

User Manual

G201N4/G201N4W/G201N/G201NW

Version 1.0

Revision Record

Version	Date	Author	Firmware Version	Applicability
V1.0	2016-07-06	Sherry	V1.0	The initial version

Table of Contents

1.Preamble.....	1
1.1 Package Contents.....	1
1.2 G201N4/G201NW/G201N.....	1
1.3 Hardware Specification.....	2
2.Indicators and Connectors.....	2
2.1 LED Indicators.....	错误！未定义书签。
2.2 Hardware Installation.....	8
3. IVR(Interactive Voice Response).....	9
3.1 The method of configuring a home gateway.....	9
3.2 Start IVR.....	9
3.3 IVR description.....	9
3.4 Notice.....	11
4. G201N4 webpage settings.....	13
4.1 Login WEB page.....	13
4.1.1 URL format.....	13
4.1.2 About Passwords.....	13
4.2 WEB Page.....	14
5 .Configure from web.....	15
5.1 Status.....	15
5.1.1 System Information.....	15
5.1.2 System Log.....	16
5.2 Network.....	17
5.2.1 WAN.....	17
5.2.2 LAN.....	22
5.2.3 VPN.....	23
5.2.4 MAC Clone.....	24
5.2.5 DMZ.....	24
5.2.6 DDNS.....	25
5.2.7 Advance.....	25
5.2.8 Port Setting.....	26
5.2.9 Multi WAN.....	26
5.3 Wireless.....	27
5.3.1 Basic.....	27
5.3.2 Wireless Security Setting.....	29
5.3.3 Wi-Fi MultiMedia.....	32
5.3.4 Wi-Fi Protected Setup (WPS).....	32
5.3.5 Wireless Client.....	34
5.3.6 Advance Wireless.....	34
5.4 SIP Account.....	36
5.4.1 Line 1.....	36
5.4.2 SIP setting.....	40

5.4.3 QoS.....	41
5.5 Phone.....	41
5.5.1 Preferences.....	42
5.5.2 Dial Plan.....	45
5.5.3Phonebook.....	47
5.5.4 Call Log.....	48
5.6 Diagnosis.....	50
5.7 Administration.....	50
5.7.1 Management.....	51
5.7.2 Firmware Upgrade.....	54
5.7.3 Provision.....	54
5.7.4 SNMP.....	56
5.7.5 TR069.....	57
6 Functions.....	58
6.1 Making Calls.....	58
6.2 Call Waiting.....	58
6.3 Call Hold.....	58
6.4 Call Transferring.....	58
6.4.1 Blind Transfer.....	58
6.4.2 Attended Transfer.....	59
6.5 3-way conference call.....	59
6.6 Call Forwarding.....	59
6.7 Direct IP calls.....	59
6.8 Speed dialing.....	60
6.9 Hotline.....	60
6.10 Daylight Saving Time.....	60
6.11 Upgrade Firmware.....	61
6.12 Password Control.....	61
6.13 Web Access.....	61
6.14 System log.....	62

1.Preamble

Thank you for choosing G201N VOIP home gateway products. G201N home gateway is a highly integrated access device, and it is a kind of high-end multi-in-one gateway product which based on IEEE802.11n standard. This product is for individual users, SOHO (Small Office or Home Office) and small enterprises to provide high-performance access. It provides a wide range of management functions, can provide dhcp, dmz host, virtual servers, firewalls etc. management; also it is able to set up the internal LAN, allowing multiple computers to share a single broadband line and ISP account; its specific firewall feature, can filter bad sites; also it supports disabling SSID broadcast mode, user can prevent AP broadcast the SSID, which can solve the leaks caused by SSID broadcast; G201N supports 64/ 28 WEP wireless dhome gateway encryption to ensure the security of dhome gateway transmission in a wireless network; it supports DHCP servers and dynamic/static routing; and it supports access control, the network administrator can control all the computer in the LAN access to the Internet through a router; supports virtual server and dmz host to meet specific application needs; it supports remote management and system logs, which brings large convenience for the network administrator to realize network management and real-time monitoring; and G201N4 also supports UpNp, voice and video transmission, online audio and video transmission, online games and other rich features.

1.1 Package Contents

One G201N package contains:

- ◆ One G201N VoIP home gateway
- ◆ One power adapter
- ◆ One Ethernet cable
- ◆ One telephone line

If the above device or accessory is damaged or lost, please contact with your reseller for replacement.

1.2 G201N4/G201NW/G201N

The below table lists the hardware difference of G201NX.

	Product Type	WAN Port	LAN Port	VoIP Port	USB Port	Wireless
G201N4W	Mini VoIP Wireless Router	1 10/100M RJ45	4 10/100M RJ45	1 FXS RJ11	1	Yes
G201N4	Mini VoIP Adapter	1 10/100M RJ45	4 10/100M RJ45	1 FXS RJ11	1	No
G201NW	Mini VoIP Adapter	1 10/100M RJ45	No	1 FXS RJ11	1	Yes
G201N	Mini VoIP Wireless Router	1 10/100M RJ45	No	1 FXS RJ11	1	No

1.3 Hardware Specification

Item		Specification
Power Adapter		MODE: FY-2409-4 Input: 100~240V AC, 50~60Hz 0.6A Output: DC 5V, 2A
CPU		MTK RT5350
Port	WAN	10/100Base_T RJ-45 for WAN
Operating Temperature		0~45℃
Storage Temperature		-25~85℃
Relative Humidity		10~90% (No condensing)
Dimension (L×W×H)		110x76x28mm
Weight (packaging included)		383g
Certification		CE / FCC / RoHS

Trade Mark: Flyingvoive.

2.Indicators and Connectors

Before you use the high speed home gateway G201N4, please get acquainted with the LED indicators and connectors first.

2.1.1 G201N4W:

(1) Front panel



LED	Color	status	Description
PWER	Green	On	System is running normal
		Off	Power off
WAN	Green	On	Link
		Blink	Active
		Off	Power off or UnLink
LAN1~LAN3	Green	On	Link
		Blink	Active
		Off	Power off or UnLink
WLAN	Green	On	WIFI Enable
		Blink	Active
		Off	Power off or WIFI disable
Phone	Green	On	Registered
		Blink	In use
		Off	Power off or unregistered
WPS	Green	On	WPS on
		Blink	active
		Off	Power off or WPS off
REG	Green	On	Have new call/in call
		Off	Standby

(2) Side panel



Interface	Description
RST	Restore the factory settings button, long press 5S after the device to restore the factory settings

WAN	Connection to access the Internet
LAN1~LAN4	Connect to local network devices
PHONE	Connect to phone
DC5V/2A	Connect to power adapter
USB	Connect to U disk

2.1.2 G201N4:

(1) Front panel



LED	Color	status	Description
PWER	Green	On	System is running normal
		Off	Power off
WAN	Green	On	Link
		Blink	Active
		Off	Power off or UnLink
LAN1~LAN3	Green	On	Link
		Blink	Active
		Off	Power off or UnLink
Phone	Green	On	Registered
		Blink	In use
		Off	Power off or unregistered
REG	Green	On	Have new call/in call
		Off	Standby

(2) Side panel



Interface	Description
RST	Restore the factory settings button, long press 5S after the device to restore the factory settings
WAN	Connection to access the Internet
LAN1~LAN4	Connect to local network devices
PHONE	Connect to phone
DC5V/2A	Connect to power adapter
USB	Connect to U disk

2.1.3 G201N

Front panel



LED	Color	status	Description
POWER	Green	On	System is running normal
		Off	Power off
WAN	Green	On	Link
		Blink	Active
		Off	Power off or UnLink

Phone	Green	On	Registered
		Blink	In use
		Off	Power off or unregistered
REG	Green	On	Have new call/in call
		Off	Standby

Side panel:



Interface	Description
RST	Restore the factory settings button, long press 5S after the device to restore the factory settings
WAN	Connection to access the Internet
PHONE	Connect to phone
DC5V/2A	Connect to power adapter
USB	Connect to U disk

2.1.4 G201NW

Front panel:



LED	Color	status	Description
PWER	Green	On	System is running normal
		Off	Power off
WAN	Green	On	Link
		Blink	Active
		Off	Power off or UnLink
WLAN	Green	On	WIFI Enable
		Blink	Active
		Off	Power off or WIFI disable
Phone	Green	On	Registered
		Blink	In use
		Off	Power off or unregistered
WPS	Green	On	WPS on
		Blink	active
		Off	Power off or WPS off
REG	Green	On	Have new call/in call
		Off	Standby

Side panel:



Interface	Description
RST	Restore the factory settings button, long press 5S after the device to restore the factory settings
WAN	Connection to access the Internet
PHONE	Connect to phone
DC5V/2A	Connect to power adapter

USB	Connect to U disk
-----	-------------------

2.2 Hardware Installation

Before starting to configure the router, you have to connect your devices correctly.

Step 1. Connect Line port to land line jack with a RJ-11 cable.

Step 2. Connect the WAN port to a modem or switch or router or Internet with an Ethernet cable.

Step 3. Connect one port of 4 LAN ports to your computer with a RJ-45 cable. This device allows you to connect 4 PCs directly.

Step 4. Connect one end of the power cord to the power port of this device. Connect the other end to the wall outlet of electricity.

Step 5. Check the Power and WAN, LAN LEDs to assure network connections.

Warning: Please do not attempt to use other different power adapter or cut off power supply during configuration or updating the G201N4 VoIP home gateway. Using other power adapter may damage G201N4 and will void the manufacturer warranty.

Warning: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

3. IVR(Interactive Voice Response)

3.1 The method of configuring a home gateway

G201N4 can be configured three ways, as follows:

- (1) Use IVR
- (2) Use Web
- (3) Use Provision

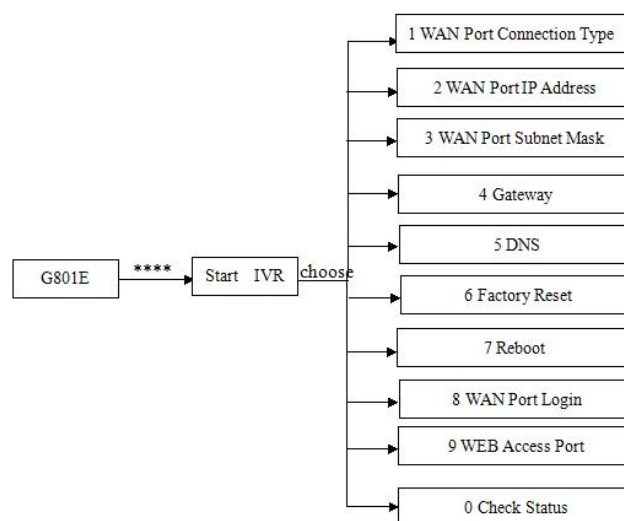
3.2 Start IVR

Customer can use the IVR function by referring to the following steps:

- (1) Connect analog phone to G201N's phone port, and connect the device well, off-hook and press the "****" key to start the IVR, then the user will hear a voice prompt device **"Please enter your option, one WAN Port"**.
- (2) Depending on the options, press any number among 0-9, the device will broadcast the corresponding contents, numbers 0-9 represent specific contents, see the chart below.
- (3) Each time after set successfully, the device will again play **"Please enter your option, one WAN Port"**

3.3 IVR description

The chart below lists the IVR requirements and detailed descriptions:



Operation Code	Contents
1	1) Pick up the phone and press "****" key to start the IVR; 2) Select "1", then the device will broadcast the current WAN port connection type; 3) To change the WAN port network connection type, users hear "Please enter password" and enter the correct password, and end with "#"; ◆ The IVR password is the same as the one of WEB login, the user simply press the corresponding key, and the matching table is the 3.4 Notice. ◆ For example: WEB page login password is "admin", the IVR password is "admin" too, the user enters "23646" and then can start to set the WAN port network connection type. 4) If you enter the correct password, the device broadcast "operation successful"; 5) To select the new WAN port network connection type, 1 represents the DHCP, 2 for the Static IP, please input number ends with "#". 6) When the device broadcast "operation successful", this means that the user has successfully set up the connection type of WAN port, The equipment will broadcast "Please enter your option, one WAN Port" again. ◆ Note: add '#' to assume after input password and select new WAN port connection type. ◆ If you want to quit the setup, please press the "* *" button.
2	1) Pick up the phone and press the "* * * *" key to start the IVR; 2) Press "2", and then device will broadcast the current WAN Port IP Address; 3) Enter the new IP address for the WAN port, and ends with a "#"; ◆ Please use "*" to replace ".", for example, the user can enter 192 * 168 * 20*168 to set up the new IP address 192.168.20.168 for WAN port. ◆ When enter the new IP address please ends with a "#". 4) If user has set up correctly, the device will broadcast "operation successful". Note: if user need to exit the setup, please press the "* *" button.
3	1) Pick up the phone and press the "* * * *" key to start the IVR; 2) Select "3", the equipment will broadcast the WAN port subnet mask; 3) Enter the new WAN port subnet mask, and ends with a "#"; ◆ Please use "*" to replace ".", for example, the user can enter 255 * 255 * 255 * 0 to set up the new subnet mask for the WAN port 255.255.255.0. ◆ When set the new subnet mask, please end with "#". 4) If the user has set up new subnet mask correctly, the device will broadcast "operation successful". Note: if user need to exit the setup, please press the "* *" button.
4	1) Pick up the phone and press the "* * * *" key to start the IVR; 2) Select "4", the equipment will broadcast the gateway; 3) Input the new gateway address and end with char '#'; ◆ Please use "*" to replace ".", for example, the user can enter 192 * 168 * 20*1 to set the new address of gateway to 192.168.20.1. ◆ When enter the new gateway address please ends with "#". 4) If the user has set up correctly, the device will broadcast "operation successful". Note: if user need to exit the setup, please press the "* *" button.
	1) Pick up the phone and press the "* * * *" key to start the IVR; 2) Select "5", the equipment will broadcast the current DNS;

5	3) Enter the new DNS address and ends with a "#"; ◆Please use "*" to replace ".", for example, the user can enter 192 * 168 * 20*1 to set up the new DNS to be 192.168.20.1. ◆When enter the new DNS please ends with a "#" 4) If the user set up correctly, the device will broadcast "operation successful". Note: if users need to exit the setup, please press the "* *" button.
6	1) Hook off and press "*****" key to start the IVR; 2) Select "6", the device will broadcast "Factory reset"; 3) User hears the machine report "Please enter password", the method of inputting password is the same as operation 1; ◆If user need to quit, press the "*" key. 4) If the user enters the correct password, the device will broadcast "operation successful", then the device settings are restored to factory condition; 5) Press "7" to reboot the device to make the changes take effect.
7	1) Hook off and press "*****" key to start the IVR; 2) Select the "7", the device will broadcast "Reboot"; 3) User hears the device report "Please enter password", the method of inputting password is the same as operation 1; 4) If the user inputs the correct password, the device will automatically restart. ◆ To exit, press the "*" key.
8	1) Pick up the phone and press "*****" key to start the IVR; 2) Select "8", the device will broadcast "WAN Port Login"; 3) User hears the machine report "Please enter password", the method of inputting password is the same as operation 1; ◆ To exit, press the "*" key. 4) If the user enters the correct password, the device will broadcast "Operation successful" 5) Equipment broadcasts "1enable 2disable", choose 1 or 2, and end with "#"; 6) If the settings are correct, the device will broadcast "Operation successful".
9	1) Pick up the phone and press "*****" key to start the IVR; 2) Select the "9", the device will broadcast "WEB Access Port"; 3) User hears the machine report "Please enter password", the method of inputting password is the same as operation 1; 4) If the user enters the correct password, the device will broadcast "Operation successful"; 5) The equipment broadcasts the current "WEB Access Port"; 6) Enter the new WEB access port number, and end with "#"; 7) After set successfully, the device will broadcast "Operation successful".
0	1) Pick up the phone and press "*****" key to start the IVR; 2) Select "0", the device will broadcast the current "Firmware version".

