EJOIN MultiWan Router HTTP DEVELOPMENT SPEC

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003	Implement and modify goip_send_cmd.htm Increase SMS task attribute coding, smsc	4.1.3 5.3.1.3	1.1	PengJian	2015.01.29
004	Modify and implement get and customize device status	3.1.1，3.1.2	1.2	PengJian	2016.04.17
005	Increase the save/reset command interface	4.1.3	1.2	PengJian	2016.06.13
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009	Add example	5.4	1.9	Xiongjiao	2019.06.27
010	Increase the parameter of mode	4.12		LiGuanBin	2020.04.01
011	Increase the parameter of port_rx_tx(0)				
012	Increase the proxy configuration	10	2.0	LiGuanBin	2023.06.20
013	Add delay parameter	4.1.2	2.1	LiGuanBin	2024.7.10
014	Add interface for configuring IP whitelist/blacklist	9, 10	2.2	LiGuanBin	2025.5.21

Table of Content

1 Overview

This document specifies HTTP MultiWan Router API of Ejoin device, include SMS receiving, single sending, group-sending and status of Sending task querying.

This SMS API is still base on HTTP, and add POST request support, it provide multitask and status report by JSON array. About JSON array format, please refer its standardization state.

2 Copyright Notice

This document is just for Ejoin R&D team reference. If in need, it can be offered to a cooperation project developer.

3 Status Notification

This device will send a HTTP POST request which include the device running status information to the SMS server when it reaches either of below conditions.

1)One of device port status changed.

2)Community period expired.

3.1.1 URL

Server can send a GET request to get the status on device by below URL:

http://host:port/goip_get_status.html?url=xxx&period=0

Device report url:

Server send a get request like above to specific the URL.

3.1.2 Parameter

Parameter	**Description**	**Default**	**Required**	**Remark**
Url	Specific the report URL	None	N	Tips: Special characters need do URL encode Just need specific once time.
Period	Report period	60	N	>0:Report status according to the specified report period,the minimum value is 60,the unit is second 0:cancel status report
all_sims	Get all the card status	0	N	0：disable 1：enable

3.1.3 Dev-status message

Device send ’dev-status’ to server periodically.

dev-status message(information in HTTP message Body) is a JSON array string that comprised of ports status. Parameter Content-Type in HTTP head should set to “application/json;charset=utf-8”.

{“type”:“dev-status” ，“seq”：1，“expires”:180,“mac”:“00-30-f1-01-02-03”,“ip”：“192.168.1.67”, “max-ports”:32, “max-slots”:4， “status”:[{“port”:“1A”,…},{“port”:“2B”,…},…, {“port”:“32D”,…}]}

Components state:

Parameter	Data type	**Description**	**Default**	**Required**
Type	String	Message type.	None	Y（dev-status）
seq	Int	Device status message sequence number, start from 1.	None	Y
expires	Int	Dev-status sending period.	180s	N
mac	String	Device MAC.	None	Y
ip	String	Device IP address.	None	Y
max-ports	Int	Total ports of device.	None	Y
max-slots	String	Total SIM slots of device.	1	N
status	array	Status of device port.	None	Y

For the description of the port status, see 3.1.4 [Port Status]

3.1.4 Port -status message

Any one port status changed, device will send ‘port-status’ message to server immediately.

Status message (information in HTTP message Body) is a JSON array string that comprised of ports status. Parameter Content-Type in HTTP head should set to “application/json;charset=utf-8”.

{“type”:“port-status” ，“port”:“2B”,“seq”：1，“status”:“3 OK”,“bal”：“100.00”, “opr”：“46000 China Mobile”,“sn”:“139xxxxxxxxx”, “imei”:“86xxxxxxxxxxxx”，“imsi”: “xxx”， “iccid”： “xxx”}

Components state:

Parameter	Data type	**Description**	**Default**	**Required**
Type	String	Message type	None	Y（port-status）
port	String	Describe the current working port and SIM slot. Like 1.01,1.02.....32.04	None	Y
seq	Int	The port is incremented from port 1		
st	string	Port status code + detail 0： No SIM card 1： Exist idel SIM card 2： Registering 3： Registered 5： no balance or alarm 6： Register failed	None	Y

		7： SIM card locked by device 8： SIM card locked by operator 9： Recognize SIM card error 11: Card Detected 12：User locked		
bal	Floating point	SIM card balance(yy.mm)	None	Y
opr	String	SIM card operator name and ID valid while parameter “st” equal to 3 or 4	None	N
sn	string	SIM number	None	N
imei	string	IMEI of module	None	N
imsi	string	IMSI num of SIM card	None	N
iccid	string	ICCID num of SIM card	None	N

4 Operate command sending

Device offer API to server to change device status, like change sim card, lock/unlock port, reboot device.

About USSD command sending, please refer to “Ejoin HTTP-USSD API(V1.0).docx”;

Device will send message to the server by port status notification when lock port or change SIM card.

4.1.1 URL

http://host:port/goip_send_cmd.html
host: Device IP address

port: Device webpage management port, default value is 80.

4.1.2 Parameter

Parameter	**Description**	**Default**	**Required**	**Ramark**
Version	API version	1.1	Y	This document describes specification support only
username	Device account	None	Y	
Password	Device password	None	Y	
Op	Operation description	None	N	get:get device configuration set: set device configuration lock: lock port unlock:unlock port switch:switch SIM card reset: reboot module save: save configuration reboot: reboot device redial: sim redial(**Note:** 1. Check the status of the SIM

				Before redial, don't redial when the status is not “dial successful” 2. The redial cycle should not be too short, and the cycle should be random in a range,in case the operator detection is abnormal 3. If the status of sim is abnormal, can reset the module and wait for a period of time until the sim works properly
mode	SIM Redial mode	None	N	0:flight mode（sim will re-registration) 1:fast mode(sim don’t re-registration) Note:not configuring this parameter will use default mode,it’s the same as mode=0. You may get a new IP in flight mode,but may not in fast mode.
delay	Delayed dialing duration	None	N	When the SIM card redials in flight mode (mode is 0) (op is redial), delay is used to specify the duration of the delay for dialing after the card registration is successful, in seconds.
par_name(n)	Parameter name of the get/set operation	The value of the set operation	N	The name of the parameter to be actually operated. If the parameter is an array parameter, you can use parentheses with parameters, and the subscript starts from 0. Sms_url: destination URL for SMS push data_service_enable： (0：disable 1：enable） Ports_rx_tx port_public_ip Port_public_ip(num),num represents the port number that needs to be get, and the value of num variable starts from 0. Port_rx_tx(num),num represents the

				port number that needs to be get, and the value of num variable starts from 0. ttl : survival time (value range 1-255)

4.1.3 Data

Device support a single command to operate multi-ports and multi-commands to operate different port.

Command sending message (information in HTTP message Body) is a JSON array string that composed by one or more command. Parameter “Content-Type” in HTTP head should set to “application/json;charset=utf-8”.

{"type":"command", "op":"lock", "ports":"1A,2B,3C,4-32", "ops":[{"op":"lock", "ports":"1A"}, {"op":"switch", "ports":"2B"}]}

Components state:

Parameter	Data Type	Description	Default	Required
type	string	Message type	None	Y（command）
op	string	operation type lock: lock port unlock: unlock port switch: switch SIM card reset: reboot module save: save configuration reboot: reboot device multiple: multiple commond	None	Y
ports	string	the port NO. need to operate. all,*: all ports It is valid while op parameter equal to lock/unlock/switch/reset When op=switch, it means to switch to this location. When op=reset, only the port number is valid.	None	Y （op=lock| op=unlock| op=switch| op=reset）
ops	array	Multi-command array Valid when op is multiple	None	Y (op= multiple)

