Arming time structure；7 days；1 day 8 time quantum ；"[0,0,23,59]"expressed as：start time-0:00，finish：23:59;
SnapCount	Snapshot number
SnapInterval	Snapshot interval
AlarmTimeType	Alarm time quantum type，0-a time quantum each day；1-eight time quantum each day
MotionScope	Motion detection scope, value is 0-22 , 18 crosswise, total 22*18 block area,"1"-detection scope, "0"-not in the detection scope;

Tampering alarm

Tampering alarm linkage please check alarm linkage.

Obtain tampering alarm

Require URL：http://192.168.0.82 //digest//frmVideoHidePara

Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
        "AlarmTimeType": 0
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "Enable": 1,
        "HandleType":      0,
        "AlarmTime": [
            [0, 0, 23, 59]
            …
        ],
        "SnapCount":1,
        "SnapInterval":1,
        "Shelters":    [22,18,470,375]
    }
}
```

Set tampering alarm

Require URL：http://192.168.0.82 //digest//frmVideoHidePara

Requirement head：

```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
        "Enable": 1,
        "HandleType":      0,
        "AlarmTime": [
```

```
            [0, 0, 23, 59]

            …
        ],
        "SnapCount":1,
        "SnapInterval":1,
        "Shelters":    [22,18,470,375],
        "AlarmTimeType":0
    }
}
```

Return head：
```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Enable	Whether start using tampering alarm：0-Don't start using；1-start using；
HandleType	Alarm process way, alarm type parameters is the same as video loss；
AlarmTime	Arming time structure；7 days；1day 1time quantum；"[0,0,23,59]"expressed as：start time -0:00，finish time：23:59
Shelters [0]	X-coordinate of tampering zone
Shelters [1]	Y-coordinate of tampering zone
Shelters [2]	Width of tampering zone
Shelters [3]	Height of tampering zone
AlarmTimeType	Alarm time quantum type，0-a time quantum each day；1-eight time quantum each day

Privacy mask

Obtain privacy mask parameters

Require URL：http://192.168.0.82 //digest//frmVideoShelterPara
Requirement head
```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
```

```
}


Return head
{
     "Result": 0,
     "Data":   {
               "EnableHide": 0,
               "Shelters":    [
                    {
                         "HideAreaTopLeftX":   0,
                         "HideAreaTopLeftY":   0,
                         "HideAreaWidth":  0,
                         "HideAreaHeight": 0
                    },
                    …
               ]
     }
}
```

Set privacy mask parameters

Require URL：http://192.168.0.82 //digest//frmVideoShelterPara
Requirement head
```
{
     "Type":   1,
     "Ch":     1,
     "Data":   {
               "EnableHide": 0,
               "Shelters":    [
                    {
                         "HideAreaTopLeftX":   0,
                         "HideAreaTopLeftY":   0,
                         "HideAreaWidth":  0,
                         "HideAreaHeight": 0
                    },
                    …
               ]
     }
}
Return head
{
     "Result": 0,
     "Data":   {
          "StatusCode": "Operation Ok"
```

```
        }
}
```

Name	Specifications
EnableHide	Whether start using video hiding：0-don't start using；1-start using
Shelters	Hide scope structure
HideAreaTopLeftX	X-coordinate of hide beginning top left corner
HideAreaTopLeftY	Y-coordinate of hide beginning top left corner
HideAreaWidth	Hide Area Width
HideAreaHeight	Hide Area Height

Intelligent alarm linkage

Obtain intelligent alarm linkage

Require URL：http://192.168.0.82 //digest//frmDetectLinkPara
Requirement head：
```
{
"Type": 0,
"Ch": 1,
"Data": {
"DetectLinkType": 1
    }
}
```
Return head：
```
{
"Result": 0,
"Data": {
"AlarmTime": [
            [0,0,20,59],
            ......
        ],
"EnableHandle": 1,
"HandleType": 4,
"SnapCount": 1,
"SnapInterval": 1,
"EnablePreset": 1,
"PresetNo": 3
    }
}
```

Set intelligent alarm linkage

Require URL：http://192.168.0.82 //digest// frmDetectLinkPara

Requirement head：

```
{
    "Type":   1,
    "Ch":     1,
    "Data": {
"AlarmTime": [
            [0,0,20,59],
            ......
        ],
"EnableHandle": 1,
"HandleType": 4,
"SnapCount": 1,
"SnapInterval": 1,
"EnablePreset": 1,
"PresetNo": 3,
        "DetectLinkType": 1
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
DetectLinkType	Intelligent alarm linkage type
	1-Target counting alarm linkage type
	2-Vitual cordon alarm linkage type
	3-Area detection alarm linkage type
	4-Object detection alarm linkage type
	5-Voice detection alarm linkage type
	6-Intelligent motion detection alarm linkage type
	7-Video diagnose alarm linkage type
	8- Fire detection alarm linkage type
	9-Plate detection alarm linkage type
	10-Face detection alarm linkage type
AlarmTime	Arming time structure；others 7 days，a time quantum each day；

	Intelligent motion detection 7days，8 time quantum each day； "[0,0,23,59]"expressed as：start time-0:00，finish time：23:59
EnableHandle	Whether start using target counting：0-don't start using；1-start using
HandleType	Process type: The "or" result of processing 0x00: no response 0x01: alarm on monitor 0x02: voice warning 0x04: upload to center 0x08: trigger alarm output 0x10: Jpeg snapshot and upload EMail 0x20; linkage video 0x40; linkage snapshot
SnapCount	Snapshot number
SnapInterval	Snapshot interval
EnablePreset	Whether calling preset 0-no, 1-yes
PresetNo	The calling PTZ preset serial No., 0xff stands for don't calling preset

Target count

Target count alarm linkage please check intelligent alarm linkage

Obtain target count parameters

Require URL：http://192.168.0.82 //digest//frmTargetCountPara
Requirement head：
{
    "Type":   0,
    "Ch":   1,
    "Data":   {
    }
}
Return head：
{
"Result": 0,
"Data": {
"SupportLineNum": 4,
"SupportPointNum": 20,
"EnableTargetCount": 1,
"CounterPara": [
          {
"DetType": 0,
"CounterPoint": [
          [2,20],
          [361,415],
          [260,288],
          [78,535],

```
                      [78,535],
                      [545,167]
              ],
"Scale": 0,
"EnableFlowCount": 0,
"CountIntervalTime": 0,
"CountAlarmThreshold": 0,
"EnableTimeFlowCount": 0,
"CountTime": [0,0,0,0],
"TotalAlarmThreshold": 0
              },
              ……
       ]
    }
}
```

Set target count parameters

Require URL：http://192.168.0.82 //digest// frmTargetCountPara

Requirement head：

```
{
    "Type":   1,
    "Ch":     1,
    "Data": {
"SupportLineNum": 4,
"SupportPointNum": 20,
"EnableTargetCount": 1,
"CounterPara": [
            {
"DetType": 0,
"CounterPoint": [
                      [2,20],
                      [361,415],
                      [260,288],
                      [78,535],
                      [78,535],
                      [545,167]
              ],
"Scale": 0,
"EnableFlowCount": 0,
"CountIntervalTime": 0,
"CountAlarmThreshold": 0,
"EnableTimeFlowCount": 0,
"CountTime": [0,0,0,0],
```

```
"TotalAlarmThreshold": 0
            },
            ……
        ]
    }
}


Return head：
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
SupportLineNum	Max. Detection line number
SupportPointNum	Max. Top point number of detection line/area
EnableTargetCount	Whether start using target counting：0-don't start using；1-start using
CounterPara	Target counting structure body
DetType	Detection type
CounterPoint[0]	Current point number of each line, and Max. Supported point number
CounterPoint[1]	Starting point coordinate of A and B
CounterPoint[2]	End point coordinate
CounterPoint[3]	OSD coordinate
CounterPoint[4]	Coordinate of the painted area
CounterPoint[5]	Coordinate of the painted area
Scale	Target proportion
EnableFlowCount	Whether start using flow count
CountIntervalTime	Flow count interval
CountAlarmThreshold	Flow count threshold
EnableTimeFlowCount	Whether start using total flow count
CountTime	Total flow count time quantum
TotalAlarmThreshold	Total flow count alarm threshold

Object detection

Object detection alarm linkage please check intelligent alarm linkage

Obtain Object detection parameters

Require URL：http://192.168.0.82 //digest//frmObjectDectPara
Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head：

```
{
"Result": 0,
"Data": {
"SupportRegionNum": 4,
"SupportPointNum": 20,
"EnableObjDect": 1,
"GoodsDetParam": [
            {
"DetType": 0,
"Scale": 3333,
"IntervalTime": 3,
"CounterPoint": [
                    [
                        0,
                        20
                    ]
                ]
            },
            ……
        ]
    }
}
```

Set Object detection parameters

Require URL：http://192.168.0.82 //digest// frmObjectDectPara
Requirement head：

```
{
    "Type":   1,
    "Ch":     1,
    "Data": {
"SupportRegionNum": 4,
```

```
"SupportPointNum": 20,
"EnableObjDect": 1,
"GoodsDetParam": [
            {
"DetType": 0,
"Scale": 3333,
"IntervalTime": 3,
"CounterPoint": [
                    [
                        0,
                        20
                    ]
                ]
        },
            ……
    ]
    }
}
Return head：
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
SupportRegionNum	Max. Detection line number
SupportPointNum	Max. Top point number of detection line/area
EnableObjDect	Whether start using object detection 0-don't start using；1-start using
GoodsDetParam	Object detection structure body
DetType	Detection type
Scale	Target proportion
IntervalTime	Detection time interval
CounterPoint	Relative coordinate

Area detection

Area detection alarm linkage please check intelligent alarm linkage

Obtain area detection parameters

Require URL：http://192.168.0.82 //digest//frmRegionDectPara
Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head：