3.4 Notice

- ◆ In the voice menu, press "*" (star) to return to the up level menu.

- ◆ After configure some functions, please restart the phone to make the change to take effect.
- ◆ Each time you enter the IP address or subnet mask, please use the "*" to replace ".", and end with "#", for example, if you want to set the IP address to be 192.168.1.11, enter 192 * 168 * 1 * 11 #.
- ◆ You can enter the password by phone keypad, the matching table between number and letters as follows:
 - ◆ User to enter A, B, C, a, b, c, press the number "2";
 - ◆ To enter D, E, F, d, e, f, press the number "3";
 - ◆ To enter G, H, I, g, h, i, press the number "4";
 - ◆ TO enter J, K, L, j, k, l, press the number "5";
 - ◆ To enter M, N, O, m, n, o, press the number "6";
 - ◆ To enter P, Q, R, S, p, q, r, s, please press the number "7";
 - ◆ To enter T, U, V, t, u, v, press the number "8";
 - ◆ To enter W, X, Y, Z, w, x, y, z, press the number "9";
- ◆ Each time you finish entering the IP address or subnet mask, enter "#" indicates the end of input;
- ◆ When the WAN port network address type is set to static IP mode, user needs to set the IP address, subnet mask and default gateway; If set the device to work in DHCP mode, please make sure that DHCP Server is available in your exiting broadband connection to which WAN port of G201N4 is connected.

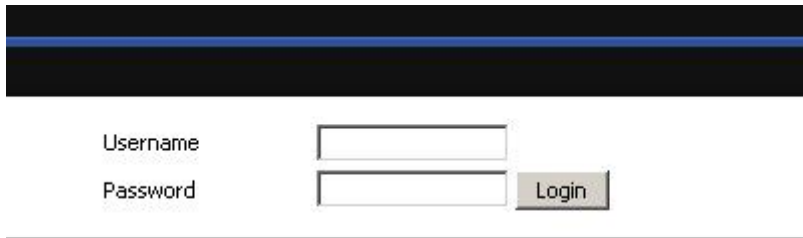
4. G201N webpage settings

4.1 Login WEB page

G201N has an embedded Web server that will respond to HTTP get/post requests. User can use a Web browser like Microsoft's IE to login and then configure G201N.

4.1.1 URL format

Login web page URL format: http://WAN port IP address, for example, if your home gateway's WAN port IP address is 192.168.20.199, please enter in the address bar, enter the appropriate address, and then the page will go to the device's login page, as shown below:



The screenshot shows a login page with a dark blue header bar. Below the header, there are two input fields: one for 'Username' and one for 'Password'. To the right of the 'Password' field is a 'Login' button. The page has a simple, functional design with a light gray background.

User can also login from device's LAN port, the default IP address of LAN port is 192.168.1.1.

Note: *The user can get the WAN port IP address using IVR.*

4.1.2 About Passwords

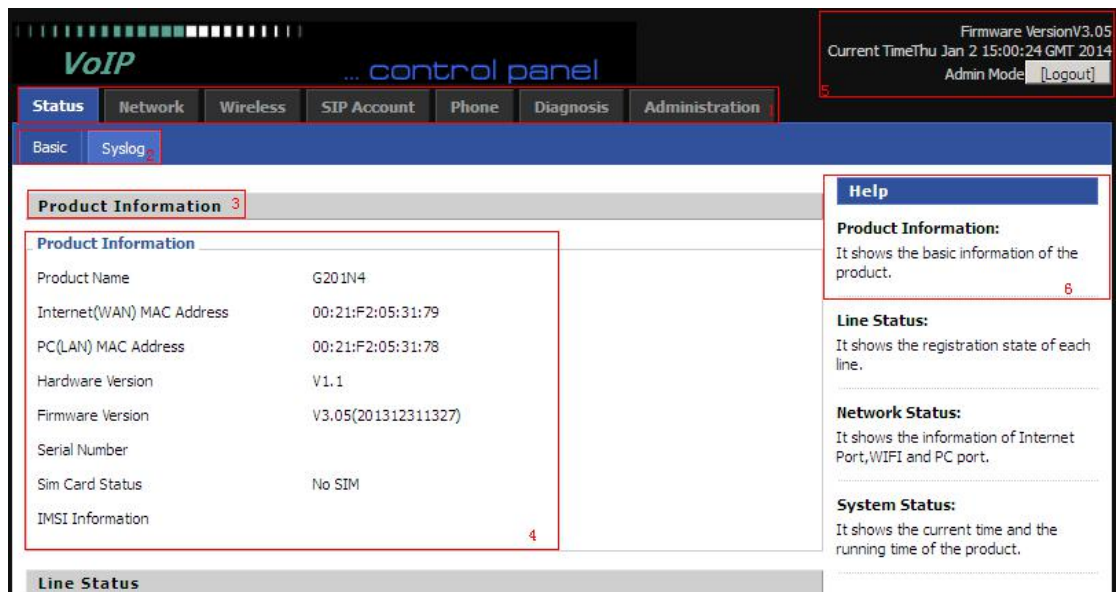
G201N has two login levels, namely administrator level and general user level, different standards have different passwords.

General level user can browse and configure some parameters; and administrator level user can configure all other parameters.

G201N's default administrator level username and password: admin/admin

G201N's default general user login username and password: user/user

4.2 WEB Page



Number	Name	Description
1	Navigation bar	Click navigation bar, many sub-navigation bar will appear in the place 2.
2	Sub-navigation bar	Click sub-navigation bar to enter to configuration webpage
3	Configuration title	The configuration title
4	Configuration bars	The configuration bars
5	Device Information	Display the firmware version, DSP version, Current Time, and login mode. Press Logout button to logout.
6	Help	Display the main information of configuration; user can get help from it directly.
Save Cancel Reboot		
	Every time making some changes, user should press the button to confirm and save the changes. After pressing the button, the red notice Please REBOOT to make the changes effective! will appear to notice user to reboot.	
	To cancel the changes	

Reboot	Press it to reboot G201N4
---------------------------------------	---------------------------

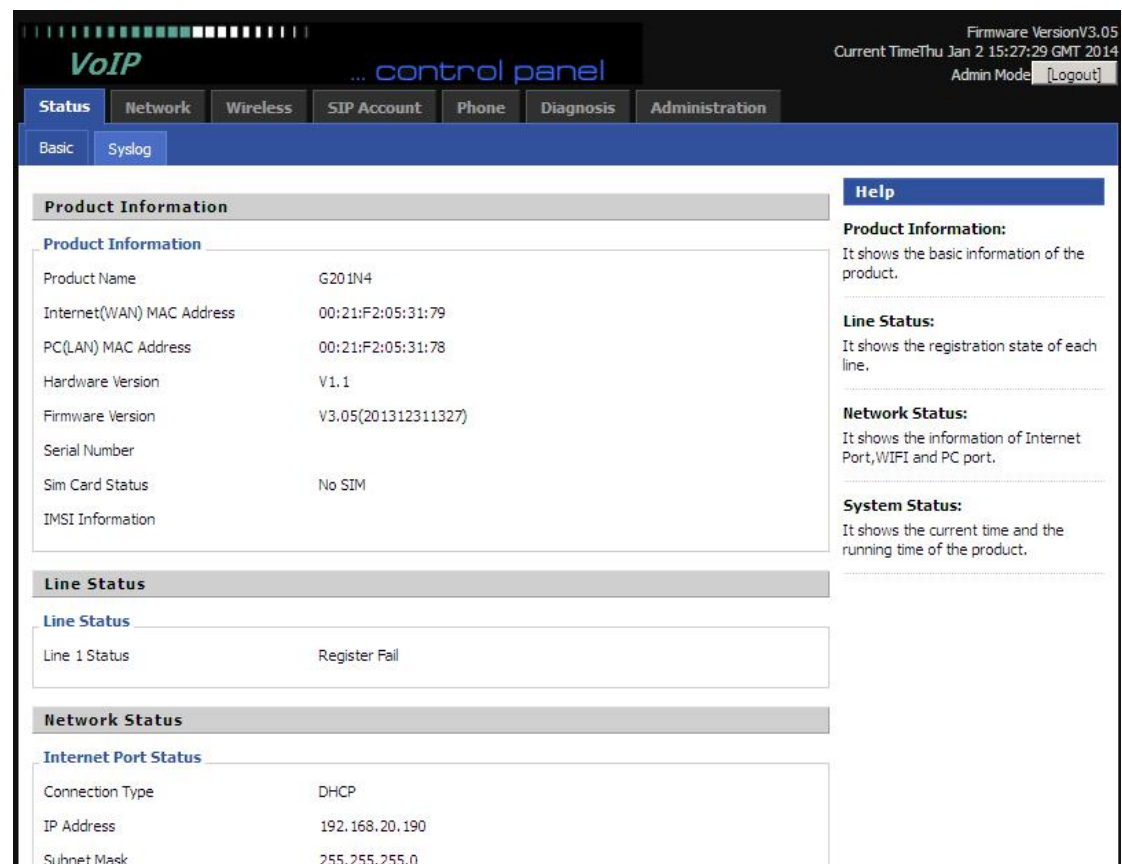
5 .Configure from web

5.1 Status

On this page, users can view the G201N4 system information and system log information. It is the first page which user will see firstly after login to WEB.

5.1.1 System Information

On this page, user can view the product information of G201N, SIP account status, network status and system status.



The screenshot displays the 'VoIP ... control panel' interface. At the top right, it shows 'Firmware Version V3.05', 'Current Time Thu Jan 2 15:27:29 GMT 2014', and 'Admin Mode [Logout]'. The main navigation bar includes 'Status', 'Network', 'Wireless', 'SIP Account', 'Phone', 'Diagnosis', and 'Administration'. The 'Status' tab is active, showing sub-tabs for 'Basic' and 'Syslog'. The 'Basic' sub-tab is selected, displaying three sections: 'Product Information', 'Line Status', and 'Network Status'. The 'Product Information' section lists details for the G201N4 device, including MAC addresses, hardware and firmware versions, and serial number. The 'Line Status' section shows 'Line 1 Status' as 'Register Fail'. The 'Network Status' section shows 'Internet Port Status' with DHCP connection, IP address 192.168.20.190, and subnet mask 255.255.255.0. A 'Help' sidebar on the right provides descriptions for 'Product Information', 'Line Status', 'Network Status', and 'System Status'.

Product Information	
Product Name	G201N4
Internet(WAN) MAC Address	00:21:F2:05:31:79
PC(LAN) MAC Address	00:21:F2:05:31:78
Hardware Version	V1.1
Firmware Version	V3.05(201312311327)
Serial Number	
Sim Card Status	No SIM
IMSI Information	

Line Status	
Line 1 Status	Register Fail

Network Status	
Internet Port Status	
Connection Type	DHCP
IP Address	192.168.20.190
Subnet Mask	255.255.255.0

Help
Product Information:
It shows the basic information of the product.

Line Status:
It shows the registration state of each line.

Network Status:
It shows the information of Internet Port, WIFI and PC port.

System Status:
It shows the current time and the running time of the product.

Default Gateway	192.168.20.1
Primary DNS	202.96.134.133
Secondary DNS	8.8.8.8

VPN Status

VPN Type	Disable
Initial Service IP	
Virtual IP Address	

LAN Port Status

IP Address	192.168.1.1
Subnet Mask	255.255.255.0
LAN1	Link Down
LAN2	Link Down
LAN3	Link Down
LAN4	Link Down

System Status

System Status

Current Time	Thu Jan 2 15:27:29 GMT 2014
Elapsed Time	55 mins

Refresh

5.1.2 System Log

In this configuration page, the user can view the system log, G201N4 system recordings contain important configuration information.

On this page, users can click the corresponding button to refresh, remove and save the relevant system information.

Status

Network

Wireless

SIP Account

Phone

Diagnosis

Administration

Basic

Syslog

Refresh Clear Save

<Sat Jan 1 08:00:35 2000> goahead: webs: Listening for HTTP requests at address

<Sat Jan 1 08:00:36 2000> snmpd[2971]: start

<Sat Jan 1 08:00:37 2000> looptask[3043]: start

<Sat Jan 1 08:00:41 2000> ipphone[3144]: ***system booting***

<Sat Jan 1 08:00:42 2000> ipphone[3143]: MiscellaneousTask: start work param_cc

<Sat Jan 1 08:00:42 2000> ipphone[3144]: SW:142(120106174008)

<Sat Jan 1 08:00:43 2000> ipphone[3213]: UISignalControl[30][9000][30][9000][s

<Sat Jan 1 08:00:48 2000> ipphone[3051]: TZ change to GMT-8.

<Sat Jan 1 08:01:09 2000> looptask[3043]: Wired Link Status Changed

<Sat Jan 1 08:01:16 2000> udhcpc[2064]: Received SIGTERM

<Sat Jan 1 08:01:16 2000> udhcpc[4020]: udhcpc (v1.12.1) started

<Sat Jan 1 08:01:17 2000> udhcpcd[2300]: Received a SIGTERM

<Sat Jan 1 08:01:18 2000> udhcpc[4020]: Sending select for 192.168.10.3...