Attributes of tasks in json data

Parameter	Data	Description	Default	Required

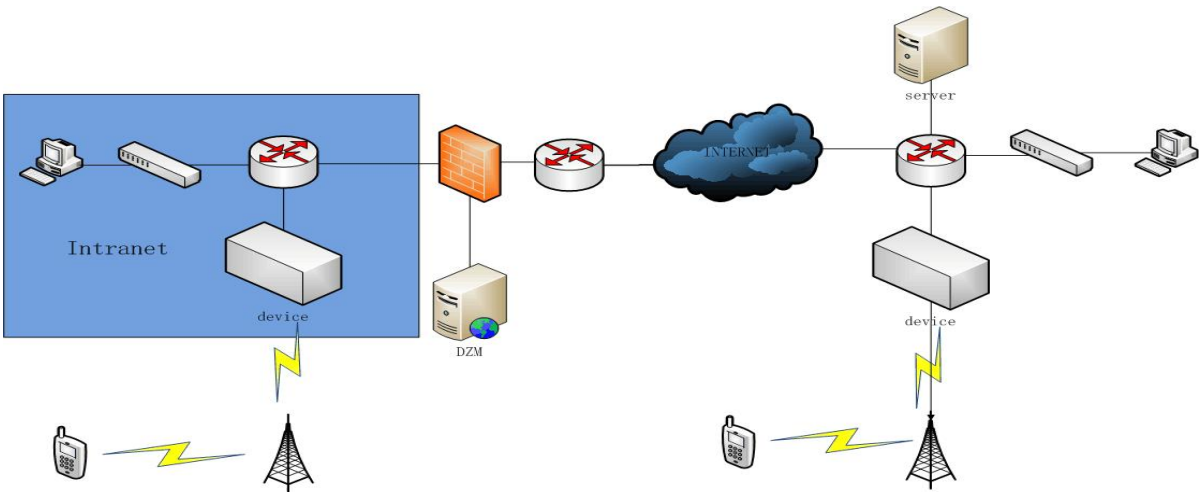
	type			
op	string	Operation type lock: lock port unlock:unlock port switch:switch SIM card reset: reboot module Redial：sim redial	None	Y
ports	string	The port that needs to perform the operation: When op=reset, only the port number is valid.	None	Y

5 SMS Sending

Server send SMS sending request to device by Ethernet, and it keep sending task in a JSON array.

5.1 Topology

While device and server not in a same LAN, device HTTP port should been Nat mapping out on boundary router, so server can send message to device actively.



5.2 SMS sending flow chart

Server can send SMS by GET/POST request. GET request use API specified in ‘Ejoin http SMS sending API’ document. POST request can be used to send long SMS(more that 300 characters) or send more that one SMS in a request message.

5.2.1 SMS sending

After got the SMS sending request from server, device will design a task ID(related to the sending report) to create one or more SMS sending task, and after those task finished, device will send 200ok message to server.

5.2.2 Sending status report

While SMS send successfully/failed/timeout, device will put the result in cache, after meet condition(cache storage full or cache time reached),device will send POST request to report one or more task execute result. If it is group sending, device will report execute result periodically until all num in this group sending task get a result.

5.2.3 Sending status query

Server can send a GET request to query task sending status, like successfully send statics, failed information(num and reason),current sending num and so on.

5.2.4 Pause the SMS task

When a SMS task is still waiting to be sent in the send queue, one or more SMS can be paused.

5.2.5 Resume the paused SMS task

Resume the sending of one or more suspended SMS tasks.

5.2.6 Delete the SMS task

Delete one or more SMS tasks waiting to be sent in the send queue.

5.2.7 Query the SMS task

Query the SMS task waiting to be sent in the send queue.

5.3 Message description

5.3.1 SMS Sending

5.3.1.1 URL

http://host:port/goip_post_sms.html

host: Device IP address

port: Device webpage management port, default value is 80.

5.3.1.2 Parameter

Parameter	**Description**	**Default**	**Required**	**Remark**
version	API version	1.0	N	1.0：Compatible with previous API 1.1: Support for the description of this document
username	Device username	None	Y	
password	Device password	None	Y	

Note: All URL parameters only appear in the GET request. For POST, it will appear in the JSON attribute of the body segment. The following will not be explained.

5.3.1.3 Data

The task data (the body segment of the HTTP message) is a JSON format string consisting of one or more tasks, and the value of the HTTP header parameter

"Content-Type" is “application/json;charset=utf-8”。

{“type”:“send-sms”,“task_num”:n, “tasks”:[{“tid”:tid_1, …},…, {“tid”:tid_n, …}]}

Components state:

Parameter	Data type	**Description**	**Default**	**Required**	**Remark**
type	string	Message type	None	N	
sr_url	string	Status report forward url	System configuration	N	
sr_cnt	string	Max num of SMS result can keep in cache.	100	N	1. The buffer number reaches this value,the buffered report is sent immediately, and the timer is reset.
sr_prd	Int	The max time SMS result can keep in cache	30	N	2. The time expired, even if not enough reports are received, send immediately , then reset the timer
sms_url	string	SMS forward URL	System configuration	N	
sms_cnt	Int	Max num of SMS can keep in cache	1	N	1. When the buffer number reaches this value, the buffered SMS is sent immediately and the timer is reset. 2. In order to be compatible with old customers, this parameter must be set to a value greater than 1, in order to buffer the received SMS and use the new sending mechanism.
sms_prd	Int	Max time SMS can keep in cache	30	N	1. The time expired, even if not enough SMS is received, it is sent immediately, then the timer is reset.
task_num	string	Total task	1	Y	
tasks	Array	Specific SMS send task	None	Y	

Attributes of tasks in json data

Parameter	**Data type**	**Description**	**Default**	**Required**
tid	Int	Task ID	None	Y
from	String	Use ‘,’ ‘-’ to assign more than one port(**from channel 1**)	Choose of device	N
to	string	one or more(**use ‘,’ to distinguish**) recipients	None	Y
sms	string	SMS content	None	Y
chs	string	Character coding set (**utf8**|**base64**)	utf8	N

coding	Int	pecific the SMS codec: 0:not assign 1:USC2 2:7bit	0	N
smstype	Int	SMS type 0：SMS	0	N
smsc	string	Store the SMSC number.	“ ”	N
intvl	string	Interval of 2 SMS while device sending them(ms)	“0”	N
tmo	Int	Max time while waiting sending result(second).	30	N
sdr	Int	If enable the successfully send report. 1:enable,0:disable.	Disable	N
fdr	Int	If enable the failed report.1:enable,0:disable.	Enable	N
dr	Int	If enable SMS delivery report.1:enable,0:disable.	Disable	N
sr_prd	Int	Status report period (seconds), 0: not on, >0: on Control only the period in which a single task generates a report	60	N
sr_cnt	Int	Single-state report SMS number, less than 1 will use the default value Control only the number of processed messages that have been reported by a single task	10	N

Tips:

1. While not choose a port, device will pick up a random port to send SMS to every recipient.
2. While chose more than one ports, and just one SMS recipient , then device will use all chose port to send SMS to this recipient.
3. If more ports, and more recipient designed, then every port will send SMS to every recipient separately.

5.3.1.4 Response

Task sending is a JSON array composed by one or more task send status,

Parameter “Content-Type” in HTTP head should set to

“application/json;charset=utf- 8”.

{ “code”:200, “reason”：“OK”，“type”:“task-status”，“status”:[{“tid”:tid_1, “status”: “0 OK”},…，{“tid”:tid_n, “status”： “2 Invalid Port”}]}

Status components state:

Parameter	Data type	**Description**	**Default**	**Required**
tid	Int	Task ID	None	Y

status	String	Task status code 0：OK 1：Invalid User 2：Invalid Port 3：USSD Expected 4：Pending USSD 5：SIM Unregistered 6：Timeout 7：Server Error 8：SMS expected 9：TO expected 10：Pending Transaction 11：TID Expected 12：FROM Expected 13：Duplicated TaskId 14: Unauthorized 15: Invalid CMD 16: Too Many Task If task status ID not equal to 0, then means this task not received by device.	None	Y

5.3.2 Task send report

5.3.2.1 URL

Server or device configuration decision.

5.3.2.2 Parameter

Parameter	**Description**	**Default**	**Required**	**Remark**
Version	API version	1.1	Y	This document describes specification support only

5.3.2.3 Data

Status-report message is a JSON array composed by one or more task send report. Parameter “Content-Type” in HTTP head should set to “application/json;charset=utf-8”.

{“type”:“status-report”,“rpt_num”:n,“rpts”:[{“tid”:tid_1, …},…, {“tid”:tid_n, …}]}

Components state:

Parameter	**Data type**	**Description**	**Default**	**Required**
type	string	Message type	None	Y（status-report）
rpt_num	string	Report num	1	Y
rpts	Array	Detail status report	None	Y

Attributes reported in json data

Parameter	**Data type**	**Description**	**Default**	**Required**
tid	Int	related task ID .	None	Y

sending	Int	total num of SMS in sending.	None	Y
sent	Int	total num of SMS successfully send.	None	Y
failed	Int	total num of SMS failed send.	None	Y
unsent	Int	total SMS in cache waiting for send	None	Y
sdr	array	Successfully send details(one list for one num) Success report is a array, [0]: recipients num index(based on group sending),int [1]: num, string [2]: SMS sending port(1.01,2.02,...), string [3]: SMS send timestamp in UTC time, int	None	N
fdr	array	Fail send details(one num one list) [0]: recipients num index(based on group sending),int [1]: num, string [2]: SMS sending port(1.01,2.02,...), string [3] : SMS send timestamp in UTC time.int [4] : Progress reason, code+details[refer to 1.0 API] [5] : Carrier reason, code+ description. Valid when [4] is failed to send	None	N

Tips：

1. tid related to the task ID in the send-sms message.
2. sending, sent, failed are accumulated num in one task.
3. Sdr(successfully send record) list records between 2 status-report, server should keep before details.
4. fdr(failed detail record) list records between 2 status-report, server should keep before details.