```
{
"Result": 0,
"Data": {
"SupportRegionNum": 4,
"SupportPointNum": 20,
"EnableRegiDect": 1,
"AreaDetParam": [
            {
"DetType": 0,
"Scale": 1111,
"IntervalTime": 1,
"CounterPoint": [
                    [
                        0,
                        20
                    ]
                ]
            },
            ……
        ]
    }
}
```

Set area detection parameters

Require URL：http://192.168.0.82 //digest// frmRegionDectPara
Requirement head：

```
{
    "Type":   1,
    "Ch":     1,
    "Data": {
```

```
"SupportRegionNum": 4,
"SupportPointNum": 20,
"EnableRegiDect": 1,
"AreaDetParam": [
            {
"DetType": 0,
"Scale": 1111,
"IntervalTime": 1,
"CounterPoint": [
                    [
                        0,
                        20
                    ]
                ]
        },
        ……
    ]
}
}
```

Return head：
```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
SupportRegionNum	Max. Detection line number
SupportPointNum	Max. Top point number of detection line/area
EnableRegiDect	Whether start using area detection 0-don't start using；1-start using
AreaDetParam	Area detection structure body
DetType	Detection type
Scale	Target proportion
IntervalTime	Detection time interval
CounterPoint	Relative coordinate

Audio exception

Audio exception alarm linkage please check intelligent alarm linkage

Obtain audio exception parameters

Require URL：http://192.168.0.82 //digest//frmSoundAlarm

Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head：

```
{
"Result": 0,
"Data": {
"Enable_infant": 1,
"SensitiveGrade_infant": 1,
"Enable_screaming": 0,
"SensitiveGrade_screaming": 0,
"Enable_gunshot": 0,
"SensitiveGrade_gunshot": 0,
"Enable_explosion": 0,
"SensitiveGrade_explosion": 0
    }
}
```

Set audio exception parameters

Require URL：http://192.168.0.82 //digest//frmSoundAlarm

Requirement head：

```
{
    "Type":   1,
    "Ch":     1,
    "Data": {
"Enable_infant": 1,
"SensitiveGrade_infant": 1,
"Enable_screaming": 0,
"SensitiveGrade_screaming": 0,
"Enable_gunshot": 0,
"SensitiveGrade_gunshot": 0,
"Enable_explosion": 0,
"SensitiveGrade_explosion": 0
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
         "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Enable_infant	Detect vagitus
SensitiveGrade_infant	Detect sensitivity 1- low 2 -mid 3 -high
Enable_screaming	Detect scream
SensitiveGrade_screaming	Detect sensitivity 1- low 2 -mid 3 -high
Enable_gunshot	Detect gunshot
SensitiveGrade_gunshot	Detect sensitivity 1- low 2 -mid 3 -high
Enable_explosion	Detect explosion
SensitiveGrade_explosion	Detect sensitivity 1- low 2 -mid 3 -high

Line crossing

Line crossing alarm linkage please check intelligent alarm linkage

Obtain line crossing parameters

Require URL：http://192.168.0.82 //digest//frmVirtualLinePara
Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head：

```
{
"Result": 0,
"Data": {
"SupportLineNum": 4,
"SupportPointNum": 20,
"EnableVirtuLine": 1,
"VirtualLineParam": [
            {
"DetType": 0,
```

```
"Scale": 1111,
"CounterPoint": [
                    [0,20],
                    [0,0],
                    [0, 0]
                ]
            },
            ……
        ]
    }
}
```

Set line crossing parameters

Require URL：http://192.168.0.82 //digest//frmVirtualLinePara
Requirement head：

```
{
    "Type":    1,
    "Ch":       1,
    "Data": {
"SupportLineNum": 4,
"SupportPointNum": 20,
"EnableVirtuLine": 1,
"VirtualLineParam": [
            {
"DetType": 0,
"Scale": 1111,
"CounterPoint": [
                    [0,20],
                    [0,0],
                    [0, 0]
                ]
            },
            ……
        ]
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
```

}

Name	Specifications
SupportLineNum	Max. Detection line number
SupportPointNum	Max. Top point number of detection line/area
EnableVirtuLine	Whether start using virtual cordon detection 0-don't start using；1-start using
VirtualLineParam	Virtual cordon detection structure body
DetType	Detection type
Scale	Target proportion
CounterPoint[0]	Current point number of each line, and Max. Supported point number
CounterPoint[1]	Starting point coordinate of A and B
CounterPoint[2]	End point coordinate

Smart motion detection

Smart motion detection alarm linkage please check intelligent alarm linkage

Obtain smart motion detection parameters

Require URL：http://192.168.0.82 //digest//frmSmartMotion
Requirement head：
{
    "Type": 0,
    "Ch":   1,
    "Data": {
    }
}
Return head：
{
"Result": 0,
"Data": {
"Enable": 1,
"Sensitive": 1,
"MinSize": 8888,
"MotionScope": [
        [0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0],
        ......
    ]
    }
}

Set smart motion detection parameters

Require URL：http://192.168.0.82 //digest//frmSmartMotion

Requirement head：

```
{
    "Ch":     1,
    "Type":   1,
    "Data": {
"Enable": 1,
"Sensitive": 1,
"MinSize": 8888,
"MotionScope": [
            [0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0],
            ......
        ]
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Enable	Whether start using intelligent motion detection 0-don't start using；1-start using；
Sensitive	Sensitivity
MinSize	Target proportion
MotionScope	Motion detection scope, value is 0-22 , 18 crosswise, total 22*18 block area,"1"-detection scope, "0"-not in detection scope ;

Video quality diagnose(VQD)

Require URL：http://192.168.0.82 //digest//frmVideoDiagnose

Obtain video diagnose information

Requirement head：
```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head：
```
{
    "Result":0,
    "Data":{
    "DiagnoseParam":{
            "DiagnoseType":0,
            "ColorSensitivity":0,
            "DarkSensitivity":34,
            "BrightSensitivity":0,
            "StripeSensitivity":0,
            "SnowSensitivity":0,
            "ShieldSensitivity":0,
            "FreezeSensitivity":0,
            "LostSensitivity":0,
            "BlurSensitivity":0,
            "JitterSensitivity":0,
            "PtzSensitivity":0
        }
    }
}
```

Obtain video diagnose information

Requirement head：
```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
        "DiagnoseParam":{
            "DiagnoseType":0,
            "ColorSensitivity":0,
```

```
                "DarkSensitivity":34,
                "BrightSensitivity":0,
                "StripeSensitivity":0,
                "SnowSensitivity":0,
                "ShieldSensitivity":0,
                "FreezeSensitivity":0,
                "LostSensitivity":0,
                "BlurSensitivity":0,
                "JitterSensitivity":0,
                "PtzSensitivity":0
            }
        }
}
```

Return head：
```
{
    "Result":0,
    "Data":{
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Type	0-Obtain video diagnose information 1-Set video diagnose information
Data.DiagnoseParam.DiagnoseType	Bitwise or, when its 0，stop video diagnose Process way, The "or" result of processing0x00: no response 0x01: diagnose_type_color 0x02: diagnose_type_dark 0x04: diagnose_type_bright 0x08: diagnose_type_stripe 0x10: diagnose_type_snowflake 0x20; diagnose_type_shield 0x40;diagnose_type_freeze 0x80;diagnose_type_vlost 0x100;diagnose_type_blur 0x200;diagnose_type_jitter 0x400;diagnose_type_ptz
Data.DiagnoseParam.ColorSensitivity	Color exception(color cast)
Data.DiagnoseParam.DarkSensitivity	Over darkness
Data.DiagnoseParam.BrightSensitivity	Over brightness
Data.DiagnoseParam.StripeSensitivity	Stripe interference

Data.DiagnoseParam.SnowSensitivity	Snow interference
Data.DiagnoseParam.ShieldSensitivity	Video tampering
Data.DiagnoseParam.FreezeSensitivity	Image freezing
Data.DiagnoseParam.LostSensitivity	Video loss (Temporary unrealized)
Data.DiagnoseParam.BlurSensitivity	Image fuzzy
Data.DiagnoseParam.JitterSensitivity	Image shake(Temporary unrealized)
Data.DiagnoseParam.PtzSensitivity	PTZ exception (Temporary unrealized)
Ch	Channel serial No.　IPC is 1 forever

Fire detection

Require URL：http://192.168.0.82 //digest//frmVideoFireDetect

Obtain fire detection

Requirement head：
```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head：
```
{
    "Result":0,
    "Data":{
        "Enable":0,
        "Sensitive":40,
        "LeftTopX":0,
        "LeftTopY":0,
        "RectWidth":704,
        "RectHeight":576
    }
}
```

Set fire detection

Requirement head：

```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
        "Enable":0,
        "Sensitive":40,
        "LeftTopX":0,
        "LeftTopY":0,
        "RectWidth":704,
        "RectHeight":576
    }
}
```

Return head：

```
{
    "Result":0,
    "Data":{
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Type	0-Obtain fire detection
	1-Set fire detection
Enable	Start using fire detection 0-off；1-on；
Sensitive	Detect sensitivity 0-100
LeftTopX	Abscissa of monitoring area upper left corner(0-704)
LeftTopY	Ordinate of monitoring area upper left corner(0-576)
RectWidth	Width of monitoring area(0-704)
RectHeight	Height of monitoring area(0-576)

Face detection

Require URL：http://192.168.0.82 //digest//frmVideoFaceDetect

Obtain face detection

Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head：

```
{
    "Result":0,
    "Data":{
        "Enable":0,
        "MinSize":5000,
        "MaxSize":8000,
        "LargestFaceOnly": 0,
        "FilterEnable": 1,
        "FilterScoreLevel": 100,
        "FilterInterval": 10,
        "RecgEnable": 1,
        "RecgScoreLevel": 500
    }
}
```

Set face detection

Requirement head：

```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
        "Enable":0,
        "MinSize":5000,
        "MaxSize":8000,
        "LargestFaceOnly": 0,
        "FilterEnable": 1,
        "FilterScoreLevel": 100,
```

```
        "FilterInterval": 10,
        "RecgEnable": 1,
        "RecgScoreLevel": 500
    }
}
```