<Sat Jan 1 08:01:18 2000> udhcpc[4020]: Lease of 192.168.10.3 obtained, lease t

<Sat Jan 1 08:01:19 2000> udhcpcd[540]: udhcpcd (v1.12.1) started

<Sat Jan 1 08:01:20 2000> ipphone[3051]: Wan If eth2.1 ip Change :0.0.0.0 -> 19

<Sat Jan 1 08:01:20 2000> ipphone[3144]: Local SIP Addr:192.168.10.3

<Sat Jan 1 08:01:20 2000> ipphone[3144]: Start Init Sip Stack...

<Sat Jan 1 08:01:21 2000> ipphone[3144]: 0 Resolve Sip OutboundProxy(cmcczj).

<Sat Jan 1 08:01:21 2000> ipphone[3144]: Do not need to resolve the domain

<Sat Jan 1 08:01:21 2000> ipphone[3144]: Resolve Outbound Proxy Address...

<Sat Jan 1 08:01:21 2000> ipphone[3144]: Resolve Alter OutBound Address...

<Sat Jan 1 08:01:21 2000> ipphone[3144]: SIP all register client init

<Sat Jan 1 08:01:21 2000> ipphone[3144]: 0 Set Outboundaddr [120.193.1.4].

<Sat Jan 1 08:01:21 2000> ipphone[3144]: SIP0(Enable) Contact:192.168.10.3:50

<Sat Jan 1 08:01:21 2000> ipphone[3144]: 1 Set Outboundaddr [].

<Sat Jan 1 08:01:21 2000> ipphone[3144]: SIP1(Disable) Contact:192.168.10.3:50

<Sat Jan 1 08:01:21 2000> ipphone[3144]: 2 Set Outboundaddr [].

Help

Syslog:

It shows the log of system

5.2 Network

5.2.1 WAN

1) Static:

In static mode, user should fill in the values of IP Address, Subnet Mask, Default Gateway, Primary DNS and Second DNS.

Status

Network

Wireless

SIP Account

Phone

Diagnosis

Administration

WAN

LAN

MAC Clone

VPN

DMZ

DDNS

Advance

Port Setting

Multi WAN

INTERNET

INTERNET

Connect Name

1_TR069_VOICE_INTERNET_R_VID_

IP Protocol Version

IPv4

INTERNET

Static

Route/Bridge Mode

Route

NAT Enable

Enable

DHCP Service Type

Pass Through

VLAN Mode

Disable

Static

IP Address

Subnet Mask

Default Gateway

DNS Mode

Manual

Primary DNS Address

Secondary DNS Address

Port Bind

Port_1

Wireless(SSID1)

Port_2

Wireless(SSID2)

Port_3

Wireless(SSID3)

Port_4

Wireless(SSID4)

Note : WAN connection can not be shared between the binding port , and finally bound port WAN connections bind operation will wash away before the other WAN connection to the port binding operation !

Help

INTERNET:

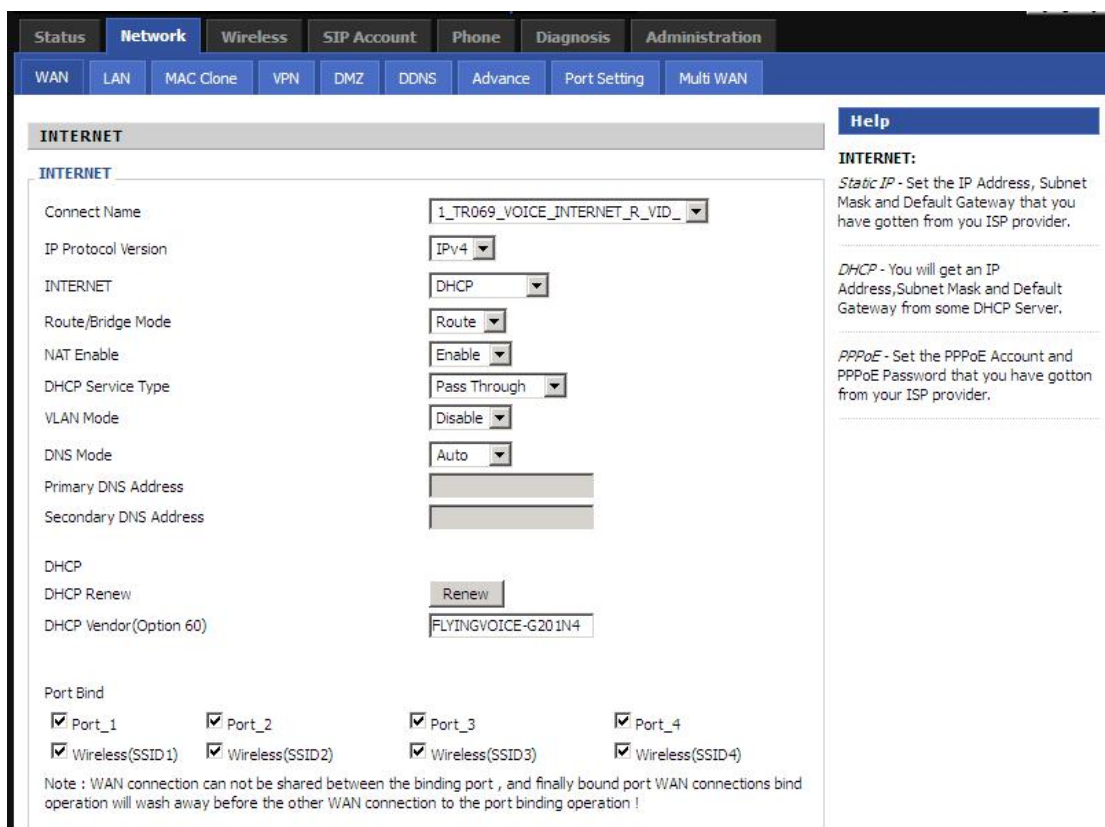
Static IP - Set the IP Address, Subnet Mask and Default Gateway that you have gotten from you ISP provider.

DHCP - You will get an IP Address, Subnet Mask and Default Gateway from some DHCP Server.

PPPoE - Set the PPPoE Account and PPPoE Password that you have gotten from your ISP provider.

Field Name	Description
Connect Name	Use keywords to indicate WAN port service model (the parameters are defined in Network--> multi-WAN page)
IP Protocol Version	Temporarily only one IPv4 option
Internet	Choose Static IP.
Route/Bridge Mode	Set network working mode, options are route and bridge.
NAT Enable	This requires multi-WAN port Page settings, please refer to 5.2.7
DHCP Service Type	Options are "pass through" "Snooping" and "the native service"
VLAN Mode	This requires multi-WAN port Page settings, please refer to 5.2.7
IP Address	The IP address of Internet port
Subnet Mask	The subnet mask of Internet port.
Default Gateway	The default gateway of Internet port.
DNS Mode	In Static mode, user need set the DNS manually.
Primary DNS Address	The primary DNS of Internet port.
Secondary DNS Address	The secondary DNS of Internet port.
Port Bind	Port bind is used for binding the service for different LAN ports and SSIDs.

2) DHCP Mode



The screenshot shows the 'INTERNET' configuration page under the 'Network' tab. The 'Connect Name' is set to '1_TR069_VOICE_INTERNET_R_VID_'. The 'IP Protocol Version' is set to 'IPv4'. The 'INTERNET' mode is set to 'DHCP'. The 'Route/Bridge Mode' is set to 'Route'. The 'NAT Enable' is set to 'Enable'. The 'DHCP Service Type' is set to 'Pass Through'. The 'VLAN Mode' is set to 'Disable'. The 'DNS Mode' is set to 'Auto'. The 'Primary DNS Address' and 'Secondary DNS Address' fields are empty. The 'DHCP Renew' button is visible. The 'DHCP Vendor (Option 60)' is set to 'FLYINGVOICE-G201N4'. The 'Port Bind' section shows checkboxes for Port_1, Port_2, Port_3, Port_4, Wireless (SSID1), Wireless (SSID2), Wireless (SSID3), and Wireless (SSID4), all of which are checked. A note at the bottom states: 'Note : WAN connection can not be shared between the binding port , and finally bound port WAN connections bind operation will wash away before the other WAN connection to the port binding operation !'.

Field Name	Description
Connect Name	Use keywords to indicate WAN1-WAN5 port service model(the parameters are defined in Network--> multi-WAN page)
IP Protocol Version	Temporarily only one IPv4 option
Internet	Choose DHCP
Route/Bridge Mode	Set network working mode, options are route and bridge.
NAT Enable	This requires multi-WAN port Page settings, please refer to 5.2.7
VLAN Mode	This requires multi-WAN port Page settings, please refer to 5.2.7
DNS Mode	From the automatic mode is selected and specify two DNS type. ♦ DNS type to Automatic, the home gateway from the DHCP server automatically obtain the preferred DNS and alternate DNS. ♦ DNS type is specified, the user should manually configure the preferred DNS and alternate DNS.
Primary DNS Address	The primary DNS of Internet port.
Secondary DNS Address	The secondary DNS of Internet port.
DHCP Renew	Refresh DHCP IP
DHCP Vendor (Option60)	Specify DHCP Vendor field Display the vendor and product name

Port Bind	Port bind is used for binding the service for different LAN ports and SSIDs.
------------------	--

3) PPPOE Mode

INTERNET

Connect Name: 1_TR069_VOICE_INTERNET_R_VID_

IP Protocol Version: IPv4

INTERNET: PPPoE

Route/Bridge Mode: Route

NAT Enable: Enable

DHCP Service Type: Pass Through

VLAN Mode: Disable

DNS Mode: Auto

Primary DNS Address:

Secondary DNS Address:

PPPoE

PPPoE Account:

PPPoE Password:

Confirm Password:

Service Name:

Leave empty to autodetect

Operation Mode: Keep Alive

Keep Alive Redial Period(0-3600s): 5

Port Bind

☒ Port_1 ☒ Port_2 ☒ Port_3 ☒ Port_4

☒ Wireless(SSID1) ☒ Wireless(SSID2) ☒ Wireless(SSID3) ☒ Wireless(SSID4)

Note : WAN connection can not be shared between the binding port , and finally bound port WAN connections bind operation will wash away before the other WAN connection to the port binding operation !

Field Name	Description
Connect Name	Use keywords to indicate the WAN1~WAN5 service mode (set relevant parameters in the WAN port settings page)
IP Protocol Version	Currently, only one IPv4 option
INTERNET	Choose PPPoE.
PPPoE Account	Assign a valid user name provided by the ISP
PPPoE Password	Assign a valid password provided by the ISP
Confirm Password	Enter your PPPoE password again
Operation Mode	Select the mode of operation, options are Keep Alive, On Demand and

	Manual: ♦ When the mode is Keep Alive, user need to set the 'keep alive redial period' values range from 0 to 3600s, the default setting is 5 minutes; ♦ When the mode is On Demand, user need to set the 'on demand idle time' value in the range of 0-60 minutes, the default setting is 5 minutes; ♦ When the mode is Manual, no need to do other settings.
Keep Alive Redial Period	Set the interval to send Keep Alive
Operation Mode On Demand On Demand Idle Time(0-60m) 5	
On Demand Idle Time	Set On demand transmission time interval
Port Bind	Port bind is used for binding the service for different LAN ports and SSIDs.

4) Bridge Mode

INTERNET

INTERNET

Connect Name

1_TR069_VOICE_INTERNET_R_VID_

IP Protocol Version

IPv4

INTERNET

Bridge

Route/Bridge Mode

Route

VLAN Mode

Disable

Port Bind

☒ Port_1

☒ Port_2

☒ Port_3

☒ Port_4

☒ Wireless(SSID1)

☒ Wireless(SSID2)

☒ Wireless(SSID3)

☒ Wireless(SSID4)

Note : WAN connection can not be shared between the binding port , and finally bound port WAN connections bind operation will wash away before the other WAN connection to the port binding operation !

Field Name	Description
Connect Name	Use keywords to indicate the WAN1~WAN5 service mode (set relevant parameters in the WAN port settings page)
IP Protocol Version	Currently, G201N4 only supports IPv4 mode.
INTERNET	Bridge: If user make the option be Bridge mode, the PC which is connected to G201N4's LAN port use PPPoE to connect Internet.
Port Bind	Port bind is used for binding the service for different LAN ports and SSIDs.

5.2.2 LAN

Status

Network

Wireless

SIP Account

Phone

Diagnosis

Administration

WAN

LAN

MAC Clone

VPN

DMZ

DDNS

Advance

Port Setting

Multi WAN

PC Port(LAN)

PC Port(LAN)

IP Address

192.168.1.1

Local Subnet Mask

255.255.255.0

Local DHCP Server

Enable

DHCP Start Address

192.168.1.2

DHCP End Address

192.168.1.254

DNS Mode

Auto

Primary DNS

192.168.1.1

Secondary DNS

202.96.134.133

Client Lease Time(0-86400s)

86400

DHCP Client List

DHCP Static Allotment

NO.	MAC	IP Address
1		
2		
3		

DNS Proxy

Disable

Field Name	Description
IP Address	Enter the IP address of the router on the local area network, all the IP addresses of the computers which are in the router's LAN must be in the same network segment with this address, and the default gateway of the computers must be this IP address. (The default is 192.168.1.1)
Local Subnet Mask	Enter the subnet mask to determine the size of the network (default is 255.255.255.0/24)
Local DHCP Server	If or not enable Local DHCP Server
DHCP Start Address	Enter a valid IP address as a starting IP address of the DHCP server, and if the router's LAN IP address is 192.168.1.1, starting IP address can be 192.168.1.2 or greater, but should be less than the ending IP address.
DHCP End Address	Enter a valid IP address as an end IP address of the DHCP server.

DNS Mode	Select DNS mode, options are Auto and Manual: ♦ When DNS mode is Auto, the device under LAN port will automatically obtains the preferred DNS and alternate DNS. ♦ When DNS mode is Manual, the user should manually configure the preferred DNS and alternate DNS
Primary DNS	Enter the preferred DNS address.
Secondary DNS	Enter the secondary DNS address.
Client Lease Time	This option defines how long the address will be assigned to the computer within the network. In that period, the server does not assign the IP address to the other computer.
DNS Proxy	Enable or disable; If enabled, the device will forward the DNS request of LAN-side network to the WAN side network

5.2.3 VPN

A VPN is a kind of technology which establish a private network based on the public network. VPN network connection between any two nodes does not require the end to end physical connection as the traditional private network; it is structured on the network platform provided by the public network services, the user dhome gateway are transmitted in the logical link. Through VPN technology, users can establish connection between any two devices which are connected to public network and transmit dhome gateway.