5.3.3 Pause the SMS task

5.3.3.1 URL

http://host:port/goip_pause_sms.html

host: Device IP address

port: Device webpage management port, default value is 80.

5.3.3.2 Parameter

Parameter	Description	Default	Required	Remark
version	API version	1.1	Y	This document describes specification support only
username	Device username	None	Y	
password	Device password	None	Y	

5.3.3.3 Data

The data (the body segment of the HTTP message) is a JSON format string consisting of one or more tasks, and the value of the HTTP header parameter "Content-Type" is “application/json;charset=utf-8”.

{“tids”:[tid1,tid2,…,tidn]}

Components state：

Parameter	Data type	**Description**	**Default**	**Required**
tids	String	Restore one or more tasks ID that are sent.	None	No. When there is no field, all send tasks are suspended.

The body of the query response is a JSON format string consisting of one or more tasks. The value of the HTTP header parameter "Content-Type" is "application/json; charset=utf-8".

{“code”:200,“reason”：“OK”，“results”:[{“tid”:tid_1,“status”：“0 OK”},…，{“tid”:tid_n,“status”：“2 Invalid Port”}]}

Components state：

Parameter	Data type	**Description**	**Default**	**Requ**
code	Int	Interface processing result code	None	Y
reason	String	Interface processing results	None	Y
results	Array	Task processing results. When there is no tids in the request, this field is not included in the result.	None	N
tid	Int	Task ID	None	N
status	String	Task status code 0：OK 1：Invalid User 2：Invalid Port 3：USSD Expected 4：Pending USSD 5：SIM Unregistered 6：Timeout 7：Server Error 8：SMS expected 9：TO expected 10：Pending Transaction 11：TID Expected 12：FROM Expected If task status ID not equal to 0, then means this task not received by device.	None	N

5.3.4 Resume the paused SMS task

5.3.4.1 URL

http://host:port/goip_resume_sms.html

host: device IP address

port: device web port,the default is 80,optional.

5.3.4.2 Parameter

Parameter	**Description**	**Default**	**Required**	**Remark**
version	API version	1.1	Y	This document describes specification support only
username	Device username	None	Y	
password	Device password	None	Y	

5.3.4.3 Data

Data(The body segment of the HTTP message)is a JSON array composed by one or more task. Parameter Content-Type in HTTP head should set to "application/json;charset=utf-8".

{"tids":[tid1,tid2,…,tidn]}

Attributes instructions:

Parameter	Data type	**Description**	**Default**	**Required**
tids	String	The task ID to be restored	None	NO. Restore all sending tasks when there is no field

The body of response is a JSON array composed by one or more task ID.

Parameter "Content-Type" in HTTP head should set to "application/json;charset=utf-8".

{"code":200,"reason": "OK", "results":[{"tid":tid_1, "status": "0 OK"},…, {"tid":tid_n, "status": "2 Invalid Port"}]}

Attributes instructions:

Parameter	Data type	**Description**	**Default**	**Required**
code	Int	Interface processing result code	None	Y
reason	string	Interface processing results	None	Y
results	array	Task processing results	None	Y
tid	Int	Task ID	None	Y
status	string	The status code and reason description of the task 0：OK	None	Y

		1：Invalid User 2：Invalid Port 3：USSD Expected 4：Pending USSD 5：SIM Unregistered 6：Timeout 7：Server Error 8：SMS expected 9：TO expected 10：Pending Transaction 11：TID Expected 12：FROM Expected If the task's response code is not 0, it indicates that the task is not accepted by the device.		

5.3.5 Delete the SMS task.

5.3.5.1 URL

http://host:port/goip_remove_sms.html

host: device IP address.

port: device web port,the default is 80,optional.

5.3.5.2 Parameter

Parameter	**Description**	**Default**	**Required**	**Remark**
version	API version	1.1	Y	This document describes specification support only
username	Device username	None	Y	
password	Device password	None	Y	

5.3.5.3 Data

Data(The body segment of the HTTP message)is a JSON array composed by one or more task. Parameter Content-Type in HTTP head should set to “application/json;charset=utf-8”.

{“tids”:[tid1,tid2,…,tidn]}

Attributes instructions：

Parameter	Data type	**Description**	**Default**	**Required**
tids	String	The task ID to be restored.	None	NO. Restore all sending tasks when there is no field.

The body of response is a JSON array composed by one or more task ID. Parameter “Content-Type” in HTTP head should set to “application/json;charset=utf- 8”.

{“code”:200,“reason”：“OK”，“results”:[{“tid”:tid_1，“status”：

“0 OK”},…，{“tid”:tid_n, “status”： “2 Invalid Port”}]}

Attributes instructions：

Parameter	Data type	Description	Default	Required
code	Int	Interface processing result code	None	Y
reason	string	Interface processing results	None	Y
results	array	Task processing results 当请求中没有tids时，结果中不带本字段	None	Y
tid	Int	Task ID	None	Y
status	string	The status code and reason description of the task 0：OK 1：Invalid User 2：Invalid Port 3：USSD Expected 4：Pending USSD 5：SIM Unregistered 6：Timeout 7：Server Error 8：SMS expected 9：TO expected 10：Pending Transaction 11：TID Expected 12：FROM Expected If the task's response code is not 0, it indicates that the task is not accepted by the device.	None	Y

5.3.6 Query the SMS task

5.3.6.1 URL

http://host:port/goip_get_tasks.html?version=xxx&username=root&password=root&port=xxx&pos=xxx&num=xxx&has_content=xx

host: device IP address.

port: device web port,the default is 80,optional.

5.3.6.2 Parameter

Parameter	Description	Default	Required	Remark
version	API version	1.1	Y	This document describes specification support only
username	Device username	None	Y	
password	Device password	None	Y	
port	Send port. Starting from 1	None	Y	
Has_content	Whether to bring a text message in the result.	0	N	0 – Do not return text message content. 1 – return text message content
Pos	The starting position of the	None	Y	The location of this field is in

	request. 0 represents the beginning of the first task.			the order of the submission of the message task order
Num	The number of Request messages.	10	N	

The body of response is a JSON array composed by one or more task ID. Parameter Content-Type in HTTP head should set to "application/json;charset=utf-8".

{"tids":[tid1,tid2,…,tidn]}

Attributes instructions:

Parameter	Data type	Description	Default	Required
tids	String	The task ID to be query.	None	N

The body of response is a JSON array composed by one or more task ID.

Parameter "Content-Type" in HTTP head should set to "application/json;charset=utf-8".

{"code":200,"reason":"OK","total_num":n"task_num":n, "tasks":[{"tid":tid_1,…},…,{"tid":tid_n,…}]

Attributes instructions:

Parameter	Data type	Description	Default	Required
code	Int	Interface processing result code.	None	Y
reason	string	Interface processing results	None	Y
Total_num	Int	The number of tasks.	None	Y
Task_num	Int	Query the number of tasks returned.	None	Y
Tasks	Array	Query the returned array of tasks.	None	Y

Attributes instructions of task:

Tasks	array	Query the returned array of tasks.	None	Y
Tid	Int	Task id	None	Y
From	string	One or more (commas, short horizontal connections) send ports (from 1)	Device selection	N
To	string	One or more (comma connected) message receiver number.	None	Y
Sms	string	Message content	None	N
Chs	string	Code set（utf8|base64）	Utf-8	N
Coding	Int	Specifies the encoding of the message sent. 0：Do not specify 1：USC2 2: 7bit	0	N

State	Int	Task status: 0 - normal, 1 - suspended.	None	Y

5.4 Example

5.4.1 Status notification

Url：

http://192.168.1.67:80/goip_get_status.html?url=http://192.168.1.142&period=60&username=root&password=root