Return head：
```
{
    "Result":0,
    "Data":{
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Type	0-Obtain face detection 1-Set face detection
Enable	Start using face detection　0-off；1-on；
MinSize	Detect Min. Proportion minSize/10000
MaxSize	Detect Max. Proportion maxSize/10000
LargestFaceOnly	Only detect the largest face　0-disabled；　1-enabled （v1.2.0 added）
FilterEnable	Enable Filter　0-disabled；　1-enabled　（v1.2.0 added）
FilterScoreLevel	Filter Score Level　1-1000　（v1.2.0 added）
FilterInterval	Filter Interval　（v1.2.0 added）
RecgEnable	Enable recognition filtering　0-disabled；1-enabled（v1.2.0 added）
RecgScoreLevel	Lowest recognition score　1-1000　（v1.2.0 added）

Plate detection

Require URL：http://192.168.0.82 //digest//frmVideoFaceDetect

Obtain plate detection

Requirement head：
```
{
    "Type":  0,
    "Ch":    1,
```

```
    "Data":   {
    }
}
```

Return head：
```
{
    "Result":0,
    "Data":{
        "Enable":0,
        "Sensitive":63,
        "PlateProvice":2,
        "LeftTopX":0,
        "LeftTopY":0,
        "RectWidth":0,
        "RectHeight":0
    }
}
```

Obtain plate detection

Requirement head：
```
{
    "Type":   1,
    "Ch":      1,
    "Data":   {
        "Enable":0,
        "Sensitive":63,
        "PlateProvice":2,
        "LeftTopX":0,
        "LeftTopY":0,
        "RectWidth":0,
        "RectHeight":0
    }
}
```

Return head：
```
{
    "Result":0,
    "Data":{
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Type	0-Obtain plate detection
	1-Set plate detection
Enable	Start using plate detection　0-off；1-on；
Sensitive	Confidence coefficient of detection
PlateProvice	Default province of plate detection
LeftTopX	Abscissa of monitoring area upper left corner(0-704)
LeftTopY	Ordinate of monitoring area upper left corner(0-576)
RectWidth	Width of monitoring area(0-704)
RectHeight	Height of monitoring area(0-576)

Network settings

Network settings--multiple network cards

Obtain multiple network cards settings

Require URL：http://192.168.0.82 //digest//frmNetworkSettings
Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "NetInterface":5,
        "DVRIP":       "192.168.0.86",
        "DvrPort":     5050,
        "DVRIPMask":    "255.255.0.0",
        "GatewayIpAddr": "192.168.188.1",
        "MACAddr": "00:48:7b:8d:7c:54",
        "HttpPortNo": 80,
        "HttpsPort":   4433,
        "RtspPort":    554,
```

```
            "RTMPPort":  1935,
            "MulticastIpAddr": "238.255.255.255",
            "MulticastPort":    28080,
            "DnsServer1IpAddr":    "202.210.230.255",
            "DnsServer2IpAddr":    "202.210.255.255",
            "DefaultRoute":    0,
            "EnableUPNP":    0,
            "UseDhcp":    0,
            "NetworkCardNum":    1,
            "AlarmHostIpAddr":    "",
            "AlarmHostIpPort":    0,
            "EnableSnmp":0,
            "SnmpHostIp":"",
            "SnmpCount":3,
            "SnmpInterval":60,
            "EnablePPPOE":    0,
            "PPPoEUser": "",
            "PPPoEIP":    "100.100.100.100",
            "PPPoEPassword": ""
        }
}
```

Set multiple network cards parameters

Require URL：http://192.168.0.82 //digest//frmNetworkSettings
Requirement head：

```
{
    "Type":    1,
    "Ch":    1,
    "Data":    {
        "NetInterface":    3,
        "DVRIP":    "192.168.0.82",
        "DvrPort":    5065,
        "DVRIPMask":    "255.255.0.0",
        "GatewayIpAddr": "192.168.0.1",
        "MACAddr": "00:68:97:3b:8c:34",
        "HttpPortNo": 80,
        "HttpsPort":    4433,
        "RtspPort":    554,
        "RTMPPort": 1935,
        "MulticastIpAddr": "238.255.255.255",
        "MulticastPort":    28080,
        "DnsServer1IpAddr":    "202.210.230.255",
        "DnsServer2IpAddr":    "202.210.255.255",
```

```
        "DefaultRoute":     0,
        "EnableUPNP":      0,
        "UseDhcp":   0,
        "NetworkCardNum":     1,
        "AlarmHostIpAddr":     "",
        "AlarmHostIpPort":     0,
        "EnableSnmp":0,
        "SnmpHostIp":"",
        "SnmpCount":3,
        "SnmpInterval":60,
        "EnablePPPOE":    0,
        "PPPoEUser": "",
        "PPPoEIP":    "100.100.100.100",
        "PPPoEPassword": ""
    }
}


Return head：
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Ch	Network card serial No.

Name	Specifications
NetInterface	Network interface 1-10MBase-T； 2-10MBase-T Full Duplex；3-100MBase-TX ； 4-100M Full Duplex； 5-10M/100Mself-adptive；
DVRIP	Ip address
DvrPort	Communication port, default 8000
DVRIPMask	Sub-net mask
GatewayIpAddr	Gateway address
MACAddr	Physical address
HttpPortNo	http port
HttpsPort	https port
RtspPort	Rtsp port
RTMPPort	Rtmp port
MulticastIpAddr	Multicast address
MulticastPort	Multicast port
DnsServer1IpAddr	IP address of domain name server 1
DnsServer2IpAddr	IP address of domain name server 2

DefaultRoute	Default route, 0- struEtherNet[0]，1- struEtherNet[1]；
~~EnableUPNP~~	~~Open UPNP~~ (V1.2.2 abandoned after)
UseDhcp	Whether start using DHCP 0xff-invalid 0-Don't start using 1-start using
NetworkCardNum	Network Card number of the device actually can be configured
AlarmHostIpAddr	Alarm host IP address
AlarmHostIpPort	Alarm host port
EnableSnmp	Start using snmp
SnmpHostIp	The host IP address description，support IPV4 IPV6 and domain name description
SnmpCount	Sending time
SnmpInterval	Sending time interval
EnablePPPOE	Whether start using PPPOE：0-Don't start using 1-start using；
PPPoEUser	PPPOE user name
PPPoEIP	PPPOE network address
PPPoEPassword	PPPOE password

DDNS settings

Obtain all DDNS server information

Require URL：http://192.168.0.82 //digest//frmGetDDNSServiceAbility
Requirement head：
{
    "Type": 0,
    "Ch":   0,
    "Data": {
    }
}
Return head：
{
    "Result": 0,
    "Data": {
        "ServiceList": [
            {
                "Describe":   "DynDns",
                "ServerName":   "members.dyndns.org",
                "Index": 1,
                "ServerPort": 80
            },
            {

```
            "Describe":     "PeanutHull",
            "ServerName":       "ddns.oray.org",
            "Index":  2,
            "ServerPort":  80
        },
        {

            "Describe":     "No-IP",
            "ServerName":       "dynupdate.no-ip.com",
            "Index":  3,
            "ServerPort":  80
        },
        {

            "Describe":     "3322",
            "ServerName":       "members.3322.org",
            "Index":  4,
            "ServerPort":  80
        },
        {

            "Describe":     "DnsDynamic",
            "ServerName":       "www.dnsdynamic.org",
            "Index":  7,
            "ServerPort":  80
        },
        {

            "Describe":     "ndns.ir",
            "ServerName":       "ndns.ir",
            "Index":  8,
            "ServerPort":  80
        }]
    }
}
```

Name	Specifications
Describe	Ddns server description
ServerName	Server domain name
Index	Internal serial No.;0-private DDNS ;1-Dyndns;2－PeanutHull(peanut shell) 3-NO-IP 4-qdns;7- DnsDynamic; 8- ndns.ir;
ServerPort	Server port

DDNS information (V1.1.0 Added)

Obtain DDNS information

Require URL：http://192.168.0.82 //digest//frmNetDDNSPara
Requirement head：

```
{
    "Type":   0,
    "Ch":     0,
    "Data":   {
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
    "EnableDDNS": 0,
    "DdnsList": [
        {
            "Enable": 0,
            "UserName": "",
            "Password": "",
            "DomainName": ""
        },
        {
            "Enable": 0,
            "UserName": "",
            "Password": "",
            "DomainName": ""
        },
        {
            "Enable": 0,
            "UserName": "",
            "Password": "",
            "DomainName": ""
        },…
    ]
}
}
```

Set DDNS information

Require URL：http://192.168.0.82 //digest//frmNetDDNSPara

Requirement head：

```
{
    "Type":   1,
    "Ch":     0,
    "Data":   {
        "EnableDDNS":    1,
            "DdnsList": [
        {
            "Enable": 0,
            "UserName": "",
            "Password": "",
            "DomainName": ""
        },
        {
            "Enable": 0,
            "UserName": "",
            "Password": "",
            "DomainName": ""
        },
        {
            "Enable": 0,
            "UserName": "",
            "Password": "",
            "DomainName": ""
        },…
    ]
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
EnableDDNS	Whether start using DDNS：0-Don't start using 1-start using
DdnsList.Enable	Enable some ddns Service
DdnsList.UserName	username

DdnsList.Password	password
DdnsList.DomainName	domain

NTP settings

Obtain NTP setting item

Require URL：http://192.168.0.82 //digest//frmNetNtpPara
Requirement head：

```
{
    "Type":  0,
    "Ch":    0,
    "Data":  {
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "EnableNTP": 1,
        "NTPServer": "asia.pool.ntp.org",
        "NTPPort":    123,
        "TimeInterval":    2,
        "TimeOffsetHour": 1,
        "TimeOffsetMinute":    1
    }
}
```

Set NTP parameters

Require URL：http://192.168.0.82 //digest//frmNetNtpPara
Requirement head：

```
{
    "Ch":    0,
    "Type":  1,
    "Data":  {
        "EnableNTP": 1,
        "NTPServer": "asia.pool.ntp.org",
        "NTPPort":    123,
        "TimeInterval":    2,
```