VPN Settings

Administration

VPN Enable PPTP ▼

Initial Service IP

User Name

Password

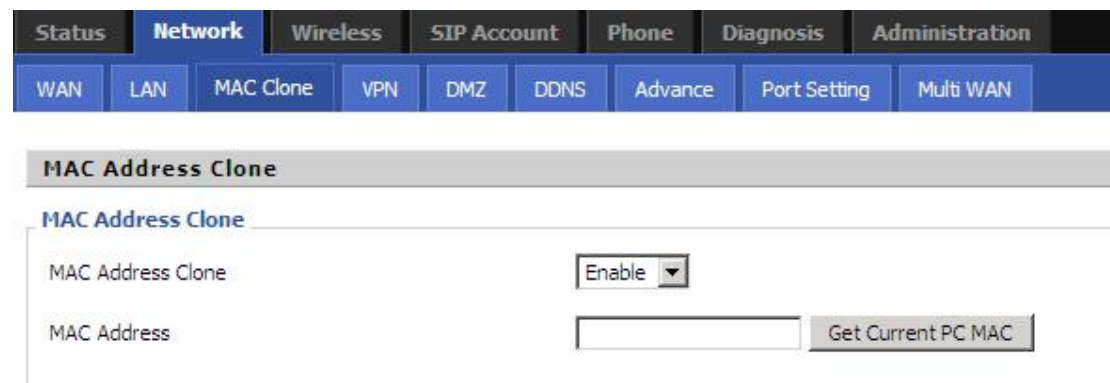
Field Name	Description
VPN Enable	If or not enable VPN.If enable, you can select PPTP and L2TP mode VPN.
Initial Service IP	Fill in the VPN server IP address
User Name	Fill in the authentication username
Password	Fill in the authentication password

5.2.4 MAC Clone

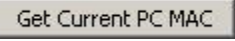
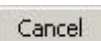
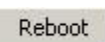
MAC address is the hardware address of the network device. Sometimes the network provider may set the network device's MAC bound to the network accounts. So when the user uses a new home gateway may not pass vendor certifications. In this case, the user can use the MAC clone function to clone your computer's physical address to the device's Internet port.

MAC address is the important parameter of the network device, the user should ensure that the MAC is correct, or the device cannot be used normally.

If you accidentally make the MAC address wrong, the user can login the web via LAN port. And then cloning the right MAC or resume the default settings.



Enabling MAC address cloning

1. Press the button  gets PC's MAC address
2. Press the button  to save your changes if users don't want to use a MAC clone, press the button  to cancel the changes
3. Press the button  to make the changes effective.

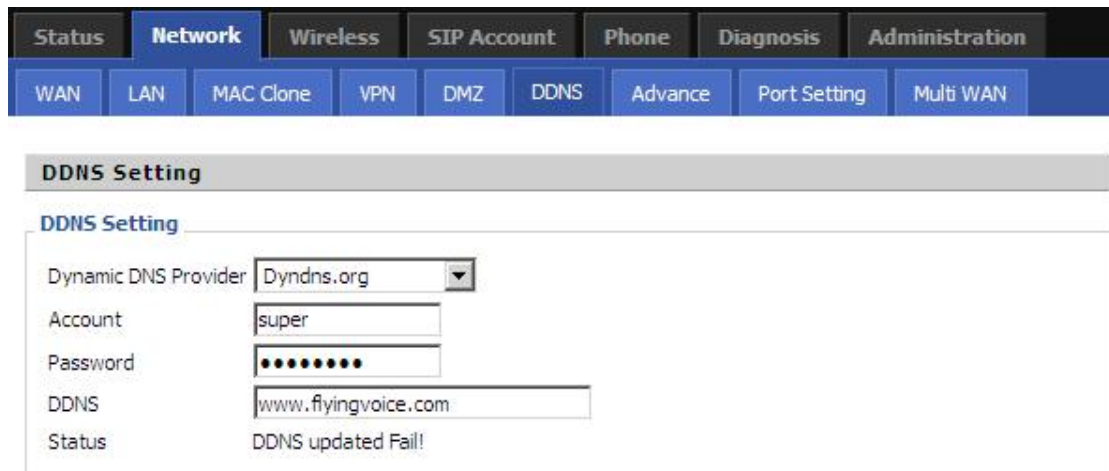
5.2.5 DMZ

Set the DMZ host in the local area network, the host will be fully exposed to the wide area network; unrestricted two-way communication can be achieved. Adding clients to the DMZ may bring local network insecurity, usually we do not recommend using this.



Field Name	Decryption
DMZ Enable	If or not enable DMZ
DMZ Host IP Address	Used to enter the DMZ host IP address

5.2.6 DDNS



DDNS Setting

DDNS Setting

Dynamic DNS Provider: Dyndns.org

Account: super

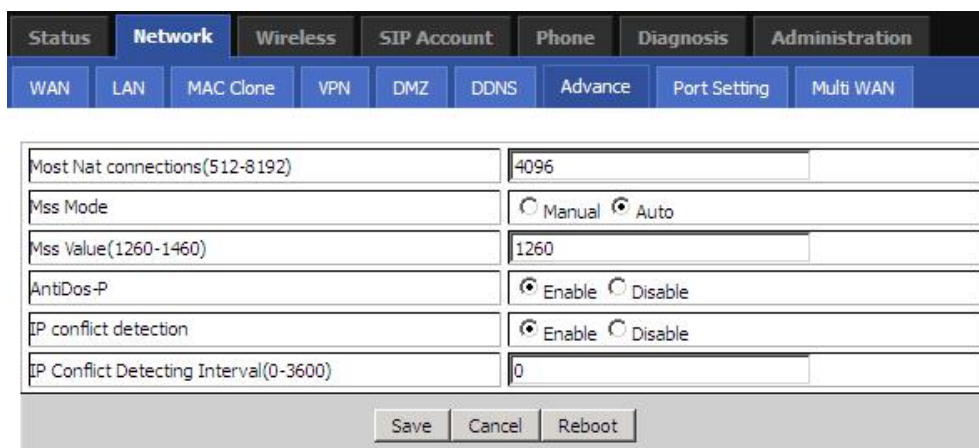
Password:

DDNS: www.flyingvoice.com

Status: DDNS updated Fail!

Field Name	Description
Dynamic DNS Provider	DDNS is enabled and select a DDNS service provider
Account	Enter the DDNS service account
Password	Enter the DDNS service account password
DDNS	Enter the DDNS domain name or IP address
Status	See if DDNS is successfully upgraded

5.2.7 Advance



Advance

Most Nat connections(512-8192): 4096

Mss Mode: ☐ Manual ☒ Auto

Mss Value(1260-1460): 1260

AntiDos-P: ☒ Enable ☐ Disable

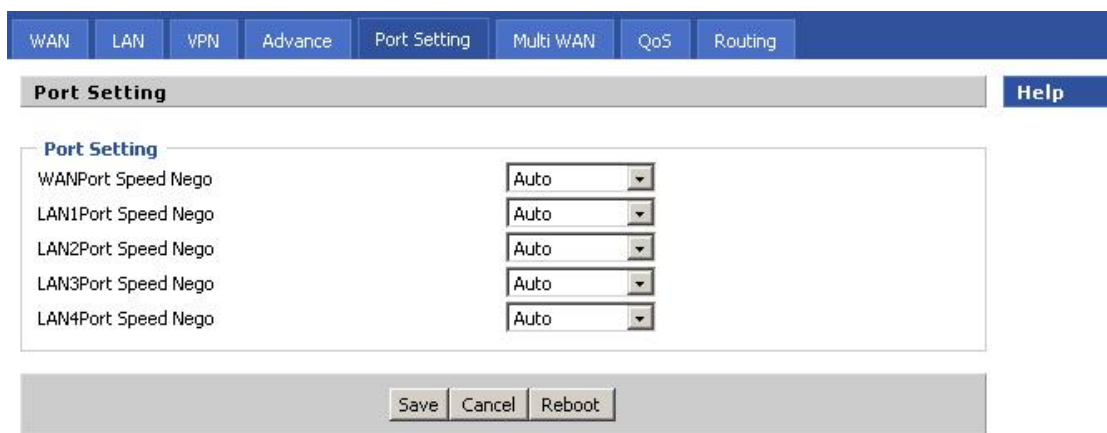
IP conflict detection: ☒ Enable ☐ Disable

IP Conflict Detecting Interval(0-3600): 0

Save Cancel Reboot

Field Name	Description
Most Nat connections	The largest value which the G201N4 can provide
Mss Mode	Choose Mss Mode from Manual and Auto
Mss Value	Set the value of TCP
AntiDos-p	You can choose to enable or prohibit
IP conflict detection	Select enable if enabled, phone IP conflict will have tips or prohibit;
IP conflict Detecting Interval	Detect IP address conflicts of the time interval

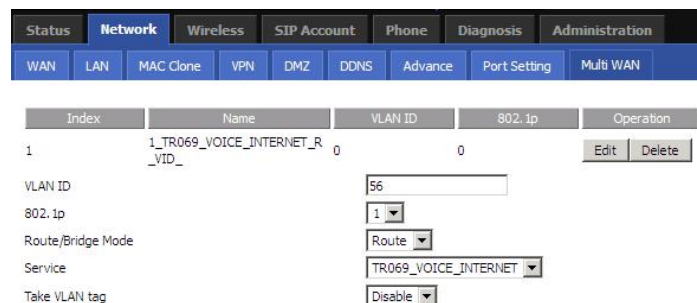
5.2.8 Port Setting



Field Name	Description
WAN Port Speed Nego	Auto-negotiation, options are Auto, 100M full, 100M half-duplex, 10M half and full, select port speed negotiation supported by methods.
LAN1~LAN4Port Speed Nego	Auto-negotiation, options are Auto, 100M full, 100M half, 10M half and 10M full, select port speed negotiation methods.

5.2.9 Multi WAN

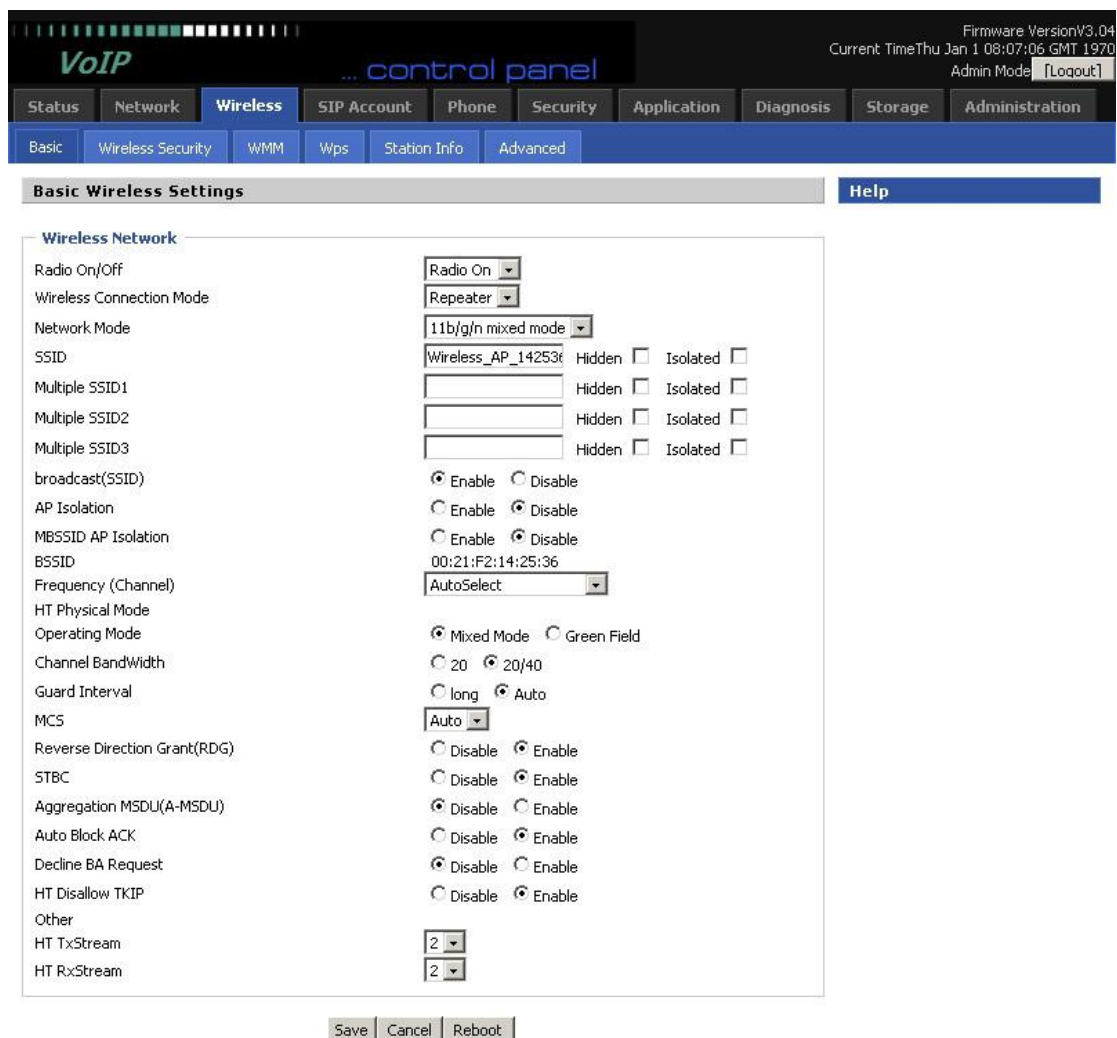
G201N4 support multi WAN function, user can set different vlans on WAN port.