Response：

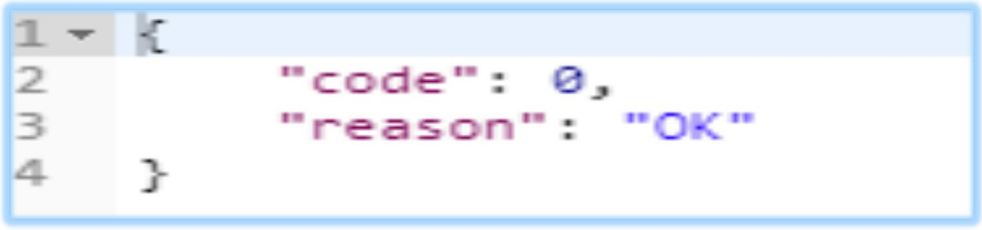

```
{
    "type": "dev-status",
    "seq": 3,
    "expires": 60,
    "mac": "00-30-f1-00-6c-55",
    "ip": "192.168.1.67",
    "ver": "532-604-924-041-100-000",
    "max-ports": 32,
    "max-slot": 4,
    "status": [
        {
            "port": "1.01",
            "sim": "",
            "seq": 8,
            "st": 3,
            "imei": "898610599441327",
            "iccid": "89860116289910033431",
            "imsi": "460014978212473",
            "sn": "",
            "opr": "46001 CHINA UNICOM GSM",
            "bal": "0.00",
            "sig": 15,
            "tot_dur": "0/-1",
            "mon_dur": "0/-1",
            "day_dur": "0/-1"
```


5.4.2 Send commend

Url： http://192.168.1.67:80/goip_send_cmd.html?Username=root&password=root

Body： **{"type":"command", "op":"switch", "ports":"2.02"}**

Response：




```
{
    "code": 0,
    "reason": "OK"
}
```


5.4.3 Send SMS

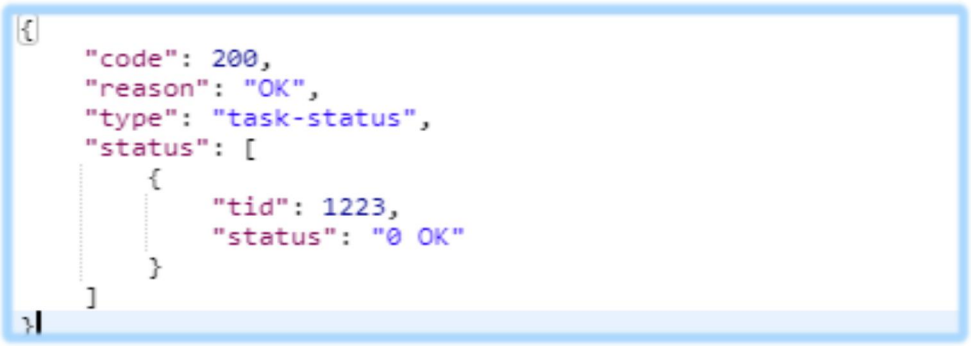
Url:

http://192.168.1.67:80/goip_post_sms.html?username=root&password=root

Body:

{"type":"send-sms","task_num":1, "tasks":[{"tid":1223,"to":"13686876620","sms":"hello123"}]}

Response:



5.4.4 Pause the SMS task

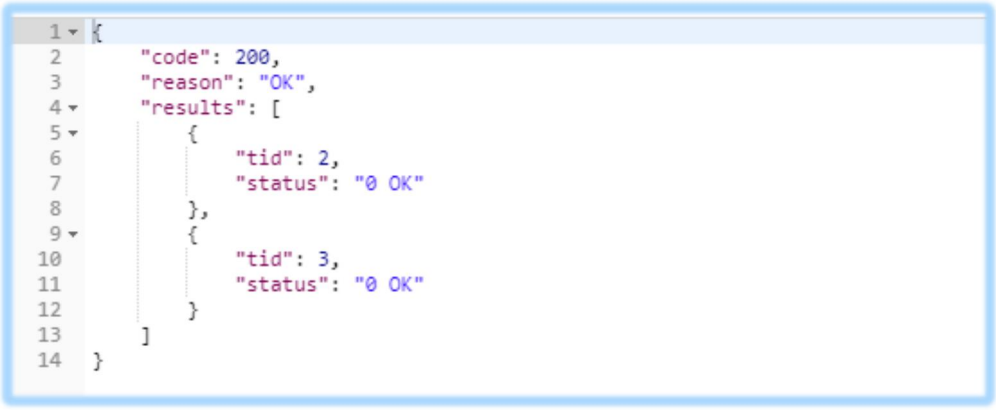
Url:

http://192.168.1.67:80/goip_pause_sms.html?username=root&password=root

Body:

{"tids":[2,3]}

Response:



5.4.5 Resume the paused SMS task

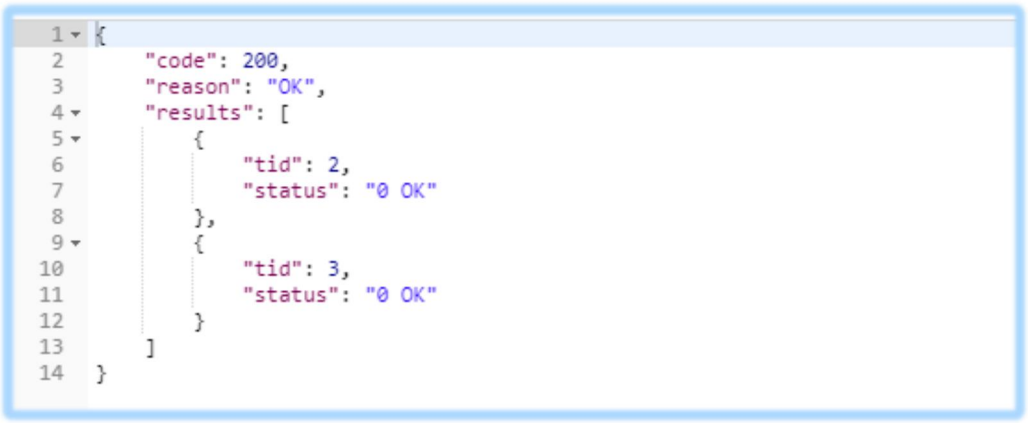
Url：

http://192.168.1.67:80/goip_resume_sms.html?Username=root&password=root

Body：

{"tids":[2,3]}

Response：



```
{
    "code": 200,
    "reason": "OK",
    "results": [
        {
            "tid": 2,
            "status": "0 OK"
        },
        {
            "tid": 3,
            "status": "0 OK"
        }
    ]
}
```

5.4.6 *Delete the SMS task*

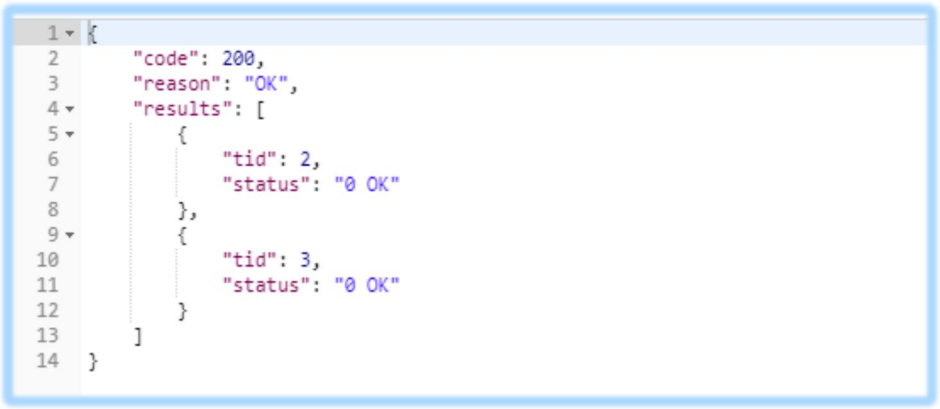
Url：

http://192.168.1.67:80/goip_remove_sms.html?Username=root&password=root

Body：

{"tids":[2,3]}

Response：



```
{
    "code": 200,
    "reason": "OK",
    "results": [
        {
            "tid": 2,
            "status": "0 OK"
        },
        {
            "tid": 3,
            "status": "0 OK"
        }
    ]
}
```

5.4.7 *Query the SMS task*

Url:

http://192.168.1.67:80/goip_get_tasks.html?version=1.1&username=root&password=root&port=1&pos=0&has_content=1

Response:

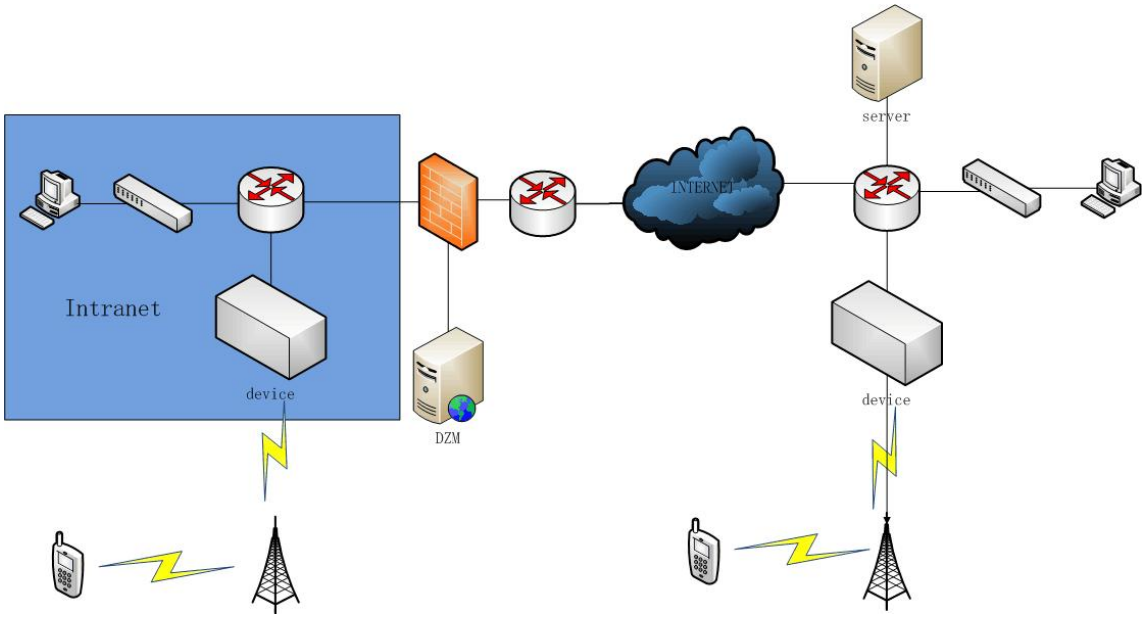
```
{
    "code": 200,
    "reason": "OK",
    "total_num": 5,
    "task_num": 5,
    "tasks": [
        {
            "tid": 2,
            "state": 0,
            "from": "",
            "to": "13686876820",
            "chs": "utf8",
            "coding": 0,
            "sms": "hello123"
        },
        {
            "tid": 3,
            "state": 0,
            "from": "",
            "to": "13686876820",
            "chs": "utf8",
            "coding": 0,
            "sms": "hello123"
        },
        {
            "tid": 4,
            "state": 0,
            "from": "",
            "to": "10010",
            "chs": "utf8",
            "coding": 0,
            "sms": "CXYF"
```


6 Receive the SMS

Device will send SMS to server by POST request, while it get SMS from operator.

6.1 Topology

While forwarding SMS, device send a request to server first, so even device in LAN, and server in a public net, it also can work effectively



6.2 Message description

6.2.1 URL

Default set by device，server can revise it in SMS sending quest message.

6.2.2 Parameter

Parameter	**Description**	**Default**	**Required**	**Remark**
version	API version	1.1	Y	This document describes specification support only

6.2.3 Data

A JSON format string consisting of one or more short messages. The value of the HTTP header parameter "Content-Type" is “application/json;charset=utf-8”.

{“type”:“recv-sms”,“sms_num”:n, “sms”:[[],…，[]]}

Attributes instructions：

Parameter	Data type	**Description**	**Default**	**Required**
type	String	Data type	None	Y（recv-sms）
sms_num	String	Total SMS num	None	Y
sms	Array	SMS array	None	Y

For saving the bandwidth, SMS content also storage in a array.

[0]: Delivery report flag,0:normal SMS, 1:This is a delivery report

[1]: Receive report(‘1.01’,’ 1.02’)

[2]: timestamp while device got this SMS

[3]: Sender(If Delivery report flag set to 1, then sender should be SMCC)

[4]: Recipient(If Delivery report flag set to 1,then recipient should be the original recipient.)

[5]: SMS content：

Delivery report: "code scts", code is 0 for successful delivery, utf-8

Ordinary SMS: BASE64 encoding of utf-8

7 Query SMS

Customers can actively query the SMS received by the device through HTTP GET/POST request.

7.1 Query process

1. Query all messages received by the device without the query parameters (except for user-verified parameters).

2. Use the value of next_sms returned by the device as the value of the sms_id parameter to query subsequent SMS messages.
3. If the device restarts, return a different ssrc synchronization source ID and return to step 1.
4. Repeat step 2

7.2 Message description

7.2.1 URL

http://host:port/goip_get_sms.html?username=root&password=root&sms_id=xxx&sms_num=xxx

host: Device IP address

port: Device webpage management port, default value is 80.

7.2.2 Parameter

Parameter	Description	Default	Required	Remark
sms_id	Start SMS ID	1	N	1：The first SMS ID received by the device
sms_num	Specify the number of SMS to be queried	0	N	0：Query all SMS
sms_del	Delete the SMS that has been returned by the query	0	N	0：Do not delete， 1：delete

7.2.3 Data

A JSON format string consisting of one or more short messages. The value of the HTTP header parameter "Content-Type" is “application/json;charset=utf-8”。

{
"code": 0,
"reason": "OK",
"ssrc": "0123456789abcdef",
"sms_num": 2,
"next_sms": 3,
"data":
[
[0, "1B",
1466506477,"10010","13265825775","5bCK5pWs55qE55So5oi377yM5oKo5aW977yB5o6o6I2Q5oKo5L2/55So44CQ5omL5py66JCl5Lia5Y6F44CR5LiA56uZ5byP5YWN5rWB6YeP5pyN5Yqh5bmz5Y+wIGh0dHA6Ly91LjEwMDEwLmNuL2R0Y2Qg77yM6L275p2+5p+l6K+i6K+d6LS544CB5L2Z6aKd5Y+K6K+m5Y2V77yb5oiW5Zue5aSN5Lul5LiL5pWw5a2X5Luj56CB6I635Y+W5oKo6ZyA6KaB55qE5pyN5Yqh77yaDQoxMDEu5b2T5pyI6K+d6LS577ybDQoxMDIu5Y+v55So5L2Z6aKd77ybDQowLuWNh+e6pzRH77ybDQoxLuivnei0ueWPiuenr+WIhu+8mw0KMi7otKbmiLfmn6Xor6LvvJsNCjMu5YWF5YC877ybDQo0LuWuoualt+acjeWKoe+8mw0KNS7kuJrliqHlip7nkIbvvJsNCjYu5aKe5YC85Lia5Yqh77ybDQo3LuecgeS7veS4k+WMuu+8mw0KOS7ng63ngrnkv4PplIDjglINCuW5v+S4nOiBlOmAmuOAggAAAAA="],
[0, "1B",
1466506670,"10010","13265825775","5bCK5pWs55qE55So5oi377yM5oKo5aW977yB5o6o6I2Q5oKo5L2/55So44CQ5omL5py66JCl5Lia5Y6F44CR5LiA56uZ5byP5YWN5rWB6YeP5pyN5Yqh5bmz5Y+wIGh0dHA6Ly91LjEwMDEwLmNuL2R0Y2Qg77yM6L275p2+5p+l6K+i6K+d6LS544CB5L2Z6aKd5Y+K6K+m5Y2V77yb5oiW5Zue5aSN5Lul5LiL5pWw5a2X5Luj56CB6I635Y+W5oKo6ZyA6KaB55qE5pyN5Yqh77yaDQoxMDEu5b2T5pyI6K+d6LS577ybDQoxMDIu5Y+v55So5L2Z6aKd77ybDQowLuWNh+e6pzRH77ybDQoxLuivnei0ueWPiuenr+WIhu+8mw0KMi7otKbmiLfmn6Xor6LvvJsNCjMu5YWF5YC877ybDQo0LuWuoualt+acjeWKoe+8mw0KNS7kuJrliqHlip7nkIbvvJsNCjYu5aKe5YC85Lia5Yqh77ybDQo3LuecgeS7veS4k+WMuu+8

mw0KOS7ng63ngrnkv4PplIDjgIINCuW5v+S4nOiBlOmAmuOAggAAAAA="]
]
}

Property description:

Parameter	Data type	Description	Default	Required
code	int	Operation code	None	Y
reason	string	Reason description	None	Y
ssrc	string	Synchronization source identifier The device generates a new ssrc each time it runs. So the value changes, re-query	None	Y
sms_num	int	Number of SMS queried	None	Y
next_sms	int	The next SMS ID	None	Y
data	int	Queryed SMS content	None	Y

For saving the bandwidth, SMS content also storage in a array. [0]: Delivery report flag,0:normal SMS, 1:This is a delivery report [1]: Receive report('1.01' ,' 1.02')

[2] : timestamp while device got this SMS

[3] : Sender(If Delivery report flag set to 1, then sender should be SMCC)

[4] : Recipient(If Delivery report flag set to 1,then recipient should be the original recipient.)