```
        "TimeOffsetHour": 1,
        "TimeOffsetMinute":     1
    }
}
```
Return head：
```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
EnableNTP	Whether start using NTP：0-Don't start using　1-start using；
NTPServer	NTP server address
NTPPort	NTP port
TimeInterval	Adjust time interval（hour）
TimeOffsetHour	hour offset with international standard time
TimeOffsetMinute	minute offset with international standard time

DST Settings（V1.1.0 Added）

Obtain DST setting　item

Required URL：http://192.168.0.82 //digest//frmDstPara
Request Head：
```
{
    "Type":   0,
    "Ch":     0,
    "Data":   {
    }
}
```
Return Head：
```
{
    "Result": 0,
    "Data":
    {
    "Enable":0,
    "Offset":7200,
    "Type":1,
    "StartDay":{
```

```
        "MonthWeekDay":"010100",
        "Time":"020000"
    },
    "StopDay":{
        "MonthWeekDay":"010100",
        "Time":"020000"
    }
    }
}
```

Set DST Setting Item

Required URL：http://192.168.0.82 //digest//frmDstPara
Request head：

```
{
    "Ch":      0,
    "Type":  1,
    "Data":   {
      "Enable":0,
      "Offset":7200,
      "Type":1,
      "StartDay":{
          "MonthWeekDay":"010100",
          "Time":"020000"
      },
      "StopDay":{
          "MonthWeekDay":"010100",
          "Time":"020000"
      }
    }

}
```
Return Head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Enable	Enable DST
Offset	Offset Seconds

Type	1- Month Week pattern（Only Support 1）
	2- Normal day pattern (Do not consider the leap day),YearDayRange is 1-365
	3- Includes leap day pattern ,YearDayRange is 0-365
MonthWeekDay	Month week day
Time	Hour minute second

Email settings

Obtain Email setting item

Require URL：http://192.168.0.82 //digest//frmEmailSetting
Requirement head
```
{
        "Ch":    0,
        "Type":  0,
        "Data":  {
        }
}
```
Return head
```
{
    "Result": 0,
    "Data":  {
        "SenderAddress":  "123@homail.com",
        "Password":  "123456",
        "EnableSSL": 0,
        "Attachment": 0,
        "EnableVerify":    0,
        "RecvArray": [
            {
                "RecvName": "aaa",
                "RecvAddress":    "125@hotmail.com"
            },
            …
        ],
        "MailInterval":    35,
        "SmtpServer": "",
        "Pop3Server": "",
        "SmtpPort":   0
    }
```

}

Set Email setting parameters

Require URL：http://192.168.0.82 //digest//frmEmailSetting
Requirement head
```
{
    "Ch":      0,
    "Type": 1,
    "Data":    {
        "SenderAddress":  "123@homail.com",
        "Password":    "123456",
        "EnableSSL": 0,
        "Attachment": 0,
        "EnableVerify":     0,
        "MailInterval":      35,
        "SmtpServer": "",
        "Pop3Server": "",
        "SmtpPort":    0,
        "RecvArray": [
            {
                "RecvName": "aaa",
                "RecvAddress":     "125@hotmail.com"
            },
            …
        ]
    }
}
```
Return head
```
{
    "Result": 0,
    "Data":    {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
SenderAddress	Sending email address
Password	Email password
EnableSSL	Whether permit SSL：0-don't permit；1-permit
Attachment	Whether bring attachment：0-don't bring ；1-bring
EnableVerify	Whether send identification authorization to smtp server：0-don't send；1-send

RecvArray	Receiver information list, max. 3 receiver
RecvName	Receiver name
RecvAddress	Receiving email address
MailInterval	Timing sending email time interval（s）
SmtpServer	Smtp server（send）
Pop3Server	pop3 server（receive）
SmtpPort	Smtp port：gmail-465, common 25

FTP settings

Require URL：http://192.168.0.82 //digest//frmFTPSetting

Obtain FTP information

Requirement head
```
{
        "Ch":     0,
        "Type":  0,
        "Data":   {
        }
}
```
Return head
```
{
    "Result":0,
    "Data":{
        "Enable":1,
        "Pasvmode":1,
        "RemotePort":21,
        "RemoteHost":"192.168.1.1",
        "Password":"",
        "UploadPath":"",
        "UserName":""
    }
}
```

Set FTP information

Requirement head
```
{
        "Ch":      0,
        "Type":    1,
        "Data":    {
            "Enable":1,
            "Pasvmode":1,
            "RemotePort":21,
            "RemoteHost":"192.168.1.1",
            "Password":"",
            "UploadPath":"",
            "UserName":""
        }
}
```
Return head
```
{
    "Result":0,
    "Data":{
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Enable	Start using FTP
Pasvmode	Passive mode
	0 no
	1 yes
RemotePort	Remote port
RemoteHost	Remote IP
Password	User password
UploadPath	Upload route
UserName	User name

UPnP Settings（**V1.2.2 Added**）

Required URL：http://192.168.0.82 //digest//frmNetUPNPPara

获取 **UPnP** 信息

Request Head
```
{
        "Ch":      1,
        "Type":   0,
        "Data":   {
        }
}
```
Return Head
```
{
    "Result": 0,
    "Data": {
        "Enable": 1,
        "UpnpList": [{
            "InPort": 80,
            "OutPort": 80,
            "OutIP": "172.31.70.28",
            "TcpOrUdp": 0,
            "Status": 1
        }]
    }
}
```

新增**/**修改 **UPnP** 信息

Request Head
```
{
        "Ch":      1,
        "Type":   1,
        "Data":   {
            "Enable": 1,
            "UpnpList": [{
                "InPort": 80,
                "OutPort": 80,
                "TcpOrUdp": 0,
            }]
        }
}
```
Return Head
```
{
    "Result":0,
    "Data":{
```

```
                "StatusCode": "Operation Ok"
        }
}
```

Name	Specifications
Enable	Enable UPnP
UpnpList	UPnP List
InPort	In Port
OutPort	Out Port
TcpOrUdp	Protocol：0-TCP,　1-UDP
OutIP	Out IP
Status	Status；0-failed,　1-success

SIP Settings(V1.1.1 Added)

Required URL：http://192.168.0.82 //digest// frmNetSipPara

Obtain SIP info

```
Request Head
{
        "Ch":     1,
        "Type":   0,
        "Data":   {
        }
}
Return Head
{
    "Result":0,
    "Data": {
        "Enable": 0,
        "SIPConfig": [
            {
                "SIPName": "",
                "Enable": 0,
                "RegServer": {
                    "Name": "",
                    "Number": "",
                    "UserName": "",
```

```
                    "Password": "",
                    "IP": "",
                    "Port": 0
                },
                "SIPServer": {
                    "IP": "",
                    "Port": 0
                },
                "StreamType": 0,
                "CallNumber": ""
            }
        ]
    }
}
```

Set SIP infos

Request Head

```
{
    "Type": 1,
    "Ch": 1,
    "Data": {
        "Enable": 0,
        "SIPConfig": [
            {
                "SIPName": "",
                "Enable": 0,
                "RegServer": {
                    "Name": "",
                    "Number": "",
                    "UserName": "",
                    "Password": "",
                    "IP": "",
                    "Port": 0
                },
                "SIPServer": {
                    "IP": "",
                    "Port": 0
                },
                "StreamType": 0,
                "CallNumber": ""
            }
        ]
    }
```

```
}
Return Head
{
    "Result":0,
    "Data":{
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Enable	Enable SIP
SIPConfig	SIPConfig
SIPName	SIPAccount
Enable	Enable current Account
RegServer	Regiester Server
Name	Name
Number	Number
UserName	Username
Password	Password
IP	Regiester Server IP
Port	Regiester ServerPort
SIPServer	SIP Server config
IP	SIP Server IP
Port	SIP Server Port
StreamType	Stream Type
CallNumber	callNumber

Telnet settings (V1.1.2 Added)

Obtain Telnet information

Require URL：http://192.168.0.82 //digest//frmNetTelnetPara
Requirement head
```
{
        "Ch":    0,
        "Type":  0,
        "Data":  {
        }
}
Return head
{
    "Result":0,
```

```
    "Data":{
        "Enable":1,
        "Port":23,
        "Password":"******"
    }
}
```

Set Telnet information

Require URL：http://192.168.0.82 //digest//frmNetTelnetPara
Requirement head

```
{
        "Ch":      0,
        "Type":   1,
        "Data":    {
            "Enable":1,
            "Port":23,
            "Password":"******"
        }
}
```
Return head
```
{
    "Result":0,
    "Data":{
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Enable	Start using Telnet
Port	Telnet port
Password	Telnet password

Wifi config (V1.2.0 added)

Obtain wifi information

Require URL：http://192.168.0.201 //digest//frmWifiPara
Requirement head
```
{
```

```
        "Type":    0,
        "Ch":      1,
        "Data":    {
        }
}
```

（1）Closed

Return head:
```
{
        "Result": 0,
        "Data": {
            "WorkStatus": {
                "WorkMode": -1,
                "WorkInfo": {}
            }
        }
}
```

Name	Specifications
WorkStatus	Wifi work state structure body
WorkMode	Wifi work mode：-1-Closed ； 0-AP； 1-STA
WorkInfo	Wifi work information structure body

（2）AP mode

Return head:
```
{
        "Result": 0,
        "Data": {
            "WorkStatus": {
                "WorkMode": 0,
                "WorkInfo": {
                    "Ssid": "123456",
                    "Psk": "12345678",
                    "IP": "192.168.10.1",
                    "Mac": "ec:3d:fd:1c:8a:c7",
                    "AuthType": 6
                }
            },
            "WifiStaList": [{
                "IP": "192.168.10.63",
```

```
            "Mac": "70:8a:09:33:dc:c3"
        }]
    }
}
```

