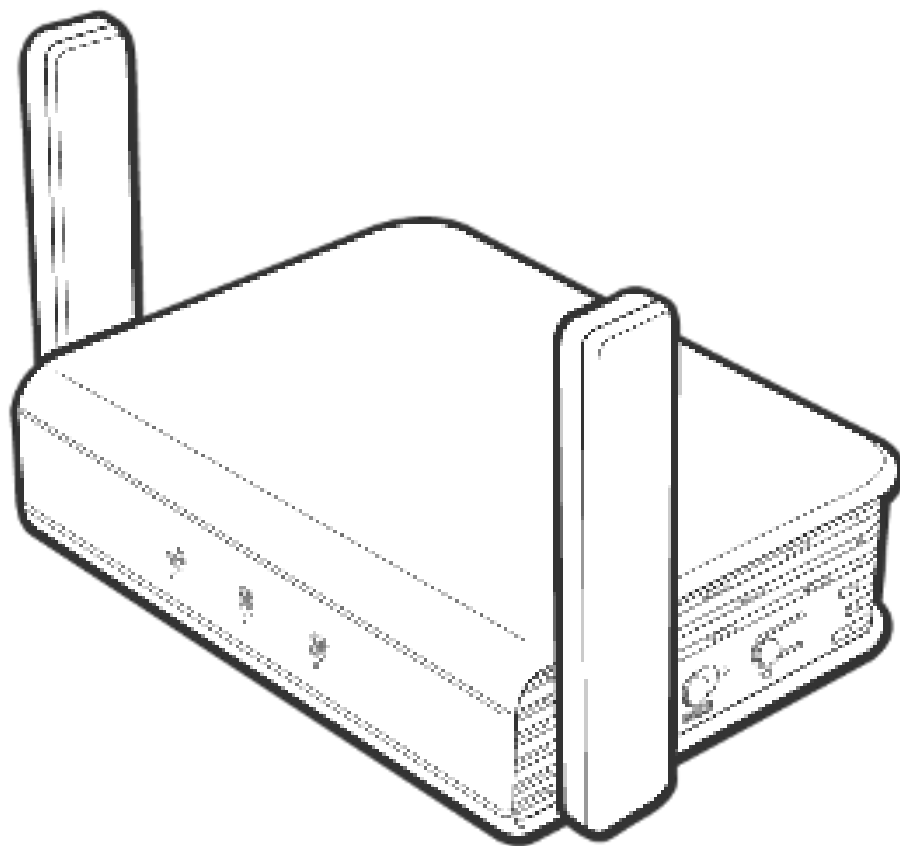


GL·iNet



Slate

(GL-AR750S-Ext)
USER MANUAL

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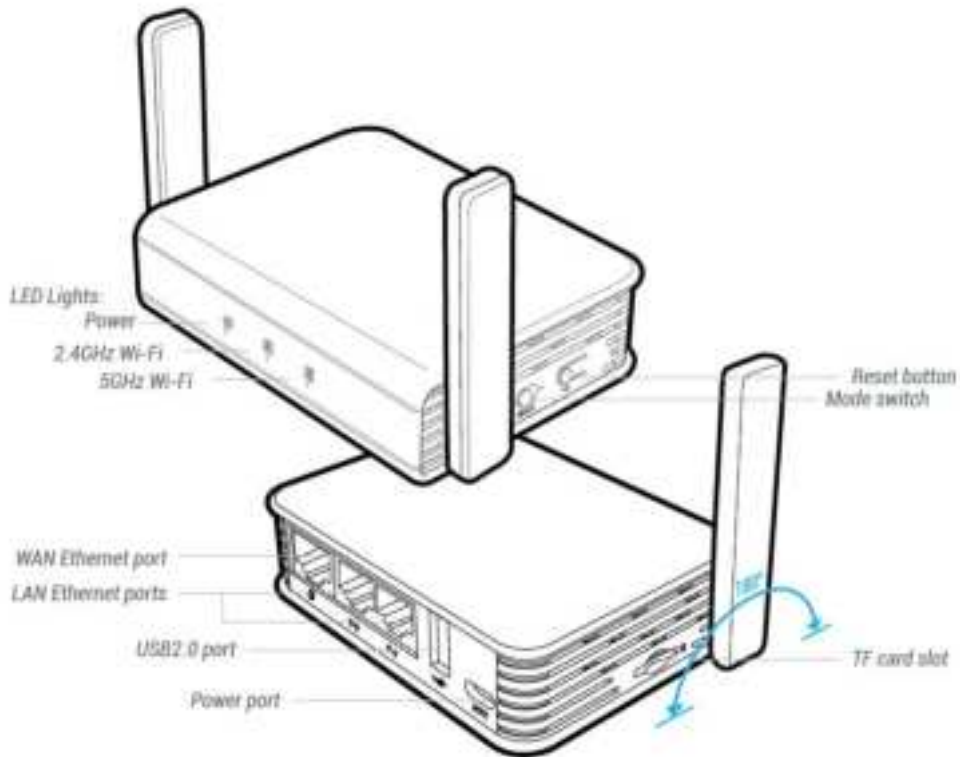
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1. Getting Started with GL.iNet Slate