[5] : SMS content：

Delivery report: "code scts", code is 0 for successful delivery, utf-8 Ordinary SMS: BASE64 encoding of utf-8

8 Proxy configuration

Obtain and modify the basic configuration of HTTP/HTTPS proxy and SOCKS5 proxy, proxy user configuration, URL blacklist/whitelist configuration, and access log configuration for a device through an HTTP API protocol. This interface distinguishes between operation types based on the request method, where the GET method is used to get the current configuration and the POST method is used to set the configuration.

8.1 Proxy

Configure the network port, SIM line, and enable/disable settings for the proxy.

8.1.1 Base URL

http://host:port/proxy?username=xxx&password=xxx&mode=xxx

8.1.2 Base Parameter

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark

mode	Proxy mode	None	Y	The values are as follows： http ： HTTP/HTTPS proxy; socks5：Socks5 proxy;
username	Device username	None	Y	
password	Device password	None	Y	

8.1.3 Obtain the proxy status

When using the HTTP GET request method to request the base URL, if the state URL parameter is specified, the device will return the current status of the proxy.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
state	Whether the proxy is enabled.	None	N	As URL parameters, the specific value is not important.for example, both state=0 and state=1 are acceptable.

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y
mode	int	Proxy mode.This field is different from the mode field in the URL parameters and is primarily used for compatibility with previous page operations. The values are as follows: 2：Socks5 proxy 3：HTTP/HTTPS proxy	None	N
enabled	int	Whether it is enabled,the values are as follows: 0: Disabled 1：Enabled	None	N

8.1.4 Obtain proxy configuration information

When using the HTTP GET request method to request the base URL, the device returns the basic configuration information of the proxy.

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y

reason	String	Reason description	None	Y
mode	int	Proxy mode.This field is different from the "mode" field in the URL parameters and is primarily used for compatibility with previous page operations. The values are as follows: 2：Socks5 proxy 3：HTTP/HTTPS proxy	None	N
enabled	int	Whether it is enabled,the values are as follows: 0: Disabled 1：Enabled	None	N
size	int	Proxy quantity	None	N
proxies	array	Array of proxy configuration results.The instructions are as follows“Proxies Array Item Description”.	None	N

- Proxies Array Item Description

Parameter	Type	Description	Default	Required
name	String	Proxy configuration name	None	N
port	int	Network port on which the proxy is listening.	None	N
interfaces	array	An array of integers,indicating the SIM WAN ports used by proxy,where 0 means using all WAN ports.	None	N
active	int	Whether the current proxy configuration is enabled,the values are as follows： 0： Disabled 1： Enabled	None	N

8.1.5 Modify the proxy status

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as enabled or disabled,the proxy status will be modified.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: enabled：Enable proxy disabled:Disable proxy	None	Y	

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.1.6 Add the proxy configuration

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as add, the proxy configuration will be added. the specified proxy configuration information needs to be included in the HTTP body of the request.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: add:Add the proxy configuration	None	Y	

- Body parameters are explained as follows:

Parameter	Description	Default	Required	Remark
proxies	Array of proxy configurations	None	Y	The instructions are as follows “ Proxies Array Item Description”

- Proxies Array Item Description

Parameter	Type	Description	Default	Required
name	String	Proxy configuration name. It must be within 32 characters. The specified name will automatically have the proxy type prefix added, such as "http-" prefix for HTTP proxies and "socks5-" prefix for SOCKS5 proxies. For example, if the name value is "foo" for an HTTP proxy, the final name will be "http-foo".	None	Y
port	int	Network port on which the proxy is listening.	None	Y
interfaces	array	An array of integers,indicating the SIM WAN ports used by proxy,where 0 means using all WAN ports.	None	Y
active	int	Whether the current proxy configuration is enabled,the values are as follows： 0： Disabled 1： Enabled	None	Y

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other	None	Y

		values mean failure.		
reason	String	Reason description	None	Y

8.1.7 Modify the proxy configuration

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as update, the proxy configuration will be modified. Currently, it supports modifying the proxy configuration status.The specified proxy configuration information needs to be included in the HTTP body of the request.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: update:Modify the proxy configuration	None	Y	

- Body parameters are explained as follows:

Parameter	Description	Default	Required	Remark
proxies	Array of proxy configurations	None	Y	The instructions are as follows “ Proxies Array Item Description”

- Proxies Array Item Description

Parameter	Type	Description	Default	Required
name	String	Proxy configuration name.	None	Y
active	int	Whether the current proxy configuration is enabled,the values are as follows： 0： Disabled 1： Enabled	None	Y

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.1.8 Delete proxy configuration

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as delete, the proxy configuration will be deleted.The specified proxy configuration information needs to be included in the HTTP body of the request.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: delete:Delete the proxy configuration	None	Y	

- Body parameters are explained as follows:

Parameter	Description	Default	Required	Remark

proxies	Array of proxy configurations	None	Y	The instructions are as follows “ Proxies Array Item Description”

- Proxies Array Item Description

Parameter	Type	Description	Default	Required
name	String	Proxy configuration name.	None	Y

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.2 Proxy User

Configure the basic information and enable/disable settings for the proxy user.

8.2.1 Base URL

http://host:port/proxy_user?username=xxx&password=xxx&mode=xxx

8.2.2 Base Parameter

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
mode	Proxy mode	None	Y	The values are as follows： http ： HTTP/HTTPS proxy; socks5：Socks5 proxy;
username	Device username	None	Y	
password	Device password	None	Y	

8.2.3 Obtain the proxy user status

When using the HTTP GET request method to request the base URL, if the state URL parameter is specified, the device will return the current status of the proxy user.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
state	Whether the proxy user is enabled.	None	N	As URL parameters, the specific value is not important.for example, both state=0 and state=1 are acceptable.

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y
mode	int	Proxy mode.This field is different from the mode field in the URL parameters and is primarily used for compatibility with previous page operations. The values are as follows: 2：Socks5 proxy 3：HTTP/HTTPS proxy	None	N
enabled	int	Whether it is enabled,the values are as follows: 0: Disabled 1：Enabled	None	N

8.2.4 Obtain proxy user configuration information

When using the HTTP GET request method to request the base URL, the device returns the basic configuration information of the proxy user.

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y
mode	int	Proxy mode.This field is different from the mode field in the URL parameters and is primarily used for compatibility with previous page operations. The values are as follows: 2：Socks5 proxy 3：HTTP/HTTPS proxy	None	N
enabled	int	Whether it is enabled,the values are as follows: 0: Disabled 1：Enabled	None	N
size	int	Proxy quantity	None	N
users	array	Array of proxy user configuration results.The instructions are as follows “users Array Item Description”.	None	N

- users Array Item Description

Parameter	Type	Description	Default	Required

name	String	Proxy user name	None	N
pwd	String	Proxy user password	None	N
interfaces	array	An array of integers,indicating the SIM WAN ports used by proxy,where 0 means using all WAN ports.	None	N
mark	String	remark	None	N

8.2.5 Modify the proxy user status

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as enabled or disabled,the proxy user status will be modified.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: enabled：Enable proxy user disabled:Disable proxy user	None	Y	

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.2.6 Add the proxy user configuration

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as add, the proxy user configuration will be added. The specified proxy user configuration information needs to be included in the HTTP body of the request.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: add:Add the proxy user configuration	None	Y	

- Body parameters are explained as follows:

Parameter	Description	Default	Required	Remark
users	Array of proxy user configurations	None	Y	The instructions are as follows“users Array Item Description”

- users Array Item Description

Parameter	Type	Description	Default	Required
name	String	Proxy user name. It must be within 20 characters.	None	Y
pwd	String	Proxy user password.It must be within 20 characters.	None	Y

interfaces	array	An array of integers,indicating the SIM WAN ports used by proxy,where 0 means using all WAN ports.	None	Y
Mark	String	Remark	None	N

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.2.7 Modify the proxy user configuration

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as update, the proxy user configuration will be modified. Currently, it supports modifying the proxy user configuration status.The specified proxy user configuration information needs to be included in the HTTP body of the request.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: update:Modify the proxy user configuration	None	Y	

- Body parameters are explained as follows:

Parameter	Description	Default	Required	Remark
users	Array of proxy user configurations	None	Y	The instructions are as follows“users Array Item Description”

- users Array Item Description

Parameter	Type	Description	Default	Required
name	String	Proxy user name. It must be within 20 characters.	None	Y
interfaces	array	An array of integers,indicating the SIM WAN ports used by proxy,where 0 means using all WAN ports.	None	Y

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.2.8 Delete proxy user configuration

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as delete, the proxy user configuration will be deleted.The specified proxy user configuration information needs to be included in the HTTP body of the request.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: delete:Delete the proxy user configuration	None	Y	

- Body parameters are explained as follows:

Parameter	Description	Default	Required	Remark
users	Array of proxy userconfigurations	None	Y	The instructions are as follows“users Array Item Description”

- users Array Item Description

Parameter	Type	Description	Default	Required
name	String	Proxy user configuration name.	None	Y

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.3 URL WhiteList

Configure the basic information and enable/disable settings for the proxy URL whitelist.