Name	Specifications
WorkStatus	Wifi work state structure body
WorkMode	Wifi work mode：-1-Closed ; 0-AP；1-STA
WorkInfo	Wifi work information structure body
Ssid	SSID
Psk	Password
IP	Ip address
Mac	Mac physical address
AuthType	Authorization type： 0--none; 1--wep; 2--wpa; 4--wpa2; 6—wpa/wpa2
WifiStaList	Wifi connected list
IP	Connected IP
Mac	Connected Mac physical address

（3）STA mode

Return head
```
{
    "Result": 0,
    "Data": {
        "WorkStatus": {
            "WorkMode": 1,
            "WorkInfo": {
                "Ssid": "360wifi",
                "StaStatus": 9,
                "IpAddr": "172.17.195.3",
                "Mac": "172.17.195.3",
                "Signal": 204
            }
        },
        "WifiScanList": [{
            "Ssid": "MLJS_2.4G",
            "Mac": "dc:fe:18:85:7b:76",
            "AuthType": 14,
```

```
                "Signal": -52
            },
            ……
            ],
            "WifiApList": [{
                "AuthCfg": {
                    "Ssid": "360wifi",
                    "Psk": "22222222",
                    "Mac": "",
                    "AuthType": 6
                },
                "IpAddrCfg": {
                    "Dhcp": 1,
                    "IP": "",
                    "NetMask": "",
                    "GateWay": ""
                }
            },
            ……
            ]
        }
}
```

Name	Specifications
WorkStatus	Wifi work state structure body
WorkMode	Wifi work mode：-1-Closed ; 0-AP； 1-STA
WorkInfo	Wifi work information structure body
Ssid	SSID
StaStatus	connect state： 0-WifiStatus_Disconnected, 1-WifiStatus_InterfaceDisabled, 2-WifiStatus_Inactive, 3-WifiStatus_Scanning, 4-WifiStatus_Authenticating, 5-WifiStatus_Associating, 6-WifiStatus_Associated, 7-WifiStatus_4way_handshake, 8-WifiStatus_group_handshake, 9-WifiStatus_Completed
IpAddr	Ip address
Mac	Mac address
Signal	Signal strength (asu)
WifiApList	Connected wifi list
IpAddrCfg	IP network information structure body
Dhcp	Whether DHCP

IP	IP address
Gateway	Gateway
NetMask	Network mask
AuthCfg	Authorization information structure body
AuthType	Authorization type： 0--none; 1--wep; 2--wpa; 4--wpa2; 6—wpa/wpa2
Ssid	SSID
Psk	Password
Mac	MAC address
WifiScanList	Wifi list
AuthType	Authorization type, this value %8: 0--none; 1--wep; 2--wpa; 4--wpa2; 6—wpa/wpa2
Mac	MAC physical address
Ssid	SSID Service Set Identifier
Signal	Signal strength (dBm)

Set wifi information

(1) Cl osed

Require URL：http://192.168.0.201 //digest//frmWifiPara
Requirement head:
```
{
    "Type": 1,
    "Ch": 1,
    "Data": {
        "WorkStatus": {
            "WorkMode": -1,
            "WorkInfo": {}
        }
    }
}
```
Return head：

```
{
    "Result": 0,
    "Data":    {
        "StatusCode": "Operation Ok"
    }
}
```

(2) AP Mode

Require URL：http://192.168.0.201 //digest//frmWifiPara
Requirement head:

```
{
    "Type": 1,
    "Ch": 1,
    "Data": {
        "WorkStatus": {
            "WorkMode": 0,
            "WorkInfo": {
                "Ssid": "123456",
                "Psk": "12345678",
                "IP": "192.168.10.1",
                "Mac": "ec:3d:fd:1c:8a:c7",
                "AuthType": 6
            }
        }
    }
}
```
Return head：

```
{
    "Result": 0,
    "Data":    {
        "StatusCode": "Operation Ok"
    }
}
```

(3) STA Mode

Wifi connection

Connection procedure figure
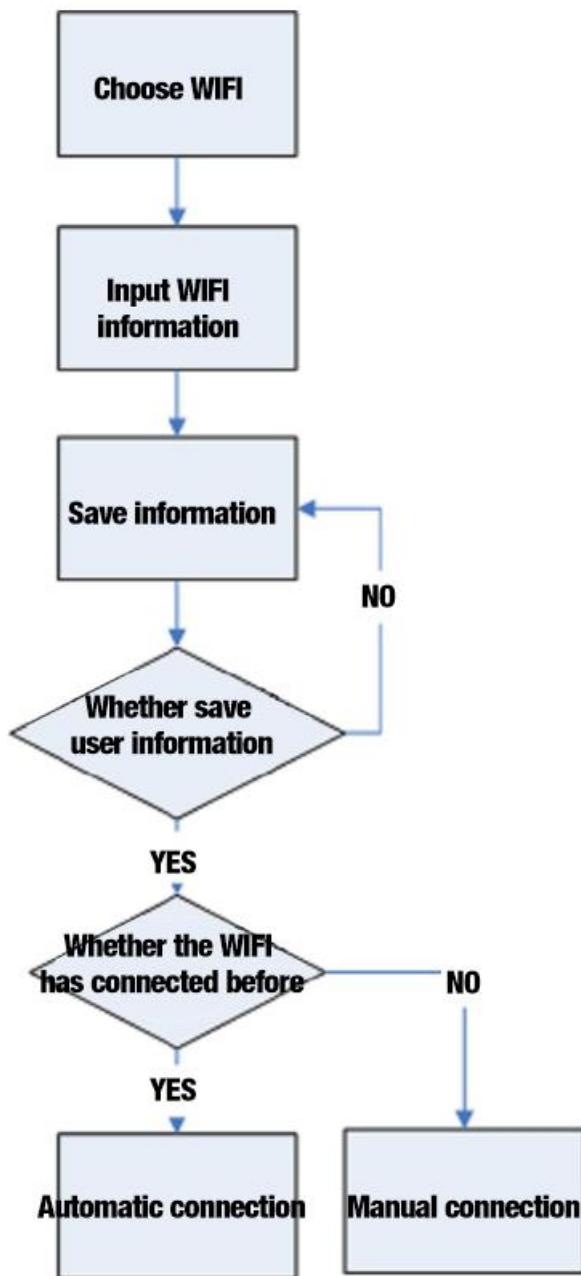
Specification:
（1）   With wifi connection function only under the STA mode
（2）   When users connecting wifi, have to enter the correct wifi information, and save
（3）   If the wifi connected before, when it connects again, just save wifi information, will be connected automatically; If didn't connected, then need to connect manuallyConnect wifi

Connect wifi

Require URL：http://192.168.0.201 //digest//frmWifiPara

Requirement head

```
{
    "Type": 1,
    "Ch": 1,
    "Data": {
        "ModifyAp": {
            "AuthCfg": {
                "Ssid": "360wifi",
                "Psk": "22222222",
                "Mac": "",
                "AuthType": 6
            },
            "IpAddrCfg": {
                "Dhcp": 1,
                "IP": "",
                "NetMask": "",
                "GateWay": ""
            }
        }
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Delete wifi

Specifications: Can only delete the connected wifi.

Require URL：http://192.168.0.201 //digest//frmWifiPara

Requirement head

```
{
    "Type": 2,
    "Ch": 1,
    "Data": {
        "ModifyAp": {
            "AuthCfg": {
                "Ssid": "360wifi",
                "Psk": "22222222",
```

```
                    "Mac": "",
                    "AuthType": 6
               },
               "IpAddrCfg": {
                    "Dhcp": 1,
                    "IP": "",
                    "NetMask": "",
                    "GateWay": ""
               }
          }
     }
}
```

Return head：

```
{
     "Result": 0,
     "Data":   {
          "StatusCode": "Operation Ok"
     }
}
```

Platform management (V1.1.1 Modified)

JSON format part of the field changed.

Obtain management host parameters

Require URL：http://192.168.0.201 //digest//frmGetManagerHostsPara
Requirement head：

```
{
     "Type":   0,
     "Ch":     0,
     "Data":   {
     }
}
```

Name	Specifications
Type	0-Obtain, ~~1-Delete~~, 2-Modify

Return head：

```
{
     "Result": 0,
     "Data":   {
```

```
        "Protocols":   [
            {
                "Type":   6,
                "ProtocolName":    "ICloud",
                "ItemCount": 2,
                "ItemLables": ["LocalTCPPort", "LocalUDPPort", "", "", "", "", "", ""]
            },
            …
        ],
        "Platform":   [
            {
                "EnableManagerHost":  1,
                "Type":   20,
                "Fixed":  0,
                "RegisterHost":       "",
                "HostPort":    0,
                "OtherItemValues":["", "", "", "", "", "", "", ""]
            },
            …
        ]
    }
}
```

Set management host parameters

(1)Delete

Require URL：http://192.168.0.201 //digest// frmGetManagerHostsPara
Requirement head：
{
    "Type": 1,
    "Ch": 0,
    "Data": {
        "Protocols": [
            {
                "Type": 6,
                "ProtocolName": "ICloud",
                "ItemCount": 2,
                "ItemLables": ["LocalTCPPort", "LocalUDPPort", "", "", "", "", "", ""]
            },
            …
        ],
        "Platform": [{

```
                        "EnableManagerHost":  1,
                        "Type":   20,
                        "Fixed":  0,
                        "RegisterHost":      "",
                        "HostPort":    0,
                        "OtherItemValues":["","","","","","","",""]
                    },
                    …
                ],
            "HostIndex":  2
        }
}
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
        }
}
```

(2)Modify

Require URL：http://192.168.0.201//digest//frmGetManagerHostsPara
Requirement head：

```
{
    "Type":  2,
    "Ch":    0,
    "Data":  {
        "Protocols":   [
                {
                    "Type":   6,
                    "ProtocolName":    "ICloud",
                    "ItemCount":  2,
                    "ItemLables": ["LocalTCPPort", "LocalUDPPort", "", "", "", "", "", ""]
                },
                …
            ],
        "Platform":   [
            {
                "EnableManagerHost":  1,
                "Type":  20,
                "Fixed":  0,
                "RegisterHost":       "",
                "HostPort":    0,
                "OtherItemValues":["", "", "", "", "", "", "", ""]
```