Field Name	Description
VLAN ID	Configure VLAN ID
Route/Bridge Mode	Select Route mode or Bridge mode.
Service	There are these options VOICE, TR069, INTERNET, TR069-INTERNET, TR069-VOICE, and VOICE-INTERNET, and TR069-INTERNET-VOICE, and Other
Take VLAN tag	Whether or not carry VLAN tag

5.3 Wireless

5.3.1 Basic



Basic Wireless Settings

Wireless Network

Radio On/Off:

Wireless Connection Mode:

Network Mode:

SSID: ☐ Hidden ☐ Isolated

Multiple SSID1: ☐ Hidden ☐ Isolated

Multiple SSID2: ☐ Hidden ☐ Isolated

Multiple SSID3: ☐ Hidden ☐ Isolated

broadcast(SSID): ☒ Enable ☐ Disable

AP Isolation: ☐ Enable ☒ Disable

MBSSID AP Isolation: ☐ Enable ☒ Disable

BSSID:

Frequency (Channel):

HT Physical Mode: ☒ Mixed Mode ☐ Green Field

Channel BandWidth: ☐ 20 ☒ 20/40

Guard Interval: ☐ long ☒ Auto

MCS:

Reverse Direction Grant(RDG): ☐ Disable ☒ Enable

STBC: ☐ Disable ☒ Enable

Aggregation MSDU(A-MSDU): ☒ Disable ☐ Enable

Auto Block ACK: ☐ Disable ☒ Enable

Decline BA Request: ☒ Disable ☐ Enable

HT Disallow TKIP: ☐ Disable ☒ Enable

Other:

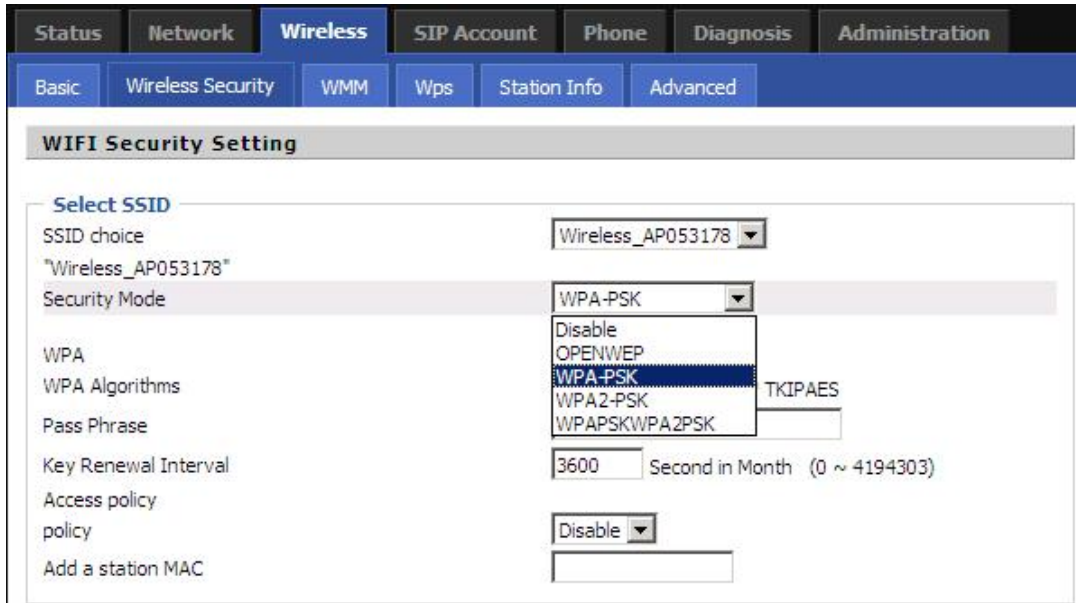
HT TxStream:

HT RxStream:

Field Name	Description
Radio on/off	Click the button to enable or disable wireless.
Wireless connection mode	According to the wireless client type, select one of these modes. Default is 11b/g/n mixed mode

SSID	It is the basic identity of wireless LAN. SSID can be any alphanumeric or a combination of special characters. It will appear in the wireless network access list.
Multiple SSID1~SSID3	G201N supports multiple SSIDs.
Hidden	After the item is checked, the SSID is no longer displayed in the search for the Wi-Fi wireless network connection list
Broadcast(SSID)	After initial State opening, the device broadcasts the SSID of the router to wireless network
AP Isolation	If AP isolation is enabled, the clients of the AP cannot access each other.
MBSSID AP Isolation	AP isolation among the devices which are not belong to this AP and along to, when the option is enabled, the devices which do not belong to this AP cannot access the devices which are within the AP.
BSSID	A group of wireless stations and a WLAN access point (AP) consists of a basic access device (BSS), each computer in the BSS must be configured with the same BSSID, that is, the wireless AP logo.
Frequency (Channel)	You can select Auto Select and channel 1/2/3/4/5/6/7/8/9/10/11.
HT Physical Mode Operating Mode	1. Mixed Mode: In this mode, the previous wireless card can recognize and connect to the Pre-N AP, but the throughput will be affected 2. Green Field: high throughput can be achieved, but it will affect backward compatibility, and security of the system
Channel Bandwidth	Select channel bandwidth, default is 20MHz and 20/40MHz.
Guard Interval	The default is automatic, in order to achieve good BER performance, you must set the appropriate guard interval
MCS	Position control signal, options are 0 to 32, the default is automatic
Reverse Direction (RDG)	You can choose to enable or disable this privilege

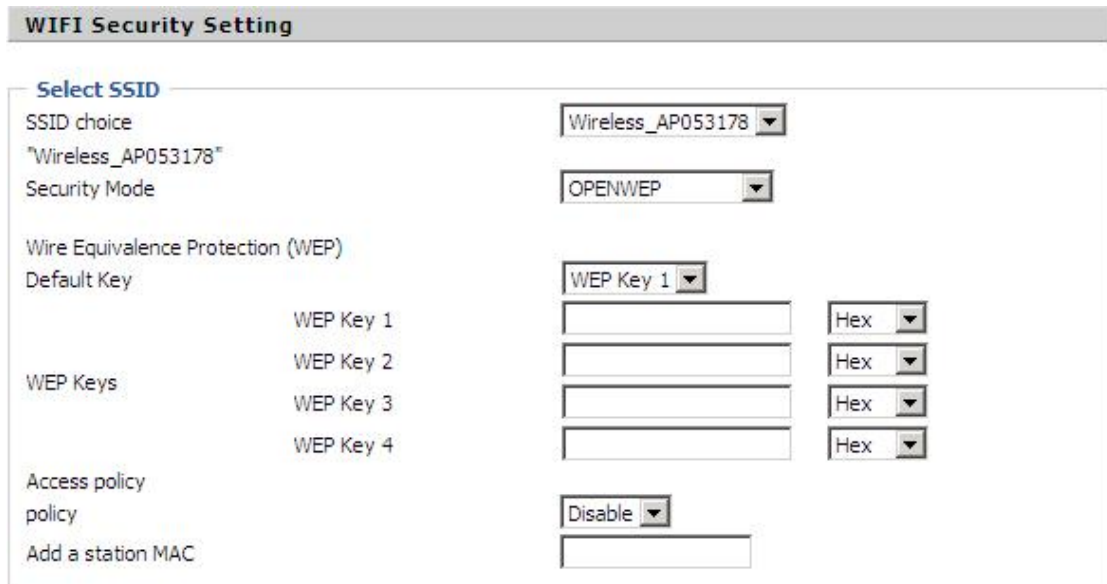
5.3.2 Wireless Security Setting



SSID choice	Select a SSID from SSID, multi SSID1, multi SSID2, multi-SSID3.
Security Mode	Select an appropriate encryption mode to increase the security and privacy features of wireless dhome gateway.

Select a different encryption mode, the web interface will be different, user can configure the corresponding parameters under the mode you select. Here are some common encryption method:

- 1)OPENWEP: A handshake way of WEP encryption, encryption via the WEP key:



WEP represents Wired Equivalent Privacy, which is a basic encryption method.

Security Mode	This is used to select one of the 4 WEP keys, key settings on the clients should be the same with this when connecting.
WEP Keys	Set the WEP key. A-64 key need 10 Hex characters or 5 ASCII characters; choose A-128 key need 26 Hex characters or 13 ASCII characters.

2) WPA-PSK, the router will use WPA way which is based on the shared key-based mode:

WIFI Security Setting

Select SSID

SSID choice: Wireless_AP053178

"Wireless_AP053178"

Security Mode: WPA-PSK

WPA Algorithms: ☐ TKIP ☒ AES ☐ TKIPAES

Pass Phrase: 12345678

Key Renewal Interval: 3600 Second in Month (0 ~ 4194303)

Access policy: Disable

Add a station MAC:

WPA Algorithms	This item is used to select the encryption of wireless dhome gateway algorithms, options are TKIP, AES and TKIPAES.
Pass Phrase	Setting up WPA-PSK security password.
Key Renewal Interval	Set the key scheduled update cycle, default is 3600s.

3) WPA2-PSK, the router will be based on shared key WPA2 modes:

WIFI Security Setting

Select SSID

SSID choice: Wireless_AP053178

"Wireless_AP053178"

Security Mode: WPA2-PSK

WPA Algorithms: ☐ TKIP ☒ AES ☐ TKIPAES

Pass Phrase: 12345678

Key Renewal Interval: 3600 Second in Month (0 ~ 4194303)

Access policy: Disable

Add a station MAC:

WPA Algorithms	This item is used to select the security algorithm for encryption of wireless dhome gateway, options are TKIP, AES, TKIPAES three
Pass phrase	Setting up WPA2-PSK security password
Key Renewal Interval	Set the key scheduled update cycle, default is 3600s

4) WPAPSKWPA2PSK manner is consistent with WPA2PSK settings

"Wireless_AP_142536"

Security Mode WPAPSKWPA2PSK

WPA

WPA Algorithms ☐ TKIP ☒ AES ☐ TKIPAES

Pass Phrase 1234567

Key Renewal Interval 3600 Second in Month (0 ~ 4194303)

WPA-PSK/WPA2-PSK WPA/WPA2 security type is actually a simplified version, which is based on the WPA shared key mode, higher security setting is also relatively simple, suitable for ordinary home users and small businesses.

WPA Algorithms	The dhome gateway is used to select the wireless security encryption algorithm options are TKIP, AES, TKIP / AES. 11N mode does not support TKIP algorithms.
Pass Phrase	Set WPA-PSK/WPA2-PSK security code
Key Renewal Interval	Set the key scheduled update cycle, default is 3600s

Wireless Access Policy:

Access policy

policy Reject

Add a station MAC Disable

Reject

Save Cancel Reboot

Field Name	Description
Access policy	Wireless access control is used to allow or prohibit the specified client to access to your wireless network based on the MAC address.
Policy	Prohibition: disable wireless access control policy; allow: only allow the clients in the list to access, rejected: block the clients in the list to access.
Add a station MAC	Enter the MAC address of the clients which you want to allow or

	prohibit
Example: Prohibit the device whose wireless network card MAC address is 00:1F: D0: 62: BA: FF's to access the wireless network, and allow other computers to access the network. Implementation: As shown, the Policy is Reject, add 00:1F: D0: 62: BA: FF to the MAC, click Save and reboot the device settings to take effect.	

5.3.3 Wi-Fi MultiMedia

WMM (Wi-Fi MultiMedia) is the QoS certificate of Wi-Fi Alliance (WFA). This provides you to configure the parameters of wireless multimedia; WMM allows wireless communication to define a priority according to the dhcpcd gateway type. To make WMM effective, the wireless clients must also support WMM.

WMM Parameters of Access Point						
	Aifsn	CWMin	CWMax	Txop	ACM	AckPolicy
AC_BE	3	15	63	0	☐	☐
AC_BK	7	15	1023	0	☐	☐
AC_VI	1	7	15	94	☐	☐
AC_VO	1	3	7	47	☐	☐

WMM Parameters of Station					
	Aifsn	CWMin	CWMax	Txop	ACM
AC_BE	3	15	1023	0	☐
AC_BK	7	15	1023	0	☐
AC_VI	2	7	15	94	☐
AC_VO	2	3	7	47	☐

5.3.4 Wi-Fi Protected Setup (WPS)

WPS is the newest Wi-Fi security settings(Wi-Fi Protected Setup), which is launched by Wi-Fi Alliance, this standard is mainly introduced to solve the problems that the steps of encrypting and authenticating the wireless network are too complicated, and these problems has long been there. By using the WPS button on G201N, we can freely enjoy quick encrypting the wireless network dhcpcd gateway, protecting illegal users from invading. On one hand, this can ensure the security of wireless networks, on the other hand, we can encrypt much easier.

WPS Setting

WPS Config
WPS

WPS Summary

WPS Current Status	Idle
WPS Configured	Yes
WPS SSID	Wireless_AP053178
WPS Auth Mode	WPA-PSK
WPS Encryp Type	AES
WPS Default Key Index	2
WPS Key(ASCII)	12345678
AP PIN	03403440

WPS Progress
WPS Mode ☒ PIN ☐ PBC
PIN

WPS Status

WPS:Idle

Field Name	Description
WPS Setting	If or not enable WPS function
WPS Summary	Display the current status of WPS, including current state, SSSID name, authentication methods, encryption type and the PIN code of this AP.
Generate	Generate a new PIN code
Reset OOB	G201N uses default security policy to allow other non-WPS users to access and apply.
WPS Mode	PIN: Enter the PIN code of the wireless device which accesses to this LAN in the following option, and press apply. Then G201N begins to send signals, turn on the PIN accessing method on the clients, and then it can access the wireless AP automatically. PBC: There are two ways to start PCB mode, user can press the PCB button directly on the device, or select PCB mode on the software and apply. Users can activate WPS connection in WPS mode through these

	two methods, only when the clients choose PCB access, the clients can connect the AP automatically.
WPS Status	WPS shows status in three ways: WSC: Idle WSC: Start WSC Process(begin to send messages) WSC: Success; this means clients have accessed the AP successfully, WPS connects well.

5.3.5 Wireless Client

This page shows user the clients' information which connects to the AP.