8.3.1 Base URL

http://host:port/proxy_white_list?username=xxx&password=xxx&mode=xxx

8.3.2 Base Parameter

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
mode	Proxy mode	None	Y	The values are as follows： http ： HTTP/HTTPS proxy; socks5：Socks5 proxy;
username	Device username	None	Y	
password	Device password	None	Y	

8.3.3 Obtain the whitelist status

When using the HTTP GET request method to request the base URL, if the state URL parameter is specified, the device will return the current status of the whitelist.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark

state	Whether the whitelist is enabled.	None	N	As URL parameters, the specific value is not important.for example, both state=0 and state=1 are acceptable.

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y
mode	int	Proxy mode.This field is different from the mode field in the URL parameters and is primarily used for compatibility with previous page operations. The values are as follows: 2：Socks5 proxy 3：HTTP/HTTPS proxy	None	N
enabled	int	Whether it is enabled,the values are as follows: 0: Disabled 1：Enabled	None	N

8.3.4 Obtain the whitelist configuration information

When using the HTTP GET request method to request the base URL, the device returns the basic configuration information of the whitelist.

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y
mode	int	Proxy mode.This field is different from the mode field in the URL parameters and is primarily used for compatibility with previous page operations. The values are as follows: 2：Socks5 proxy 3：HTTP/HTTPS proxy	None	N
enabled	int	Whether it is enabled,the values are as follows: 0: Disabled	None	N

		1：Enabled		
size	int	Whitelist configuration quantity	None	N
urls	array	An array of whitelist configuration results, where each array item is a string representing URL information.	None	N

8.3.5 Modify the whitelist status

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as enabled or disabled,the whitelist status will be modified.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: enabled：Enable proxy whitelist disabled:Disable proxy whitelist	None	Y	

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.3.6 Add the whitelist configuration

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as add, the proxy whitelist configuration will be added. The specified proxy whitelist configuration information needs to be included in the HTTP body of the request.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: add:Add the proxy whitelist configuration	None	Y	

- Body parameters are explained as follows:

Parameter	Description	Default	Required	Remark
urls	Array of proxy whitelist configurations	None	Y	Each array item is a string representing URL information.Examples of URL formats: 1,* -all URLs; 2,www.example.com -exact single URL match; 3,*.example.com -suffix match, such as a.example.com,b.example.com,

				etc; 4,www.example.* -prefix matching,such as www.example.com, www.example.org. etc;

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.3.7 Delete whitelist configuration

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as delete, the proxy whitelist configuration will be deleted.The specified proxy whitelist configuration information needs to be included in the HTTP body of the request.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: delete:Delete the whitelist configuration	None	Y	

- Body parameters are explained as follows:

Parameter	Description	Default	Required	Remark
urls	Array of proxy whitelist configurations	None	Y	Each array item is a string representing URL information.

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.4 URL BlackList

Configure the basic information and enable/disable settings for the proxy URL Blacklist.

8.4.1 Base URL

http://host:port/proxy_black_list?username=xxx&password=xxx&mode=xxx

8.4.2 Base Parameter

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
mode	Proxy mode	None	Y	The values are as follows： http ： HTTP/HTTPS

				proxy; socks5：Socks5 proxy;
username	Device username	None	Y	
password	Device password	None	Y	

8.4.3 Obtain the blacklist status

When using the HTTP GET request method to request the base URL, if the state URL parameter is specified, the device will return the current status of the blacklist.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
state	Whether the whitelist is enabled.	None	N	As URL parameters, the specific value is not important.for example, both state=0 and state=1 are acceptable.

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y
mode	int	Proxy mode.This field is different from the mode field in the URL parameters and is primarily used for compatibility with previous page operations. The values are as follows: 2：Socks5 proxy 3：HTTP/HTTPS proxy	None	N
enabled	int	Whether it is enabled,the values are as follows: 0: Disabled 1：Enabled	None	N

8.4.4 Obtain the blacklist configuration information

When using the HTTP GET request method to request the base URL, the device returns the basic configuration information of the blacklist.

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

mode	int	Proxy mode.This field is different from the mode field in the URL parameters and is primarily used for compatibility with previous page operations. The values are as follows: 2：Socks5 proxy 3：HTTP/HTTPS proxy	None	N
enabled	int	Whether it is enabled,the values are as follows: 0: Disabled 1：Enabled	None	N
size	int	Blacklist configuration quantity	None	N
urls	array	An array of blacklist configuration results, where each array item is a string representing URL information.	None	N

8.4.5 Modify the blacklist status

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as enabled or disabled,the whitelist status will be modified.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: enabled：Enable blacklist disabled:Disable blacklist	None	Y	

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.4.6 Add the blacklist configuration

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as add, the proxy blacklist configuration will be added. The specified proxy blacklist configuration information needs to be included in the HTTP body of the request.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: add:Add the proxy whitelist configuration	None	Y	

- Body parameters are explained as follows:

Parameter	Description	Default	Required	Remark
urls	Array of proxy whitelist	None	Y	Each array item is a string

	configurations			representing URL information.Examples of URL formats: 1,* -all URLs; 2,www.example.com -exact single URL match; 3,*.example.com -suffix match, such as a.example.com,b.example.com, etc; 4,www.example.* -prefix matching,such as www.example.com, www.example.org. etc;

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.4.7 Delete whitelist configuration

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as delete, the blacklist configuration will be deleted.The specified proxy blacklist configuration information needs to be included in the HTTP body of the request.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: delete:Delete the blacklist configuration	None	Y	

- Body parameters are explained as follows:

Parameter	Description	Default	Required	Remark
urls	Array of blacklist configurations	None	Y	Each array item is a string representing URL information.

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

8.5 *Enable Access Log*

Configure enable/disable settings for the proxy URL logs.

8.5.1 Base URL

http://host:port/proxy_access_log?username=xxx&password=xxx&mode=xxx

8.5.2 Base Parameter

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
mode	Proxy mode	None	Y	The values are as follows： http ： HTTP/HTTPS proxy; socks5：Socks5 proxy;
username	Device username	None	Y	
password	Device password	None	Y	

8.5.3 Obtain the blacklist status

When using the HTTP GET request method to request the base URL, if the state URL parameter is specified, the device will return the current status of logs.

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y
mode	int	Proxy mode.This field is different from the mode field in the URL parameters and is primarily used for compatibility with previous page operations. The values are as follows: 2：Socks5 proxy 3：HTTP/HTTPS proxy	None	N
enabled	int	Whether it is enabled,the values are as follows: 0: Disabled 1：Enabled	None	N

8.5.4 Modify the access log status

When using the HTTP POST request method to request the base URL and specifying the URL parameter op as enabled or disabled,the access log status will be modified.

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
op	Operation type:The possible values are as follows: enabled：Enable access log disabled:Disable access log	None	Y	

- The response results are as follows:

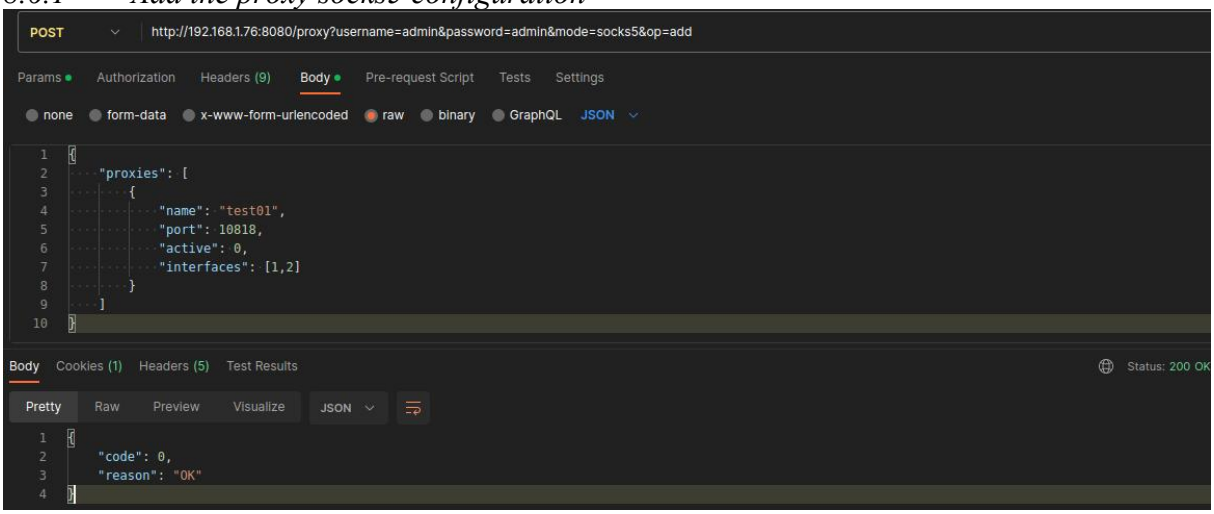
Parameter	Type	Description	Default	Required

code	int	Result code.0 means success, other values mean failure.	None	Y
reason	String	Reason description	None	Y