```
            },
                …
            ]
        }
}
Return head：
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Protocols	Protocol list
Type	Main protocol type, Corresponding to the management host type list index： 6-Icould; 8-I8S; 11-Device; 12-AECloud; 17-Dana; 20- WebServer;
ProtocolName	Protoco lName
ItemCount	Support register host number meantime
ItemLables	Parameters display name
Platform	Platform information
EnableManagerHost	Whether start using management host: 0-don't start using； 1-start using
Type	Main protocol type, Corresponding to the management host type list index： 6-Icould; 8-I8S; 11-Device; 12-AECloud; 17-Dana; 20- WebServer;
Fixed	0-can modify，1-can't modify
RegisterHost	Register host IP or domain name address, don't use
HostPort	Management host main port, don't use
Status	Management host connection state
OtherItemValues	Other item value

Obtain GB28181 Parameters

Require URL：http://192.168.0.201 //digest//frmParaPlatform28181

Requirement head：

```
{
    "Type": 0,
    "Ch": 1,
    "Data": {
        "HostIndex": 3
    }
}
```

Name	Specifications
HostIndex	Protocol index number

Return head：

```
{
    "Result": 0,
    "Data": {
        "GB28181CFG": {
            "SIP_Code": "",
            "SIP_Zone": "",
            "SIP_DeviceID": "",
            "SIP_Password": "",
            "SIP_IP": "",
            "SIP_Port": 0,
            "Local_Port": 0,
            "Expires": 0,
            "Keepalive": 0,
            "KeepaliveCnt": 0
        },
        "ChanNum":0,
        "AlarmNum":0,
        "ChanInfo": [
            {
                "Index":0,
                "ChanID": "",
                "Level": 0
            }
        ],
        "AlarmInfo": [
            {
                "Index":0,
```

```
                "ChanID": "",
                "Level": 0
            }
        ]
    }
}
```

Set GB28181 Parameters

Require URL：http://192.168.0.201 //digest//frmParaPlatform28181
Requirement head：

```
{
    "Type": 1,
    "Ch": 1,
    "Data": {
        "GB28181CFG": {
            "SIP_Code": "",
            "SIP_Zone": "",
            "SIP_DeviceID": "",
            "SIP_Password": "",
            "SIP_IP": "10.10.10.0",
            "SIP_Port": 1234,
            "Local_Port": 1111,
            "Expires": 0,
            "Keepalive": 0,
            "KeepaliveCnt": 0
        },
        "ChanInfo": [
            {
                "Index":0,
                "ChanID": "",
                "Level": 0
            }
        ],
        "AlarmInfo": [
            {
                "Index":0,
                "ChanID": "",
                "Level": 0
            }
        ],
        "HostIndex": 4
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
GB28181CFG	GB28181 parameters
SIP_Code	SIP server number
SIP_Zone	SIP server zone
SIP_DeviceID	Device id
SIP_Password	Regist password
SIP_IP	SIP server ip
SIP_Port	SIP server port
Local_Port	Local port
Expires	Period of validity of registration (s)
Keepalive	Heartbeat cycle (s)
KeepaliveCnt	Maximum number of heartbeat timeout
ChanNum	Number of channels (readonly)
AlarmNum	Number of alarm (readonly)
ChanInfo	Channel infomation
Index	Channel index
ChanID	Channel id
Level	Alarm level
AlarmInfo	Alarm infomation
Index	Alarm index
ChanID	Channel id
Level	Alarm level
HostIndex	Protocol index number

Alarm exception

Alarm input

Obtain alarm input

Require URL：http://192.168.0.201 //digest//frmAlarmInPara
Requirement head

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
    }
}
```

Return head

```
{
    "Result": 0,
    "Data":  {
        "AINum":      2,
        "AIName":     "AlarmInPort01",
        "AIType":     0,
        "AIHandle":   0,
        "HandleType":     4,
        "AlarmTime": [
            [0, 0, 23, 59],
            …
        ],
        "SnapCount": 1,
        "SnapInterval":   1,
        "PresetEnable":   0,
        "PresetNo":   1
    }
}
```

Set alarm input

Require URL：http://192.168.0.201 //digest//frmAlarmInPara
Requirement head

```
{
    "Type":  1,
    "Ch":    1,
```

```
    "Data":   {
        "AINum":      2,
        "AIName":    "AlarmInPort01",
        "AIType":      0,
        "AIHandle":   0,
        "HandleType":      4,
        "AlarmTime": [
            [0, 0, 23, 59],
            …
        ],
        "SnapCount": 1,
        "SnapInterval":      1,
        "PresetEnable":      0,
        "PresetNo":    1
    }
}
Return head
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
AINum	Alarm input No.
AIName	Alarm input name
AIType	Alertor state: 0-on; 1-off
AIHandle	Alarm processing: 0-off; 1-on
HandleType	Stands for summation of exception alarm, alarm output type corresponding value: ,"0x00"-don't trigger any alarm; "0x01"-alarm on monitor; "0x02"-audio warning; "0x04"-upload to center; "0x08"-trigger alarm output; "0x10"-email linkage; "0x20"-trigger alarm record; "0x40"-screen shot;
AlarmTime	Arming time number group; 7 days 7time quantum; "[0,0,23,59]"expressed as:start time-0:00，finish time: 23:59
SnapCount	Screen shot number
SnapInterval	Screen shot time interval
PresetEnable	Whether start using preset in channel， 0-don't start using； 1-start using
PresetNo	Start using preset No.

Obtain alarm input(V1.2.1 Added)

Require URL：http://192.168.0.201 //digest//frmAlarmInPara

Requirement head

```
{
    "Type":   0,
    "Ch":     0,
    "Data":   {
        "AlarmCh":   1
    }
}
```

Name	Specifications
AlarmCh	Alarm input channel

Return head

```
{
    "Result": 0,
    "Data":   {
        "AINum":      2,
        "AIName":     "AlarmInPort01",
        "AIType":     0,
        "AIHandle":   0,
        "HandleType":      4,
        "AlarmTime": [
            [0, 0, 23, 59],
            …
        ],
        "SnapCount": 1,
        "SnapInterval":     1,
        "PresetEnable":     0,
        "PresetNo":    1
    }
}
```

Set alarm input(V1.2.1 Added)

Require URL：http://192.168.0.201 //digest//frmAlarmInPara
Requirement head

```
{
    "Type":   1,
    "Ch":     0,
    "Data":   {
        "AlarmCh":   1,
        "AINum":     2,
        "AIName":    "AlarmInPort01",
        "AIType":    0,
```

```
        "AIHandle":    0,
        "HandleType":        4,
        "AlarmTime": [
            [0, 0, 23, 59],
            …
        ],
        "SnapCount": 1,
        "SnapInterval":       1,
        "PresetEnable":       0,
        "PresetNo":    1
    }
}
Return head
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
AlarmCh	Alarm input channel
AINum	Alarm input No.
AIName	Alarm input name
AIType	Alertor state: 0-on; 1-off
AIHandle	Alarm processing: 0-off; 1-on
HandleType	Stands for summation of exception alarm, alarm output type corresponding value: ,"0x00"-don't trigger any alarm; "0x01"-alarm on monitor; "0x02"-audio warning; "0x04"-upload to center; "0x08"-trigger alarm output; "0x10"-email linkage; "0x20"-trigger alarm record; "0x40"-screen shot;
AlarmTime	Arming time number group; 7 days 7time quantum; "[0,0,23,59]"expressed as:start time-0:00，finish time: 23:59
SnapCount	Screen shot number
SnapInterval	Screen shot time interval
PresetEnable	Whether start using preset in channel, 0-don't start using；1-start using
PresetNo	Start using preset No.

Alarm output

Obtain alarm output

Require URL：http://192.168.0.201 //digest//frmAlarmOut
Requirement head
```
{
    "Type":   0,
    "Ch":     0,
    "Data":   {
    }
}
```
Return head
```
{
    "Result": 0,
    "Data":   {
        "AlarmOutCount": 1,
        "AlarmType": 0,
        "AlarmOutDelay": 7,
        "SelfDefinedDelay":    0,
        "AlarmTime": [
            [
                [0, 0, 5, 59],
                ...
            ],
            ...
        ]
    }
}
```

Set alarm output

Require URL：http://192.168.0.201 //digest//frmAlarmOut
Requirement head
```
    "Type":   1,
    "Ch":     0,
    "Data":   {
        "AlarmType":0,
        "AlarmOutDelay": 2,
        "SelfDefinedDelay":    0,
```

```
        "AlarmTime": [
            [
                [0, 0, 5, 59],
                …
            ],
            …
        ]
    }
}}
```

Return head

```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
AlarmOutCount	Alarm output number
AlarmOutDelay	Alarm delay： 0—no delay; 5—5S 10—10S; 30—30S; 60—1min; 120—2min; 300—5min; 600—10min;
~~SelfDefinedDelay~~	~~User-defined alarm delay~~
TimeSeg	Arming time structure body；7 days；8 time quantum 1 day ；"[0,0,23,59]"expressed as：start time-0:00，finish time：23:59
AlarmType	Alarm output relay state：0—normally open；1—normally close

Exception settings

Obtain alarm exception

Require URL：http://192.168.0.201 //digest//frmAlarmException

Requirement head

```
{
    "Type":  0,
```

```
      "Ch":     2,
      "Data":   {
      }
}
```

Name	Specifications
Ch	2—Network broken; 3—IP conflict; 4—Illegal access

Return head
```
{
      "Result": 0,
      "Data":   {
            "HandleType":     44,
            "RelAlarmOut":    [1]
      }
}
```

Set alarm exception

Require URL：http://192.168.0.201 //digest//frmAlarmException
Requirement head
```
{
      "Type":   1,
      "Ch":     2,
      "Data":   {
            "HandleType":     44,
            "RelAlarmOut":    [1]
      }
}
```
Return head
```
{
      "Result": 0,
      "Data":   {
            "StatusCode": "Operation Ok"
      }
}
```

Name	Specifications
HandleType	Stands for summation of exception alarm, alarm output type corresponding value："0x00"-Don't trigger any alarm; "0x01"-alarm on monitor；"0x02"-alarm warning；"0x04"-upload to center；"0x08"-trigger alarm output；"0x10"-email linkage；"0x20"-trigger alarm record；"0x40"-screen-shot；

RelAlarmOut	Stands for triggering alarm output port：0-Don't trigger；1-Trigger

Obtain alarm exception (V1.2.0 Added)

Require URL：http://192.168.0.201 //digest//frmAlarmException
Requirement head

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
        "Type":  2
    }
}
```