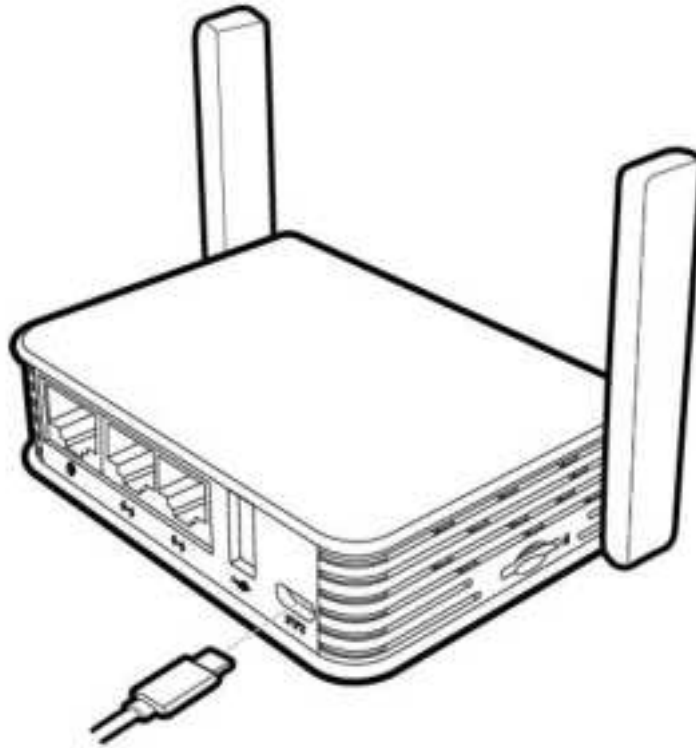
Model:

GL-AR750S-Ext



1.1. Power on

Plug the Micro USB power cable into the power port of the router. Make sure you are using a standard **5V/2A** power adapter. Otherwise it may cause malfunction.



*Note: Hot plug for TF card is **not** supported. If you want to use TF card, please insert before powering on the router.*

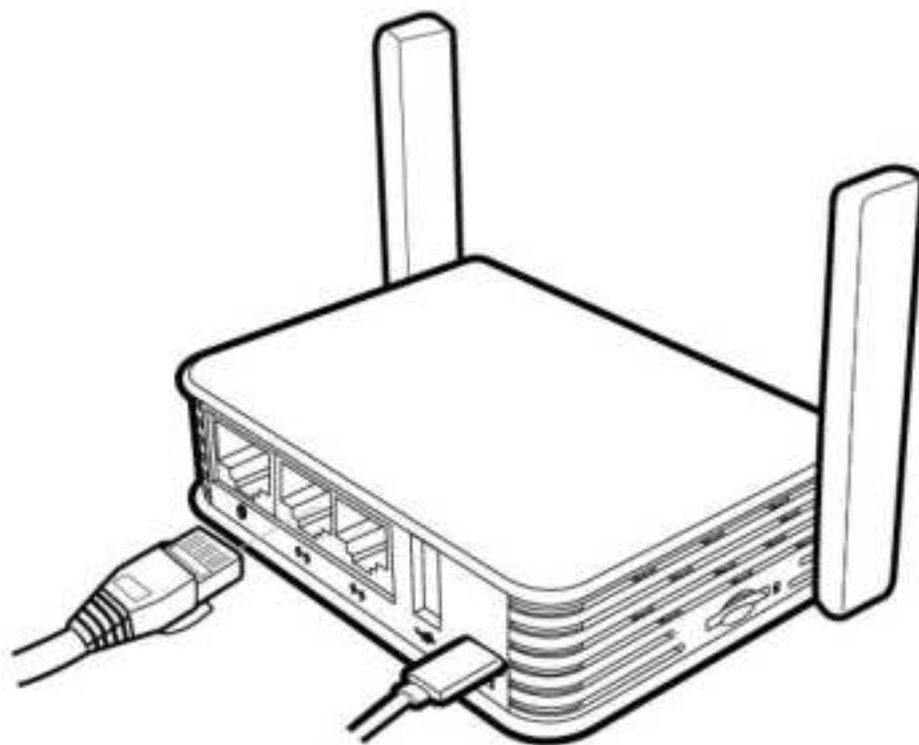
1.2. Connect

You can connect to the router via Ethernet cable or Wi-Fi.