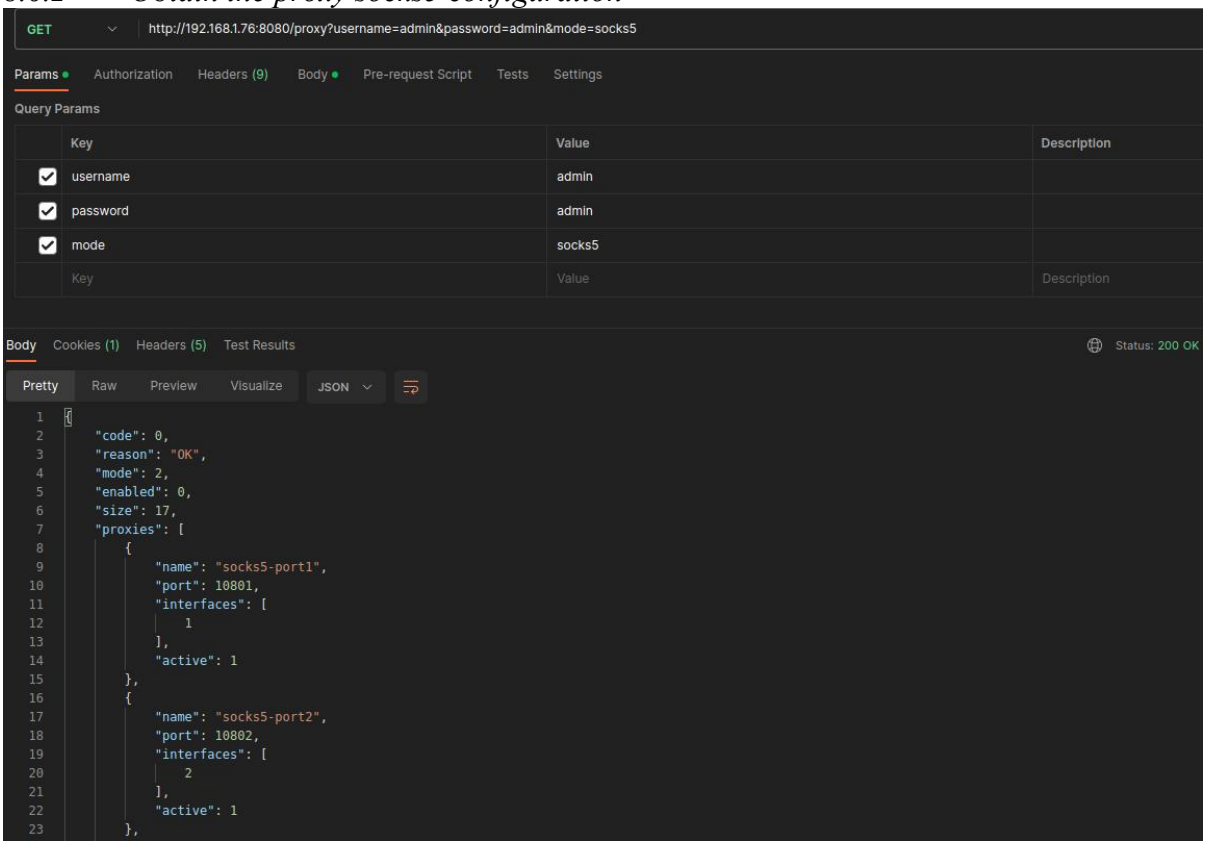
8.6 Example

The following examples are performed using the Postman application.

8.6.1 Add the proxy socks5 configuration



8.6.2 Obtain the proxy socks5 configuration



9 IP Whitelist Configuration

Provides APIs to view and manage the IP whitelist, including enabling/disabling the whitelist and adding/removing IP entries.

9.1 Retrieve IP Whitelist Information

Use the HTTP GET method to retrieve the configured IP addresses and whitelist status.

9.1.1 Base URL

http://host:port/ip_white_list?username=xxx&password=xxx

9.1.2 Base Parameter

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
username	Device username	None	Y	Username used to log in to device
password	Device password	None	Y	Password corresponding to the username

9.1.3 Response Fields

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	string	Reason description	None	Y
enbale	int	Whether the whitelist is enabled The values are as follows: 0：Disabled 1：Enabled	None	Y
ipset	array	Array of IP strings. Each string can be: - An IPv4 address (e.g., 192.168.1.1) - An IPv4 subnet (e.g., 192.168.1.1/24)	None	Y

9.2 Modify IP Whitelist Configuration

Use the HTTP POST method to add or remove IP addresses, or to enable/disable the whitelist.

9.2.1 Base URL

http://host:port/ip_white_list?username=xxx&password=xxx

9.2.2 Base Parameter

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
username	Device username	None	Y	Username used to log in to device
password	Device password	None	Y	Password corresponding to the username

9.2.3 Request Body Fields

Parameter	Type	Description	Default	Required
enbale	int	Whether the whitelist is enabled The values are as follows: 0：Disabled 1：Enabled	None	Y
deleted_set	array	Array of IP to delete. Each string can be: - An IPv4 address (e.g., 192.168.1.1) - An IPv4 subnet (e.g., 192.168.1.1/24)	None	Y
added_set	array	Array of IP to add. Each string can be: - An IPv4 address (e.g., 192.168.1.1) - An IPv4 subnet (e.g., 192.168.1.1/24)	None	Y

9.2.4 Response Fields

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	string	Reason description	None	Y

10 IP Blacklist Configuration

Provides APIs to view and manage the IP blacklist, including enabling/disabling the blacklist and adding/removing IP entries.

10.1 Retrieve IP Whitelist Information

Use the HTTP GET method to query the current blacklist configuration.

10.1.1 Base URL

http://host:port/ip_black_list?username=xxx&password=xxx

10.1.2 Base Parameter

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
username	Device username	None	Y	Username used to log in to device
password	Device password	None	Y	Password corresponding to the username

10.1.3 Response Fields

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	string	Reason description	None	Y
enbale	int	Whether the blacklist is enabled The values are as follows: 0：Disabled 1：Enabled	None	Y
ipset	array	Array of IP strings. Each string can be: - An IPv4 address (e.g., 192.168.1.1) - An IPv4 subnet (e.g., 192.168.1.1/24) - “ * ” The * symbol represents all IP addresses	None	Y

10.2 Modify IP Whitelist Configuration

Use the HTTP POST method to add or remove IP addresses, or to enable/disable the blacklist.

Note that using the * symbol to configure the blacklist will block all IP addresses from accessing the device, so the whitelist feature must be configured and enabled first.

10.2.1 Base URL

http://host:port/ip_black_list?username=xxx&password=xxx

10.2.2 Base Parameter

- URL parameters are explained as follows:

Parameter	Description	Default	Required	Remark
username	Device username	None	Y	Username used to log in to device
password	Device password	None	Y	Password corresponding to the username

10.2.3 Request Body Fields

Parameter	Type	Description	Default	Required
enbale	int	Whether the blacklist is enabled The values are as follows: 0：Disabled 1：Enabled	None	Y
deleted_set	array	Array of IP to delete. Each string can be: - An IPv4 address (e.g., 192.168.1.1) - An IPv4 subnet (e.g., 192.168.1.1/24) - “ * ” The * symbol represents all IP addresses	None	Y
added_set	array	Array of IP to add. Each string can be: - An IPv4 address (e.g., 192.168.1.1) - An IPv4 subnet (e.g., 192.168.1.1/24) - “ * ” The * symbol represents all IP addresses	None	Y

10.2.4 Response Fields

- The response results are as follows:

Parameter	Type	Description	Default	Required
code	int	Result code.0 means success, other values mean failure.	None	Y
reason	string	Reason description	None	Y