

Ejoin Proxy Gateway API

Version: 1.0.001

DOC NO: XXXXXXXX

Table of Content

1	Overview.....	4
2	Copyright Notice.....	4
3	Status Notification.....	4
	3.1 URL.....	4
	3.2 Parameter.....	4
	3.3 Dev-status message.....	5
	3.4 Port-status message.....	5
4	Operate command sending.....	6
	4.1 URL.....	7
	4.2 Parameter.....	7
	4.3 Data.....	8
5	Example.....	10
	5.1 Get status report.....	10
	5.2 Redial.....	10
	5.3 Get public ip.....	11

1 Overview

This document specifies Ejoin proxy gateway http API, include status report, redial and get public ip.

This 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 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

default port is 8080

Device report url:

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

3.2 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

3.3 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]

3.4 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": "139xxxxxxxx", "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 7: SIM card locked by device 8: SIM card locked by operator 9: Recognize SIM card error 11: Card Detected 12: User locked	None	Y
bal	Floatin g 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.

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

4.1 URL

`http://host:port/goip_send_cmd.html`

host: Device IP address

port: default value is 8080.

4.2 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.
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.

4.3 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:

Ejoin Proxy Gateway API.

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 command	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 type	Description	Default	Required
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 Example

5.1 Get status report

Request URL:

http://192.168.0.42:8080/goip_get_status.html?username=admin&password=admin&url=192.168.1.99&period=60

Response:

http://192.168.0.42:8080/goip_get_status.html?username=admin&password=admin&url=192.168.1.99&period=60

Send Preview Add to collection

Body Cookies (1) Headers (5) STATUS 200 OK TIME 82 ms

Pretty Raw Preview JSON XML

```
1 {
2   "type": "dev-status",
3   "seq": 2,
4   "expires": 60,
5   "mac": "00-30-f1-01-01-05",
6   "ip": "192.168.0.42",
7   "ver": "716-204-001-041-100-000",
8   "max-ports": 16,
9   "max-slot": 1,
10  "status": [
11    {
12      "port": "1.01",
13      "sim": "",
14      "seq": 2,
15      "st": 0,
16      "imei": "860548044514724"
17    },
18    {
19      "port": "2.01",
20      "sim": "",
21      "seq": 2,
22      "st": 15,
23      "imei": "905821363306734",
24      "iccid": "89860083192095012141",
25      "imsi": "460023140821016",
26      "sn": "",
27      "opr": "46000 CHINA MOBILE",
28      "bal": "0.00",
29      "sig": 26
30    },
31    {
32      "port": "3.01",
```

5.2 Redial

Request URL:

http://192.168.0.42:8080/goip_send_cmd.html?username=admin&password=admin&port=2&op=redial

Response:

http://192.168.0.42:8080/goip_send_cmd.html?username=admin&password=admin&port=2&op=redial

GET

Send Preview Add to collection

Body Cookies (1) Headers (5) STATUS 200 OK TIME 75 ms

Pretty Raw Preview JSON XML

```
1 {
2   "code": 0,
3   "reason": "OK"
4 }
```

5.3 Get public ip

Request URL:

http://192.168.0.42:8080/goip_send_cmd.html?username=admin&password=admin&op=get&port_public_ip=

Response:

http://192.168.0.42:8080/goip_send_cmd.html?username=admin&password=admin&op=get&port_public_ip= GET

Send Preview Add to collection

Body Cookies (1) Headers (5) STATUS 200 OK TIME 70 ms

Pretty Raw Preview JSON XML

```
1 {
2   "code": 0,
3   "reason": "OK",
4   "data": {
5     "port_public_ip": [
6       "117.136.40.1",
7       "",
8       "",
9       "",
10      "",
11      "",
12      "",
13      "",
14      "",
15      "",
16      "",
17      "",
18      "",
19      "",
20      "",
21      ""
22    ]
23  }
24 }
```