Wireless Network

MAC Address	Aid	PSM	MimoPS	MCS	BW	SGI	STBC
-------------	-----	-----	--------	-----	----	-----	------

5.3.6 Advance Wireless

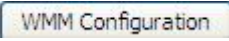
Advanced Wireless

BG Protection Mode	Auto
Beacon Interval	100 ms (range 20 - 999, default 100)
Data Beacon Rate (DTIM)	3 ms (range 1 - 255, default 3)
Fragment Threshold	2346 (range 256 - 2346, default 2346)
RTS Threshold	2347 (range 1 - 2347, default 2347)
TX Power	100 (range 1 - 100, default 100)
Short Preamble	☒ Enable ☐ Disable
Short Slot	☒ Enable ☐ Disable
Tx Burst	☒ Enable ☐ Disable
Pkt_Aggregate	☒ Enable ☐ Disable
IEEE 802.11H Support	☐ Enable ☒ Disable (only in A band)
Country Code	US (United States)
Wi-Fi Multimedia	
WMM Capable	☒ Enable ☐ Disable
APSD Capable	☐ Enable ☒ Disable
WMM Parameters	WMM Configuration
Multicast-to-Unicast Converter	
Multicast-to-Unicast	☐ Enable ☒ Disable

Save

Cancel

Reboot

Field Name	Description
BG Protection Mode	Select G protection mode, options are on, off and automatic.
Beacon Interval	The interval of sending a wireless beacon frame, within this range, it will send a beacon frame for the information of the surrounding radio network.
Dhomer gateway Beacon Rate(DTIM)	Specify the interval of transmitting the indication message, it is a kind of cut down operation, and it is used for informing the next client which is going to receive broadcast multi-cast.
Fragment Threshold	Specify the fragment threshold for the packet, when the length of the packet exceeds this value, the packet will be divided into multiple packets.
RTS Threshold	Specify the packet RTS threshold, when the packet exceeds this value, the router will send RTS to the destination site consultation
TX Power	Define the transmission power of the current AP, the greater it is, the stronger the signal is.
Short Preamble	Default is enable, G201N system is not compatible with traditional IEEE802.11, the operation rate can be 1,2Mbps
Short Slot	If or not enable short slot, default is enable, it is helpful in improving the transmission rate of wireless communication.
Tx Burst	One of the features of MAC layer, it is used to improve the fairness for transmitting TCP.
Pkt_Aggregate	It is a mechanism that is used to enhance the LAN, in order to ensure that the dhomer gateway packets are sent to the destination correctly.
IEEE802.11H support	If or not enable IEEE802.11H Support, default is disable.
Country Code	Select country code, options are CN, US, JP, FR, TW, IE, HK and NONE.
Wi-Fi Multimedia(WMM)	
WMM Capable	If or not enable WMM. WMM take effects when it is enabled.
APSD Capable	After enable this, it may affect wireless performance, but can play a role in energy-saving power
WMM Parameters	Press  , the webpage will jump to the configuration page of Wi-Fi multimedia.
Multicast-to-Unicast Converter	
Multicast-to-Unicast	If or not enable Multicast-to-Unicast, by default, it is disabled, you can enable it.

5.4 SIP Account

5.4.1 Line 1

In this webpage, user can configure the information on Line 1, including the following 4 parts: Basic, Audio Configuration, Supplementary Service Subscription and Advanced.

1) Basic

Set the basic information provided by your VOIP Service Provider, such as Phone Number, Account, password, SIP Proxy and so on.

Basic

Basic Setup

Line Enable

Enable

Peer To Peer

Disable

Proxy and Registration

Proxy Server

192.168.20.1

Proxy Port

5060

Outbound Server

Outbound Port

5060

Backup Outbound Server

Backup Outbound Port

5060

Subscriber Information

Display Name

Flyingvoice1

Phone Number

502

Account

502

Password

.....

Field Name	Description
Line Enable	If or not enable the line.
Peer To Peer	If or not enable PEER to PEER. If enable, SIP-1 will not send register request to SIP server; but in Status/ SIP Account Status webpage, Status is Registered; lines 1 can dial out, but the external line number cannot dialed line1.
Proxy Server	The IP address or the domain of SIP Server
Outbound Server	The IP address or the domain of Outbound Server
Backup Outbound Server	The IP address or the domain of Backup Outbound Server
Proxy port	SIP Service port, default is 5060
Outbound Port	Outbound Proxy's Service port, default is 5060
Backup Outbound Port	Backup Outbound Proxy's Service port, default is 5060

Display Name	The number will be displayed on LCD
Phone Number	Enter telephone number provided by SIP Proxy
Account	Enter SIP account provided by SIP Proxy
Password	Enter SIP password provided by SIP Proxy

2) Audio Configuration

Audio Configuration

Codec Setup

Audio Codec Type 1	G.711U	Audio Codec Type 2	G.711A
Audio Codec Type 3	G.729	Audio Codec Type 4	G.722
Audio Codec Type 5	G.723	G.723 Coding Speed	5.3k bps
Packet Cycle(ms)	20ms	Silence Supp	Disable
Echo Cancel	Enable	Auto Gain Control	Enable
T.38 Enable	Enable	T.38 Redundancy	Disable
T.38 CNG Detect Enable	Enable	gpmc attribute Enable	Disable

Field Name	Description
Audio Codec Type1	Choose the audio codec type from G.711U, G.711A, G.722, G.729, G.723
Audio Codec Type2	Choose the audio codec type from G.711U, G.711A, G.722, G.729, G.723
Audio Codec Type3	Choose the audio codec type from G.711U, G.711A, G.722, G.729, G.723
Audio Codec Type4	Choose the audio codec type from G.711U, G.711A, G.722, G.729, G.723
Audio Codec Type5	Choose the audio codec type from G.711U, G.711A, G.722, G.729, G.723
G.723 Coding Speed	Choose the speed of G.723 from 5.3kbps and 6.3kbps
Packet Cycle	The RTP packet cycle time, default is 20ms
Silence Supp	If or not enable silence
Echo Cancel	If or not enable echo cancel, default is enable
Auto Gain Control	If or not enable auto gain.
T.38 Enable	If or not enable T.38
T.38 Redundancy	If or not enable T.38 Redundancy
T.38 CNG Detect	If or not enable T.38 CNG Detect

Enable	
gmd attribute Enable	If or not enable gmd attribute.

3) Supplementary Service Subscription

Supplementary Service Subscription

Supplementary Services

Call Waiting	Enable	Hot Line	
MWI Enable	Enable	Voice Mailbox Numbers	
MWI Subscribe Enable	Disable	VMWI Serv	Enable
DND	Disable		

Speed Dial

Speed Dial 2	075526099365	Speed Dial 3	075526099129
Speed Dial 4	075586129677	Speed Dial 5	
Speed Dial 6		Speed Dial 7	
Speed Dial 8		Speed Dial 9	

Field Name	Description
Call Waiting	If or not enable Call Waiting
Hot Line	Fill in the hotline number. Pickup handset or press handsfree/headset button, the device will dial out the hotline number automatically.
MWI Enable	If or not enable MWI (message waiting indicate). If the user needs to user voice mail, please enable this feature.
Voice Mailbox Numbers	Fill in the voice mailbox phone number, Asterisk platform, for example, its default voice mail is *97
VMWI Serv	If or not enable VMWI service.
DND	If or not enable DND (do not disturb). If enable, any phone call cannot arrive at the device; default is disable.
Speed Dial	Enter the speed dial phone numbers. Dial *74 to active speed dial function. Then press the speed dial numbers, for example, press 2, phone will dial 075526099365 directly.

4) Advanced

Advanced

Advanced Setup

Domain Name Type	Enable	Carry Port Information	Disable
Signal Port	5060	DTMF Type	RFC2833
RFC2833 Payload(>=96)	101	Register Refresh Interval(sec)	3600
RTP Port	0 (= =0 auto select)	Cancel Message Enable	Disable
Session Refresh Time(sec)	0	Refresher	UAC
Prack Enable	Disable	SIP OPTIONS Enable	Disable
Primary SER Detect Interval	0	Max Detect Fail Count	3
Keep-alive Interval(10-60s)	15	Anonymous Call	Disable
Anonymous Call Block	Disable	Proxy DNS Type	A Type
Use OB Proxy In Dialog	Disable	Reg Subscribe Enable	Disable
Dial Prefix		User Type	IP
Hold Method	ReINVITE	Request-URI User Check	Disable
Only Recv Request From Server	Disable	Server Address	
SIP Received Detection	Disable		

Field Name	Description
Domain Name Type	If or not use domain name in the SIP URI.
Carry Port Information	If or not carry port information in the SIP URI.
Signal Port	The local port of SIP protocol, default is 5060.
DTMF Type	Choose the DTMF type from Inbound, RFC2833 and SIP INFO.
RFC2833 Payload(>=96)	User can use the default setting.
Register Refresh Interval	The interval between two normal Register messages. You can use the default setting.
RTP Port	Set the port to send RTP. The device will select one idle port for RTP if you set “0”; otherwise use the value which user sets.
Cancel Message Enable	When you set enable, an unregistered message will be sent before registration, while you set disable, unregistered message will not be sent before registration. You should set the option for different Proxy.
Session Refresh Time(sec)	Time interval between two sessions, you can use the default settings.
Refresher	Choose refresher from UAC and UAS.
Prack Enable	If or not enable prack.

SIP OPTIONS Enable	When you set enable, the device will send SIP-OPTION to the server, instead of sending periodic Hello message. The sending interval is Keep-alive interval.
Primary SER Detect Interval	Test interval of the primary server, the default value is 0, it represents disable.
Max Detect Fail Count	Interval of detection of the primary server fail; the default value is 3, it means that if detect 3 times fail; the device will no longer detect the primary server.
Keep-alive Interval(10-60s)	The interval that the device will send an empty packet to proxy.
Anonymous Call	If or not enable anonymous call.
Anonymous Call Block	If or not enable anonymous call block.
Proxy DNS Type	Set the DNS server type, choose from A type and DNS SRV.
Use OB Proxy In Dialog	If or not use OB Proxy In Dialog.
Reg Subscribe Enable	If enable, subscribing will be sent after registration message, if not enable, do not send subscription.
Dial Prefix	The number will be added before your telephone number when making calls.
User Type	Choose the User Type from IP and Phone.
Hold Method	Choose the Hold Method from ReINVITE and INFO.
Request-URI User Check	If or not enable the user request URI check.
Only Recv request from server	If or not enable the only receive request from server.
Server Address	The IP address of SIP server.
SIP Received Detection	If or not enable SIP Received Detection, if enable, use it to confirm the public network address of the device.

5.4.2 SIP setting

1)SIP Parameters:

SIP Parameters

SIP Parameters

SIP T1	500	MS	Max Forward	70
SIP Reg User Agent Name			Max Auth	2
Mark All AVT Packets	Enable		RFC 2543 Call Hold	Enable
SRTP	Disable		SRTP Prefer Encryption	AES_CM
Service Type	Common			

2) NAT Traversal

NAT Traversal

NAT Traversal	Disable	STUN Server Address	
NAT Refresh Interval(sec)	60	STUN Server Port	3478

Field Name	Description
NAT Traversal	1. If or not enable NAT Traversal 2. G201N4 supports STUN Traversal; If you want to traverse NAT/Firewall, select the STUN.
STUN Server Address	Add the correct STUN service provider IP address.
NAT Refresh Interval	Set NAT Refresh Interval, default is 60s.
STUN Server Port	Set STUN Server Port, default is 5060.

5.4.3 QoS

Qos services can improve the quality of voice applications

Line 1	SIP Settings	VoIP QoS
--------	--------------	----------

QoS Settings

Layer 3 QoS

SIP QoS(0-63)	0
RTP QoS(0-63)	0

Field Name	Description
SIP /RTP QoS	The default value is 0,you can set a range of values is 0~63

5.5 Phone

This page user can set preferences for home gateways, and call logs.

Status	Network	Wireless	SIP Account	Phone	Diagnosis	Administration
Preferences	Dial Plan	Phonebook	Call Log			

5.5.1 Preferences

1) Volume Settings

Volume Settings

Handset Input Gain	5	Handset Volume	5
--------------------	---	----------------	---

Field Name	Description
Handset Input Gain	Adjust the handset input gain from 0 to 7.
Handset Volume	Adjust the output gain from 0 to 7.

2) Regional

Regional

Tone Type	USA		
Dial Tone			
Busy Tone			
Off Hook Warning Tone			
Ring Back Tone			
Call Waiting Tone			
Min Jitter Delay(ms)	0	Max Jitter Delay(ms)	80
Ringing Time(sec)	60		
Regional Ring Waveform	Sinusoid	Regional Ring Voltage	70
Regional Ring Frequency	25	VMWI Ring Splash Len(sec)	0.5
Flash Time Max(sec)	0.9	Flash Time Min(sec)	0.1

Field Name	Description
Tone Type	Choose tone type form China, US, Hong Kong and so on.
Dial Tone	Dial Tone
Busy Tone	Busy Tone
Off Hook Warning Tone	Off Hook warning tone
Ring Back Tone	Ring back tone
Call Waiting Tone	Call waiting tone

Min Jitter Delay	The Min value of home gateway's jitter delay, home gateway is an adaptive jitter mechanism.
Max Jitter Delay	The Max value of home gateway's jitter delay, home gateway is an adaptive jitter mechanism.
Ringing Time	How long G201N4 will ring when there is an incoming call.
Regional Ring Waveform	Select regional ring waveform, options are Sinusoid and Trapezoid, the default Sinusoid.
Regional Ring Voltage	Set ringing voltage, the default value is 70
Regional Ring Frequency	Set ring frequency, the default value is 25
VMWI Ring Splash Len(sec)	Set the VMWI ring splash length, default is 0.5s.
Flash Time Max(sec)	Set the Max value of the device's flash time, the default value is 0.9
Flash Time Min(sec)	Set the Min value of the device's flash time, the default value is 0.1

3) Features and Call Forward

Features

All Forward
Busy Forward

No Answer Forward

Call Forward

All Forward
Busy Forward

No Answer Forward
No Answer Timeout

Feature Code

Hold Key Code
Conference Key Code

Transfer Key Code
IVR Key Code

R Key Enable
R Key Cancel Code

R Key Hold Code
R Key Transfer Code

R Key Conference Code

Page/parameter		Description
Features	All Forward	If or not enable forward all calls
	Busy Forward	If or not enable busy forward.
	No Answer Forward	If or not enable no answer forward.
Call Forward	All Forward	Set the target phone number for all forward. The device will forward all calls to the phone number immediately when there is an incoming call.
	Busy Forward	The phone number which the calls will be forwarded to

		when line is busy.
	No Answer Forward	The phone number which the call will be forwarded to when there's no answer.
	No Answer Timeout	The seconds to delay forwarding calls, if there is no answer at your phone.
Feature Code	Hold key code	Call hold signatures, default is *77.
	Conference key code	Signature of the tripartite session, default is *88.
	Transfer key code	Call forwarding signatures ,default is *98.
	IVR key code	Signatures of the voice menu, default is ****.
	R key enable	If or not enable R key way call features.
	R key cancel code	Set the R key cancel code, option are ranged from R1 to R9, default value is R1.
	R key hold code	Set the R key hold code, options are ranged from R1 to R9, default value is R2.
	R key transfer code	Set the R key transfer code, options are ranged from R1 to R9, default value is R4.
	R key conference code	Set the R key conference code, options are ranged from R1 to R9, default value is R3.
	Speed Dial Code	Speed dial code, default is *74.