Name	Specifications
Data.Type	2—Network broken; 3—IP conflict; 4—Illegal access

Return head

```
{
    "Result": 0,
    "Data":  {
        "HandleType":    40
    }
}
```

Set alarm exception (V1.2.0 Added)

Require URL：http://192.168.0.201 //digest//frmAlarmException
Requirement head

```
{
    "Type":  1,
    "Ch":    1,
    "Data":  {
        "HandleType":    44,
        "Type":  2
    }
}
Return head
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
```

}

Name	Specifications
HandleType	Stands for summation of exception alarm, alarm output type corresponding value："0x00"-Don't trigger any alarm; "0x01"-alarm on monitor；"0x02"-alarm warning；"0x04"-upload to center；"0x08"-trigger alarm output；"0x10"-email linkage；"0x20"-trigger alarm record；"0x40"-screen-shot；
Data.Type	2—Network broken; 3—IP conflict; 4—Illegal access

User information

User management

Obtain user information

Require URL：http://192.168.0.201 //digest//frmUserManage
Requirement head：
{
    "Type": 0,
    "Ch":   0,
    "Data": {

    }
}
Return head：
{
    "Result": 0,
    "Data": {
        "UserInfoList":   [
            {
                "UserName": "admin",
                "Password": "******",
                "Priority":   2,
                "IP":"0",
                "MACAddr": [0, 0, 0, 0, 0, 0]
            },
            …
        ]
    }

}

Name	Specifications
UserInfoList	Various types user information list
UserName	User name
Password	Password
Priority	User Priority: 0xff-none，0-low，1-middle，2-high； none-Don't support priority setting；low-Default permission: including local and remote playback, local and remote check log and state, local and remote shutdown/reboot；middle- including local and remote PTZ，local and remote manual record, local and remote playback, bi-direction talk and remote preview, local backup, local/remote shutdown,reboot；high-administrator；
IP	IP
MACAddr	MAC address

Note: If specify User Name in data, then it will take out corresponding user information, or it will take out all users information

Add or modify user

Require URL：http://192.168.0.201 //digest//frmUserManage
Requirement head：
```
{
    "Type":   1,
    "Ch":     1,
    "Data":   {
        "UserName":  "aaa",
        "Password":    "",
        "IP":"",
        "MACAddr":  [0, 0, 0, 0, 0, 0],
        "Priority":     0,
        "UserIndex":  -1
    }
}
```
Return head：
```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications

UserIndex	User operation No. -1stands for add new users；others stands for users No. In user management list, start from 0；
UserName	User name
Password	Password
IP	IP
MACAddr	MAC address
Priority	Priority：0xff-none，0-low，1-middle，2-high；Ordinary user priority is 0；Operator priority is 1；Administrator priority is 2；Specific operation permissions reference to obtain the priority in the user information；

Note: Can't add user with administrator permission；can't modify administrator name and type when modifying user information with administrator permission, can't delete administrator；

Delete user

Require URL：http://192.168.0.201 //digest//frmUserManage
Requirement head：

```
{
    "Type":  2,
    "Ch":    0,
    "Data":  {
        "UserInfoList":    [
            {
                "UserName":  "admin",
                "Password":   "******",
                "Priority":    2,
                "IP":"0",
                "MACAddr":  [0, 0, 0, 0, 0, 0]
            },
            …
        ],
        "UserName":  "aaa"
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Single user permission

Obtain single user permission

Require URL：http://192.168.0.201 //digest//frmUserRights_V2

Requirement head：

```
{
    "Type":  0,
    "Ch":    0,
    "Data":  {
        "UserName":  " default "
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "LocalRight": [0, 0, 0, 0, 0, 0, 0, 0, 0, 0],
        "RemoteRight":      [0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0],
        "LocalPreviewRight":   [1],
        "NetPreviewRight":      [0],
        "LocalPlaybackRight": [0],
        "NetPlaybackRight":      [0],
        "LocalBackupRight":      [0],
        "LocalPTZRight": [0],
        "NetPTZRight":      [0],
        "LocalRecordRight":      [0],
        "NetRecordRight": [0]
    }
}
```

Set single user permission

Require URL：http://192.168.0.201 //digest//frmUserRights_V2

Requirement head：

```
{
    "Type":  1,
    "Ch":    0,
    "Data":  {
        "LocalRight": [0, 0, 0, 0, 0, 0, 0, 0, 0, 0],
        "RemoteRight":      [0, 0, 1, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0],
        "LocalPreviewRight":   [1],
```

```
        "NetPreviewRight":      [0],
        "LocalPlaybackRight":  [0],
        "NetPlaybackRight":     [1],
        "LocalBackupRight":     [0],
        "LocalPTZRight":  [0],
        "NetPTZRight":      [0],
        "LocalRecordRight":      [0],
        "NetRecordRight": [0],
        "UserName":  "default"
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Username	User name

Name	Specification
LocalRight[0]	Local control PTZ
LocalRight[1]	Local manual record
LocalRight[2]	Local playback
LocalRight[3]	Local set parameters
LocalRight[4]	Local check state, log
LocalRight[5]	Local high-class operation(update, formatting, reboot, shutdown)
LocalRight[6]	Local check parameters
LocalRight[7]	Local manage analog and IPC
LocalRight[8]	Local backup
LocalRight[9]	Local shutdown, reboot

Name	Specifications
RemoteRight[0]	Remote PTZ control PTZ
RemoteRight[1]	Remote manual record
RemoteRight[2]	Remote playback
RemoteRight[3]	Remote set parameters
RemoteRight[4]	Remote check state, log
RemoteRight[5]	Remote high-class operation(update, formatting, reboot, shutdown)
RemoteRight[6]	Remote start bi-direction talk
RemoteRight[7]	Remote preview

| RemoteRight[8]	Remote requirement alarm upload, alarm output
RemoteRight[9]	Remote control, local output
RemoteRight[10]	Remote control serial port
RemoteRight[11]	Remote check parameters
RemoteRight[12]	Remote manage analog and IP camera
RemoteRight[13]	Remote shutdown,reboot

Name	Specifications
NetPreviewRight	Remote previewing channel：0-no permission；1-have permission
LocalPreviewRight	Local previewing channel：0-no permission；1-have permission
NetPlaybackRight	Remote playback channel：0-no permission；1-have permission
LocalPlaybackRight	Local playback channel：0-no permission；1-have permission
LocalBackupRight	Local backup permission channel：0-no permission；1-have permission
NetPTZRight	Remote control PTZ channel：0-no permission；1-have permission
LocalPTZRight	Local control PTZ channel：0-no permission；1-have permission
NetRecordRight	Remote record channel：0-no permission；1-have permission
LocalRecordRight	Local record PTZ channel：0-no permission；1-have permission

System management

System update (V1.1.2 Modified)

V1.1.2 performs UsernameToken authentication after uploading the file using the form and input = file, validates the Username PasswordDigest Created Nonce required and places it in input = hidden in the form. Verify the success of the upgrade will be carried out, otherwise fail to return

Update procedure
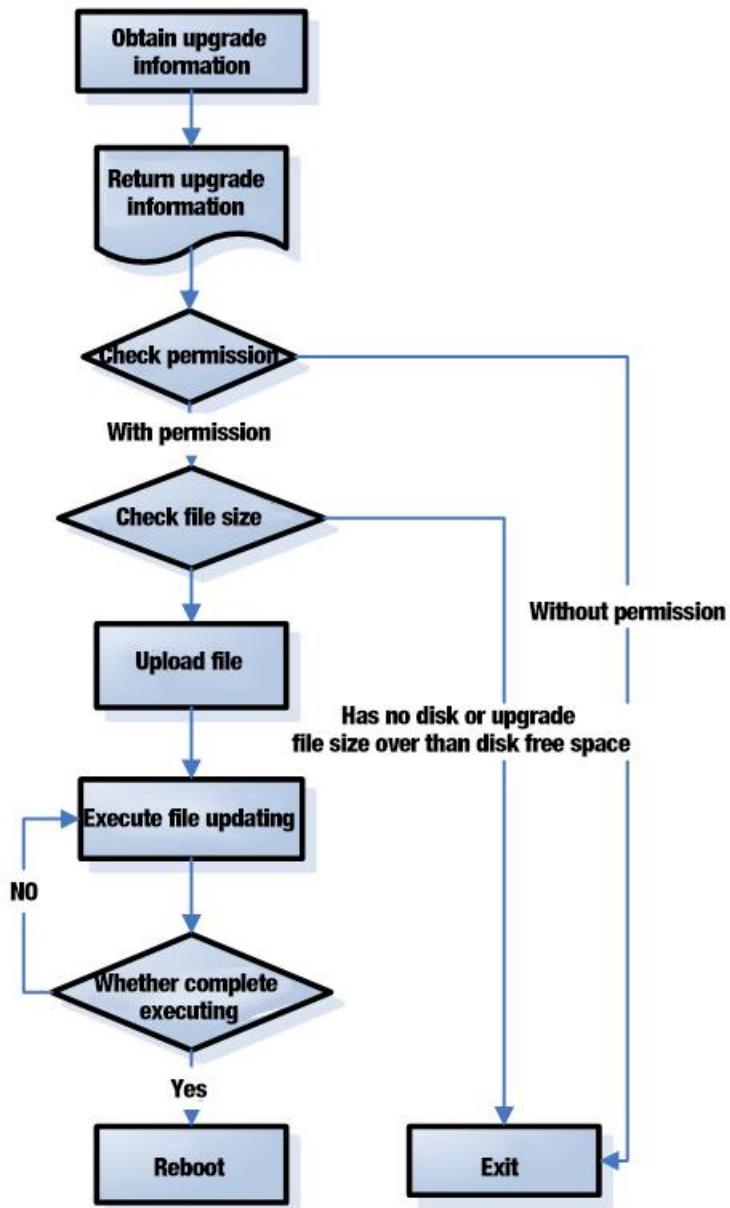
Obtain update information

Require URL：http://192.168.0.201 //digest//frmSysUpdate
Requirement head：
{
    "Type":   0,
    "Ch":   1,
    "Data": {
    }