4) Miscellaneous

Miscellaneous

Codec Loop Current	26	Impedance Matching	US PBX,Korea,Taiwan(600)
CID Service	Enable	CWCID Service	Disable
Dial Time Out(IDT)	5	Call Immediately Key	#
ICMP Ping	Disable	Escaped char enable	Disable

Field Name	Description
Codec Loop Current	Set off-hook loop current, default is 26
Impedance Matching	Set impedance matching, default is US PBX,Korea,Taiwan(600).
CID service	If or not enable displaying caller ID; If enable, caller ID is displayed when there is an incoming call or it won't be displayed. Default is enable.
CWCID Service	If or not enable CWCID. If enable, the device will display the waiting call's caller ID, or it won't display. Default is disable.
Dial Time Out	How long G201N4 will sound dial out tone when G201N4 dials a number.
Call Immediately Key	Choose call immediately key form * or #.

ICMP Ping	If or not enable ICMP Ping. If enable this option, home gateway will ping the SIP Server every interval time, otherwise, It will send “hello” empty packet to the SIP Server.
Escaped char enable	Open special character translation function; if enable, when you press the # key, it will be translated to 23%, when disable, it is just #

5.5.2 Dial Plan

1) Parameters and Settings

General

Dial Plan
Enable

No.	Line	Digit Map	Action	Move Up	Move Down	
1	Line1	*.0[3-9]xxxxxxxx5x	Dial Out	▲	▼	☐
2	Line1	*.0[3-9]xx[019]x.5	Dial Out	▲	▼	☐
3	Line1	*.02xxxxxxxx	Dial Out	▲	▼	☐
4	Line1	*.02x[019]x.5	Dial Out	▲	▼	☐
5	Line1	*.010xxxxxxxx	Dial Out	▲	▼	☐
6	Line1	*.010[019]x.5	Dial Out	▲	▼	☐
7	Line1	*.00xx5x.5	Dial Out	▲	▼	☐

Line
Line1

Digit Map

Action
Deny

OK Cancel

Save Cancel Reboot

Field Name	Description
Dial Plan	If or not enable dial plan.
Line	Set the line.
Digit Map	Fill in the sequence used to match input number The syntactic, please refer to the following Dial Plan Syntactic
Action	Choose the dial plan mode from Deny and Dial Out.

	Deny means G201N4 will reject the matched number, while Dial Out means G201N4 will dial out the matched number.
Move Up	Press it to move up.
Move Down	Press it to move down.

2) Adding one dial plan:

Step 1. Enable Dial Plan

Step 2. Click **Add** button, and the configuration table

Step 3. Fill in the value of parameters.

Step 4. Press **OK** button to end configuration.

Step 5. Press **Save** button to save changes

3) Dial Plan Syntactic

No.	String	Description
1	0 1 2 3 4 5 6 7 8 9 * #	Legal characters
2	x	Lowercase letter x stands for one legal character
3	[sequence]	To match one character form sequence. For example: [0-9]: match one digit form 0 to 9 [23-5*]: match one character from 2 or 3 or 4 or 5 or *
4	x.	Match to $x^0, x^1, x^2, x^3, \dots, x^n$ For example: “01.”:can match “0”, “01”, “011”, “0111”, ..., “01111...”
5	<diald:substituted>	Replace diald with substituted. For example: <8:1650>123456 : input is “85551212”, output is “16505551212”
6	x,y	Make outside dial tone after dialing “x”, stop until dialing character “y” For example: “9,1xxxxxxxxx”:the device reports dial tone after inputting “9”, stops tone until inputting “1” “9,8,010x”: make outside dial tone after inputting “9”, stop tone until inputting “0”
7	T	Set the delayed time. For example: “<9:111>T2”: The device will dial out the matched number “111” after 2 seconds.

5.5.3Phonebook

In this page, user can upload or download phonebook or blacklist file, and can add or delete or edit phonebook and blacklist one by one.

1)Upload&&Download phonebook

Phonebook Upload && Download

Phonebook Upload && Download

Local File

Click to select the phonebook file and click to upload it to G201N4;

Click to save the phonebook file to your local computer.

2)Upload&&Download Blacklist

Blacklist Upload && Download

Blacklist Upload && Download

Local File

Click to select the blacklist file and click to upload it to G201N4; Click

to save the blacklist file to your local computer.

3)Phonebook

Phonebook

Index	Name	Number	Ring	
1	Operator	500	Bell Type 1	☐
2	Sales	510	Bell Type 2	☐
3	Support	520	Bell Type 3	☐
4	R&D	530	Bell Type 4	☒

Select one contact, click Edit to edit it, click Delete to delete, and click Move to blacklist to move the contact to blacklist.

Name	Lily
Number	18625947562
Ring	Bell Type 4
OK Cancel	

Click Add, user can add one new contact, as the upon picture, enter the contact name and phone number, and select one ring tone, there are ten kinds of different ring tones to choose, click OK to confirm and click Cancel to cancel.

4)Blacklist

Blacklist			
Index	Name	Number	
1	Rob	12345	☐
2	Henry	123456	☐

Edit	Add	Delete	Move to phonebook
-------------------------------------	------------------------------------	---------------------------------------	--

Select one contact and click edit to change the information, click delete to delete the contact, click Move to phonebook to move the contact to phonebook.

Click Add to add one blacklist, enter the name and phone number, click OK to confirm and click cancel to cancel.

Name	Ded
Number	123589
OK Cancel	

5.5.4 Call Log

To view the call log information such as redial list (incoming call), answered call and missed cal

1) Redial List

Redial List				
Index	NUMBER	Start Time	Duration	☐
1	123	10/28 10:30	00:00:07	☐
2	010123	10/28 12:02	00:00:01	☐
3	010123	10/28 16:16	00:00:00	☐
4	010123	10/28 16:16	00:00:00	☐
5	123	10/28 16:20	00:00:13	☐
6	123	10/28 16:21	00:00:34	☐
7	123	10/29 10:50	00:00:10	☐
8	123	10/29 14:36	00:00:01	☐
9	123	10/29 15:05	00:00:23	☐
10	123	10/29 15:06	00:00:05	☐
11	123	10/29 15:07	00:00:01	☐

2) Answered Calls

Answered Calls				
Index	NUMBER	Start Time	Duration	☐
1	22222	10/21 09:56	00:00:40	☐
2	110	10/21 18:14	00:00:03	☐
3	110	10/21 18:15	00:00:07	☐
4	sipp	10/23 13:40	00:00:06	☐
5	sipp	10/24 18:05	00:00:05	☐
6	sipp	10/24 18:05	00:00:05	☐
7	sipp	10/25 15:38	00:00:03	☐
8	sipp	10/25 15:42	00:00:06	☐
9	sipp	10/25 15:55	00:00:10	☐
10	sipp	10/25 16:03	00:00:02	☐
11	sipp	10/25 16:15	00:00:02	☐

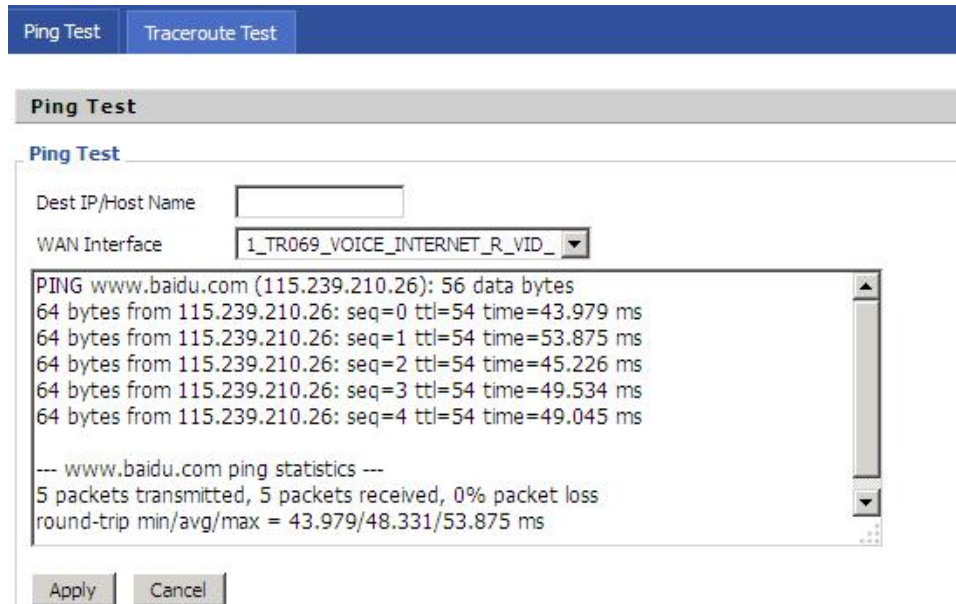
3) Missed Call

Missed Calls				
Index	NUMBER	Start Time	Duration	☐
1	110	10/21 09:50	00:00:03	☐
2	555	10/22 12:04	00:00:03	☐

5.6 Diagnosis

In this page, user can do ping test and traceroute test to diagnose the device's connection status.

1) Ping Test



The screenshot shows the 'Ping Test' tab selected in the 'Diagnosis' section. The 'Dest IP/Host Name' field is empty. The 'WAN Interface' dropdown menu is set to '1_TR069_VOICE_INTERNET_R_VID_'. The test results for www.baidu.com (115.239.210.26) are displayed in a text area:

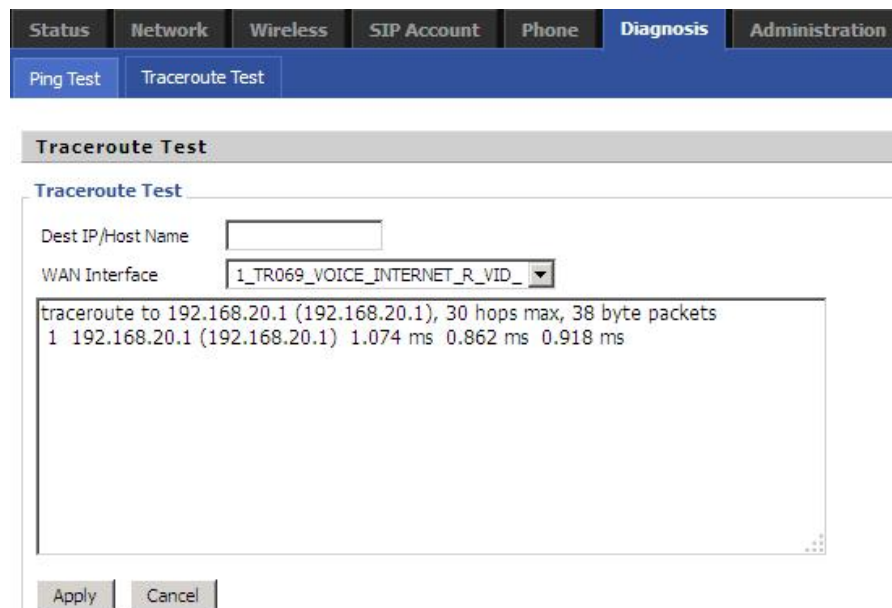
```
PING www.baidu.com (115.239.210.26): 56 data bytes
64 bytes from 115.239.210.26: seq=0 ttl=54 time=43.979 ms
64 bytes from 115.239.210.26: seq=1 ttl=54 time=53.875 ms
64 bytes from 115.239.210.26: seq=2 ttl=54 time=45.226 ms
64 bytes from 115.239.210.26: seq=3 ttl=54 time=49.534 ms
64 bytes from 115.239.210.26: seq=4 ttl=54 time=49.045 ms

--- www.baidu.com ping statistics ---
5 packets transmitted, 5 packets received, 0% packet loss
round-trip min/avg/max = 43.979/48.331/53.875 ms
```

At the bottom of the form are 'Apply' and 'Cancel' buttons.

Enter the destination IP or host name, and then click Apply, device will perform ping test.

2) Traceroute Test



The screenshot shows the 'Traceroute Test' tab selected in the 'Diagnosis' section. The 'Dest IP/Host Name' field is empty. The 'WAN Interface' dropdown menu is set to '1_TR069_VOICE_INTERNET_R_VID_'. The test results for 192.168.20.1 are displayed in a text area:

```
traceroute to 192.168.20.1 (192.168.20.1), 30 hops max, 38 byte packets
1 192.168.20.1 (192.168.20.1) 1.074 ms 0.862 ms 0.918 ms
```

At the bottom of the form are 'Apply' and 'Cancel' buttons.

Enter the destination IP or host name, and then click Apply, device will perform traceroute test.

5.7 Administration

Use can manage the device in these webpage; you can configure the Time/Date, password, web access, system log and associated configuration TR069

5.7.1 Management

You can configure the value of Time/Date, password, web access, and system log and so on.

1) Save config file

Save Config File

Config File Upload && Download

Local File

Field Name	Description
Config file upload and download	Upload: click on browse, select file in the local, press the upload button to begin uploading files
	Download: click to download, and then select contains the path to download the configuration file

2) Administrator settings

Administrator Settings

Password Reset

User Type

New User Name

New Password

Confirm Password

Language

Language

Web Access

Remote Web Login

Web Port

Web Idle Timeout(0 - 60m)

Allowed Remote IP(IP 1,IP2,...)

Telnet Access

Remote Telnet

Telnet Port

Field Name	Description
User type	Choose the user type from admin user and normal user and basic user.
New User Name	You can modify the user name, set up a new user name

New Password	Input the new password
Confirm Password	Input the new password again
Language	Select the language for the web, the device support Chinese, English, and Spanish and so on.
Remote Web Login	If or not enable remote Web login
Web Port	Set the port value which is used to login from Internet port and PC port, default is 80.
Web Idle timeout	Set the Web Idle timeout time. The webpage can be logged out after Web Idle Timeout without any operation.
Allowed Remote IP(IP1,IP2,...)	Set the IP which can login the device remotely.
Remote Telnet	If or not enable remote telnet login
Telnet Port	Set the port value which is used to telnet the device.

3) NTP settings

NTP Settings

NTP Enable	Enable
Current Time	Thu Jan 1 08:04:41 GMT 1970 Sync with host
NTP Settings	(GMT+08:00) China Coast, Hong Kong
Primary NTP Server	pool.ntp.org
Secondary NTP Server	cn.pool.ntp.org
NTP synchronization(1 - 1440m)	60

Field Name	Description
NTP Enable	If or not enable NTP
Current Time	Display current time
NTP Settings	Setting the Time Zone
Primary NTP Server	Primary NTP server's IP address or domain name
Secondary NTP Server	Options for NTP server's IP address or domain name
NTP synchronization	NTP synchronization cycle, cycle time can be 1 to 1440 minutes in any one, the default setting is 60 minutes

4) Daylight Time

Daylight Saving Time

Enable

60

Min.

April

Sunday

First in Month

2

October

Sunday

Last in Month

2

Set the summer time steps:

Step 1. Enable Daylight Saving Time.