```
}
Return head：
{
     "Result": 0,
     "Data":   {
          "HDCount":   0,
          "RemoteRight":     1,
          "Path":   "/dev/ipc.update",
          "FreeSize":     4395008
     }
}
```

Upload file and update

Use the html form to submit action to / digest / upload
Because the upgrade requires UsernameToken authentication
Use the input hidden field to pass Username PasswordDigest Created Nonce
Verify that the upgrade will begin, or return to 401

Obtain update procedure

Require URL：http://192.168.0.201 //digest//GetProgress
Requirement head：
```
{
     "Type":  0,
     "Ch":    1,
     "Data":  {
     }
}
```
Return head：
```
{
   "Result": 0,
   "Data": {
     "Progress": 20
   }
}
```

Name	Specifications
Progress	Execute process，20 stands for20%

Reboot

Require URL：http://192.168.0.201 //digest//frmDeviceReboot

Requirement head：

```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
    }
}
```

Execute result：

Device reboot

Auto maintenance（**V1.1.0 Modified**）

Added month plan fields to data.

Obtain auto maintenance

Require URL：http://192.168.0.201 //digest//frmAutoReboot

Requirement head

```
{
    "Type":  0,
    "Ch":    0,
    "Data":  {
    }
}
```

Return head

```
{
    "Result": 0,
    "Data":   {
        "AutoRebootMode":     2,
        "EveryDayTime":   4623,
        "Week": [
            {
                "Enable": 1,
                "Time":   45
            }
            …
        ],
        "Month": {
            "Days": [0,0,0…],
```

```
                "Time": 1234
            },
        "DateTime":   [1970, 1, 1, 12, 14, 0]
    }
}
```

Set auto maintenance

(1) Forbidden

Require URL：http://192.168.0.201 //digest//frmAutoReboot
Requirement head：
```
{
    "Type":  1,
    "Ch":     0,
    "Data":  {
        "AutoRebootMode":     0,
        "EveryDayTime":  0,
        "Week":  [
            {
                "Enable": 0,
                "Time":   0
            },
            …
        ],
        "Month": {
            "Days": [0,0,0…],
             "Time": 1234
         },
        "DateTime":   [1970, 1, 1, 0, 0, 0]

    }
}
```

(2) Everyday

Require URL：http://192.168.0.201 //digest//frmAutoReboot
Requirement head：
```
{
    "Type":  1,
    "Ch":     0,
    "Data":  {
```

```
        "AutoRebootMode":      1,
        "EveryDayTime":  0
    }
}
```

(3) Every week

Require URL：http://192.168.0.201 //digest//frmAutoReboot
Requirement head
```
{
    "Type":  1,
    "Ch":      0,
    "Data":   {
        "AutoRebootMode":      2,
        "Week":  [
            {
                "Enable":1,
                "Time":  45
            },
            …
        ]
    }
}
```

(4) Single time

Require URL：http://192.168.0.201 //digest//frmAutoReboot
Requirement head
```
{
    "Type":  1,
    "Ch":      0,
    "Data":   {
        "AutoRebootMode":      3,
        "EveryDayTime":  0,
        "Week":  [
            {
                "Enable":0,
                "Time":  0
            },
            …
        ],
        "DateTime":   [1970, 1, 1, 12, 14, 0]
    }
```

```
}
Return head
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

(5) Every Month

Required URL：http://192.168.0.201 //digest//frmAutoReboot
Request Head：

```
{
    "Type":   1,
    "Ch":      0,
    "Data":   {
        "AutoRebootMode":     4,

        "Month": {
            "Days": [0,0,0…],
             "Time": 1234
         }
    }
}
```

Return Head

```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specification
AutoRebootMode	Maintain mode：0-Don't maintain；1-Timing maintain everyday；2-Timing maintain every week；3-Single time maintain; 4-Monthly selected day maintenance
EveryDayTime	Maintain time everyday：0-7 bit is minute，8-15 bit is hour；
Week	Every week time structure body
Enable	Whether every week 7 days boot to maintain：0-unchoosed；1-choose；week corresponding value：0-sunday，1-monday，2-tuesday，3-wensday，

	4-thursday，5-friday，6-saturday；
Time	Maintain time every week: 0-7 bit is minute，8-15 bit is hour；
DateTime	Single maintain time :[1970,1,1,12,14,0]expressed as 1970/1/1 12:14:00
Month. Days	The array size is 31
Month. Time	Week time:0-7bit is minute，8-15bit is hour；

Storage management

Video plan(V1.1.0 Added)

Obtain video plan

Require URL：http://192.168.0.82 //digest//frmVideoPlanPara

Requirement head：

```
{
    "Type":  0,
    "Ch":    0,
    "Data":  {
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":{
        "RecordMode":2
        "PreRecordTime":0,
        "RecordTime":0,
        "RecordSched":[
                        [[0,0,23,59].....],
                        ...........
                        ],
        }
}
```

Set video plan

Require URL：http://192.168.0.82 //digest//frmVideoPlanPara

Requirement head：

```
{
    "Ch":    0,
```

```
    "Type":   1,
    "Data":   {
        "RecordMode":2
        "PreRecordTime":0,
        "RecordTime":0,
        "RecordSched":[
                         [[0,0,23,59].....],
                         ...........
                         ],
        }

}
Return head：
{
    "Result": 0,
    "Data":   {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specification
RecordMode	Record mode 0-Don't record 1-Timing record 2-Alarm record 3-Timing+alarm
PreRecordTime	Prerecord time ["Don't prerecord",0] ["5S", 1] ["10S", 2] ["15S",3] ["20S",4] ["25S", 5] ["30S", 6] ["without restrict",7]
RecordTime	Record delay["5S",0] ["20S", 1] ["30S", 2] ["1min",3] ["20S",4] ["2min", 5] ["5min", 6] ["10min",7]
RecordSched	Record time period 7X8 format

Storage card information

Obtain storage card information

Require URL：http://192.168.0.201 //digest//frmGetHDInfo

Requirement head：

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
    }
}
```

Return head：

```
{
    "Result": 0,
    "Data":  {
        "HDInfoList": [
            {
                "HDNo": 1,
                "HdStatus":  0,
                "Capacity":  1007,
                "FreeSpace": 919,
                "HDType":  0
            },
            …
        ]
    }
}
```

Name	Specification
HDInfoList	Disk list；
HDNo	Disk No.：Value is 0 to the maximum number of disk
HdStatus	HDD state(can't set) HD_STAT, bit0：0-normal，1-abnormal；bit1：1-the current writing HDD
Capacity	HDD capacity（can't set）
FreeSpace	HDD free space（can't set）
HDType	Disk type：0-Local HDD；1-ESATA HDD；2-NAS HDD；3-iSCSI HDD；4-No. group，Virtual HDD；5-SD ;

Formatting

Require URL：http://192.168.0.201 //digest//frmHDFormat
Requirement head

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
        "FormatList": [2]
    }
}
```

Return head

```
{
    "Result": 0,
    "Data":  {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specification
FormatList	Storage card NO., 2—the second storage card

Obtain formatting procedure

Require URL：http://192.168.0.201 //digest//frmGetHDFormatProgress
Requirement head

```
{
    "Type":  0,
    "Ch":    1,
    "Data":  {
    }
}
```

Return head

```
{
    "Result": 0,
    "Data":  {
        "DiskNo":    1,
        "DiskProgress":    25
    }
}
```

Name	Specification
DiskNo	Formatting storage card No., 1—the second storage card

DiskProgress	Formatting procedure

Restore Defaults

Export configuration

V1.1.1 to download the file over http (similar to plug-in download).

Require URL：http://192.168.0.201//goform//frmGetConfigFile
Fcgi Server returned the complete file flow.Read file flow and store in the file,
The file named XXXXX. gtz   is ok

Import configuration

V1.1.1 to upload files over http (with UsernameToken authentication).

Require URL：http://192.168.0.201 //goform//frmSetConfigFile
Read the packaged configuration file flow, send to Fcgi server through HTTP POST will be ok
Data format as follows：4bytes (file flow length)+ data

Configuration restore defaults

Require URL：http://192.168.0.201 //digest//frmParaSysRestore
Requirement head：
```
{
    "Type":   0,
    "Ch":     1,
    "Data":   {
        "Network":    0,
        "IPChannel":  0,
        "Alarm": 0,
        "Account":    0,
        "DisplaySet":  0,
        "ResolveMode":    0,
        "RecordCfg":  0,
        "OtherCfg":   1
    }
}
```

Return body：

```
{
    "Result": 0,
    "Data":    {
        "StatusCode": "Operation Ok"
    }
}
```

Name	Specifications
Network	Whether network parameters restore defaults：0-don't restore；1-restore；
~~IPChannel~~	~~Whether IP channel settings restore defaults：0-don't restore；1-restore；~~
Alarm	Whether alarm exception restore defaults：0-don't restore；1-restore；
Account	Whether user management restore defaults：0-don't restore；1-restore；
~~DisplaySet~~	~~Whether display settings restore defaults：0-don't restore；1-restore；~~
~~ResolveMode~~	~~Whether mode restore defaults：0-don't restore；1-restore；~~
~~RecordCfg~~	~~Whether video plan restore defaults：0-don't restore；1-restore；~~
OtherCfg	Whether others restore defaults：0-don't restore；1-restore；

Local configuration

None