Step 2. Set value of offset, like the upon picture

Step 3: Set staring Month/Week/Day/Hour in **Start Month/Start Day of Week Last in Month/Start Day of Week/Start Hour of Day**, analogously set stopping Month/Week/Day/Hour in **Stop Month/Stop Day of Week Last in Month/Stop Day of Week/Stop Hour of Day**.

Step 4.Press **Saving** button to save and press **Reboot** button to active changes.

5) System Log Setting

Syslog Setting

Enable

INFO

Enable

192.168.10.101

Field Name	Description
Syslog Enable	If or not enable syslog function
Syslog Level	Select the system log, there is INFO and Debug two grades, the Debug INFO can provide more information.
Remote Syslog Enable	If or not enable remote syslog function.
Remote Syslog server	Add a remote server IP address.

6) Packet Trace

Packet Trace

Packet Trace

Packet Trace

Users can use the packet trace feature intercepts the packets that were sent. Click the Start button, start dhme gateway tracking and keep refreshing the page until the message trace shows to stop, click the Save button to save captured packets.

7) Factory settings

Factory Defaults

Click Factory Default to restore the residential gateway to factory settings.

5.7.2 Firmware Upgrade

Management	Firmware Upgrade	Provision	SNMP	TR069
Firmware Management Firmware Upgrade Upgrade Types Upgrade Software Local Upgrade 浏览... Upgrade Help Firmware Upgrade: Click on the <i>Browse...</i> button to select the firmware file to be uploaded to the router. Click the <i>Upgrade</i> button to begin the upgrade process. Upgrade must not be interrupted.				

Press to select the firmware file and press to upgrade the firmware.

5.7.3 Provision

Provisioning allows G201N auto-upgrading and auto-configuring, and Flyingvoice devices support TFTP, HTTP and HTTPS three ways.

- ◆ Before testing or using TFTP, user should have tftp server and upgrading file and configuring file.
- ◆ Before testing or using HTTP, user should have http server and upgrading file and configuring file.
- ◆ Before testing or using HTTPS, user should have https server and upgrading file and configuring file and CA Certificate file(should same as https server's) and Client Certificate file and Private key file(HTTPS provision will be supported soon)

User can uploading CA Certificate file and Client Certificate file and Private Key file in Security page.

Notice: Please refer to documentation **Provision_User Manual_en_v1.5.pdf** to use this function.

Management	Firmware Upgrade	Provision	SNMP	TR069
Provision Configuration Profile Provision Enable Enable Resync On Reset Enable Resync Random Delay(sec) 40 Resync Periodic(sec) 3600 Resync Error Retry Delay(sec) 3600 Forced Resync Delay(sec) 14400 Resync After Upgrade Enable Resync From SIP Disable Option 66 Enable Config File Name \$(MA) Profile Rule Firmware Upgrade Upgrade Enable Enable Upgrade Error Retry Delay(sec) 3600 Upgrade Rule				

Help

Provision:

Provision allows a device automatically resync to a specific configuration file on a TFTP server or a web server which use HTTP or HTTPS

Field Name	Description
Provision Enable	If or not enable provision.
Resync on Reset	If or not enable resync after DIV378 restart
Resync Random Delay(sec)	Set the maximum delay for request the synchronization file, default is 40.
Resync Periodic(sec)	If the last resync was failure, G201N will retry resync after the “Resync Error Retry Delay” time, default is 3600s.
Resync Error Retry Delay(rec)	Set the periodic time for resync, default is 3600s.
Forced Resync Delay(sec)	If it’s time to resync, but G201N is busy now, in this case, G201N will wait for a period time, the longest is “Forced Resync Delay”, default is 14400s, when the time over, G201N will forced to resync.
Resync After Upgrade	If or not enable firmware upgrade after resync, by default it is enabled.
Resync From SIP	If or not enable resync from SIP.
Option 66	It is used for In-house provision mode only. When use TFTP with option 66 to realize provisioning, user must input right configuration file name in IP542N's webpage. When disable Option 66 , this parameter has no effect.
Config File Name	It is used for In-house provision mode only. When use TFTP with option 66 to realize provisioning, user must input right configuration file name in IP542N's webpage. When disable Option 66 , this parameter has no effect.
Profile Rule	URL of profile provision file Note that the specified file path is relative to the TFTP server’s virtual root directory.

Firmware Upgrade

Upgrade Enable	Enable
Upgrade Error Retry Delay(sec)	3600
Upgrade Rule	

Field Name	Description
Upgrade Enable	If or not enable firmware upgrade via provision.
Upgrade Error Retry Delay(sec)	If the last upgrade fails, G201N will try upgrading again after "Upgrade Error Retry Delay" period, default is 3600s.
Upgrade Rule	URL of upgrade file

5.7.4 SNMP

Management	Firmware Upgrade	Provision	SNMP	TR069
------------	------------------	-----------	------	-------

SNMP Configuration

SNMP Service

Trap Server Address

Read Community Name

Write Community Name

Trap Community

Trap period interval(sec)

Disable

public

private

trap

300

Help

SNMP Configuration:
 Allow the device to be managed by the Manager which is set in the SNMP Manager IP.

Field Name	Description
SNMP Enable	If or not enable SNMP.
Trap Server Address	Enter the trap server address.
Read Community Name	String, as an express password between management progress and agent progress.
Write Community Name	String, as an express password between management progress and agent progress.
Trap Community	The community field in trap.
Trap period interval(sec)	The interval of sending trap.

5.7.5 TR069

Status
Network
Wireless
SIP Account
Phone
Security
Application
Diagnosis
Storage
Administration

Management
Firmware Upgrade
Provision
SNMP
TR069

TR069 Configuration

ACS

TR069 Enable

Disable

CWMP

Enable

ACS URL

User Name

Password

Periodic Inform Enable

Enable

Periodic Inform Interval

30

Connect Request

User Name

CMS

Password

...

SSL Key

Save

Cancel

Reboot

Help

TR069 Configuration:
Allow the device to be managed by the ACS server which is set in the ACS URL.

Field Name	Description
TR069 Enable	If or not enable TR069
CWMP	If or not enable CWMP
ACS URL	ACS URL address
User Name	ACS username
Password	ACS password
Periodic Inform Enable	If or not enable the function of periodic inform, default is enable
Periodic Inform Interval	Periodic notification interval, the unit is seconds, default is 43200s
User Name	The username used to connect the TR069 server to the DUT.
Password	The password used to connect the TR069 server to the DUT.
SSL Key	Fill SSL key

6 Functions

6.1 Making Calls

- ◆Dial the number directly and wait for 5 seconds (default No Key Entry Timeout).
- ◆Dial the number with ending char #, G201N will dial out immediately
- ◆Dial the phone number which matches one dial rule, G201N will dial out immediately, no need to press # or wait for 5 seconds.

6.2 Call Waiting

Step 1.Enable waiting feature in SIP-->Line1-->supplementary Service→Call Waiting (default is Enable)

Step 2.While in conversation, user will hear a special stutter tone if there is another incoming call.

Step3.User then can press “*77” (or Flash button)to put the current call party on hold automatically and switch to the other call. Pressing “*77”(or Flash button) toggles between two active calls.

6.3 Call Hold

Step 1.While in conversation, pressing the “*77”(or Flash button), will put the remote end on hold.

Step 2.Pressing the “*77”(or Flash button) again, will release the previously Hold state and resume the bi-directional media.

6.4 Call Transferring

G201N4 supports blind transfer and attended transfer.

6.4.1 Blind Transfer

Assuming that call party A and party B are in conversation, A wants to Blind Transfer B to C

Step 1.Party A dials *98, A will hear dialing tone

Step 2.Dial party C's number, and press # (or wait for 5 seconds) to call C, then C will ring, A will be disconnected.

Step 3.If C answer the call, B and C can go on talking.

6.4.2 Attended Transfer

Assuming that call party A and B are in conversation. A wants to Attend Transfer B to C:

Step 1. Party A dials *77 to hold B, A will hear dialing tone

Step 2. Dial party C's number, and press # (or wait for 5 seconds) to call C, then A will hear ringing tone.

Step 3. If C answer the call, A will talk with C firstly

Step 4. If C wants to talk with B, A press "*98" to transfer, and then C will talk with B. If C does not talk with C successfully, A will talk with B again.

6.5 3-way conference call

Assuming that call party A and B are in conversation. A wants to add C to the conference:

Step 1. Party A dials *77 to hold B, A will hear dialing tone

Step 2. Dial party C's number, and press # (or wait for 5 seconds) to call C, then A will hear ringing tone.

Step 3. If C answer the call, A will talk with C firstly

Step 4. If C receive the conference, A press "*88" to add C to the conference, and then A, B and C are in conference.

6.6 Call Forwarding

Step 1. Open Phone→Preferences→Call Forward, enable the one call forward mode and fill forwarded number

Step 2: G201N4 will forward incoming call to the forwarded number according to the settings of Call Forward and call status

6.7 Direct IP calls

Direct IP calling allows two phones, that is, a home gateway with an analog phone and another VoIP Device, to talk to each other without a SIP proxy. VoIP calls can be made between two phones if:

Both home gateway and the other VoIP device (i.e. another home gateway or other SIP products) have public IP addresses, or

Both home gateway and the other VoIP device (i.e. another home gateway or other SIP products) are on the same LAN using private or public IP addresses, or

Both home gateway and the other VoIP device (i.e. another home gateway or other SIP products) can be connected through a router using public or private IP addresses

To make a direct IP call,

Step 1: Picking up the analog phone or turning on the speaker phone on the analog phone

Step 2: Input the IP address directly with ending char #. E.g. call 192.168.20.34, dial

192*168*20*34#

6.8 Speed dialing

Notice: The current firmware does not support speed dial, will be added in new branch firmware.

Step 1.Set phone number(E.g.3333) in SIP Account→Line 1→Speed Dial, and then save the changes

Step 2.Dial*74 to active speed dial function

Step 3.Then dial 2 to call 3333, and G201N4 will dial out immediately.

Speed Dial

Speed Dial 2	3333	Speed Dial 3	
Speed Dial 4		Speed Dial 5	
Speed Dial 6		Speed Dial 7	
Speed Dial 8		Speed Dial 9	

6.9 Hotline

Step 1.Set hotline in SIP Account→Line 1→Supplementary Service Subscription, you can refer to the following picture. And then save the changes.

Supplementary Service Subscription

Supplementary Services

Call Waiting

Hot Line

Step 2.Picking up handset or press speaker button, G201N4 will ring hotline immediately.

If you want to delay some seconds after pick up the handset, please add delay time. For example, G201N4 will call 511 after user picks up the handset for 4 seconds.

Supplementary Service Subscription

Supplementary Services

Call Waiting

Hot Line

6.10 Daylight Saving Time

Daylight Saving Time (or summer time as it is called in many countries) is a way of getting more light out of the day by advancing clocks by some hour during the summer. During Daylight Saving Time, the sun appears to rise one hour later in the morning, when people are usually asleep anyway, and sets one hour later in the evening, seeming to stretch the day longer.

Step 1.Open Administration/Management webpage.

Step 2.Enable parameter Daylight Saving Time in Time/Date.

Step 3.Set offset: "-60" means advancing 60min, "60" means delaying 60min.

Step 4.Set starting Month/Week/Day/Hour in Start Month/Start Day of Week Last in Month/Start Day of Week/Start Hour of Day, analogously set stopping Month/Week/Day/Hour in Stop Month/Stop Day of Week Last in Month/Stop Day of Week/Stop Hour of Day.

Step 5.Press Saving button to save and press reboot button to active changes.

6.11 Upgrade Firmware

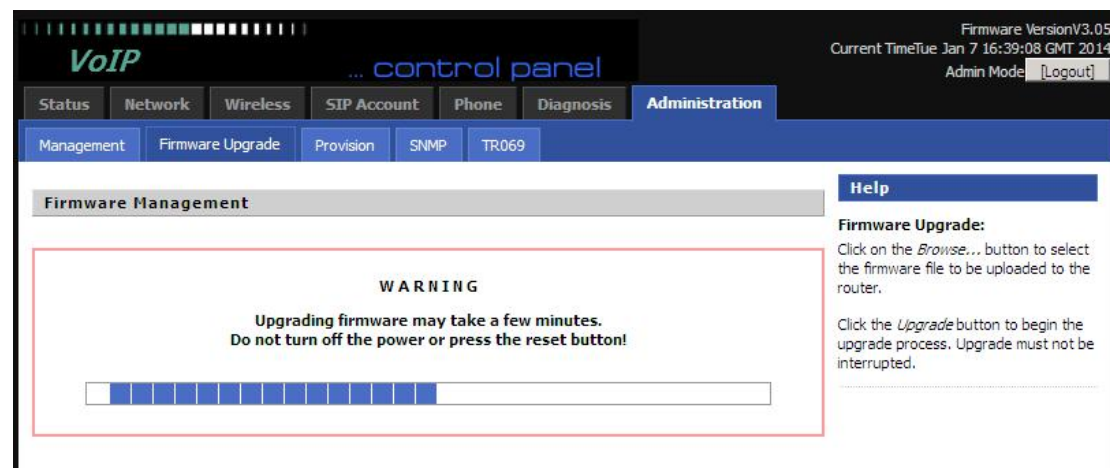
Function is to upgrade firmware in local.

Step 1.Open Administration/Firmware Upgrade webpage

Step 2.Press  to browse a firmware file

Step 3.Press  to start upgrading

Step 4.When upgrading, there will be prompt like below



6.12 Password Control

Function is to reset password.

Step 1.Open Administration/Management webpage

Step 2.Choose password type

Step 3.Input current password (Original Password, default is "admin" for admin level and user for user level),

Step 4.Input new password in New Password and Password Confirm.

Step 5.Press Save Settings button to save and then press Reboot button to make changes effective.

6.13 Web Access

User can use the two parameters in Web Access to control WAN web login or login port.

WAN Interface Login is to disable/enable user access to web via WAN port;

Web Login Port is to set login port.

6.14 System log

User can view system log in local or in remote.

In local:

Step 1.Open Administration/Management page, System Log Setting column.

Step 2.Choose log level from INFO and Debug, in INFO level, G201N4 records INFO log, and in Debug level, G201N4 records all debug information.

Step 3.Press Save button to save and then press Reboot button to make changes effective.

In remote:

Step 1.Open Administration/Management page, System Log Setting column.

Step 2.Fill system server IP Address or domain name into Syslog Server.

Step 3.Choose log level from INFO and Debug, in INFO level, G201N4 records INFO log, and in Debug level, G201N4 records all debug information.

Step 4.Press Save button to save and then press Reboot button to make changes effective.