Note: This step only connects your devices to the local area network (LAN) of the router. You cannot access the Internet currently. In order to connect to the Internet, please finish the setup procedures below and then follow Internet to set up an Internet connection.

(1)Connect via LAN

Connect your device to the LAN port of the router via Ethernet cable.



(2)Connect via Wi-Fi

Search for the SSID of the router in your device and input the default password: *goodlife*.

Note: The SSID was printed on the bottom label of the router with the following formats:

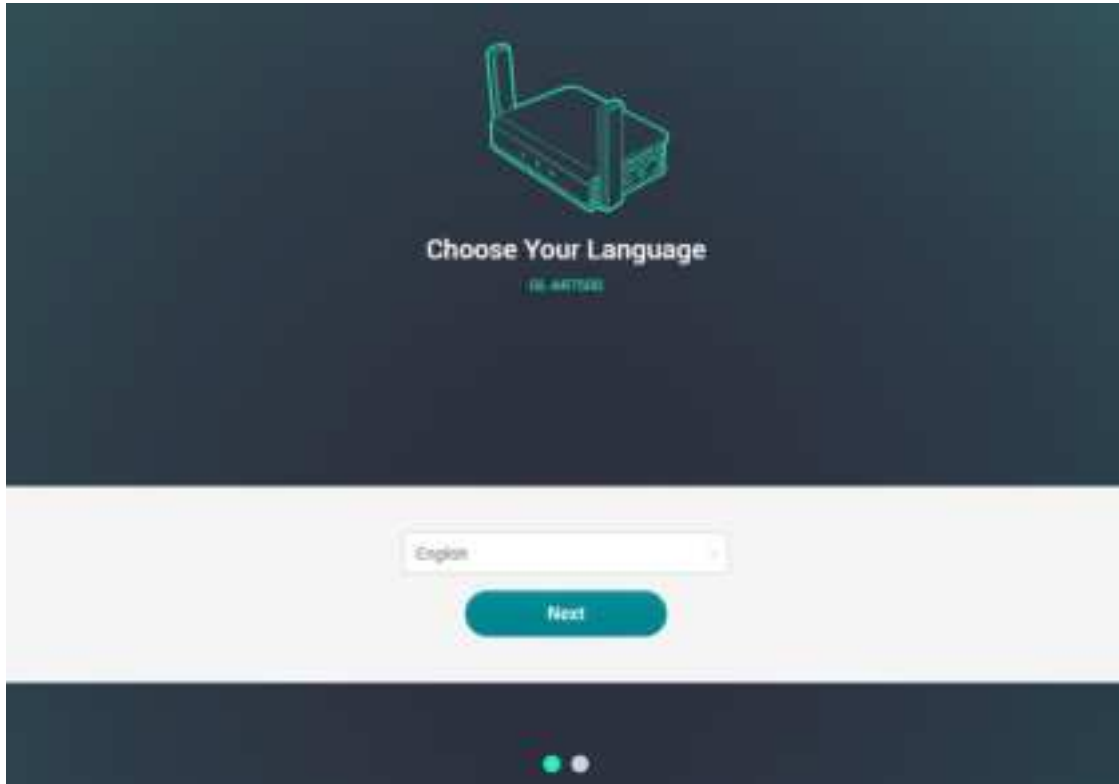
- **GL-AR750S-XXX**
- **GL-AR750S-XXX-5G**

1.3. Access the Web Admin Panel

Open a web browser (we recommend Chrome, firefox) and visit <http://192.168.8.1>. You will be directed to the initial setup of the web Admin Panel.

(1)Language Setting

You need to choose the display language of the Admin Panel. Currently, our routers support English, 简体中文, 繁體中文, Deutsch, Français, Español and 日本語.



Note: If your browser always redirects to Luci (<http://192.168.8.1/cgi-bin/luci>), you can visit: <http://192.168.8.1/index.html> instead of <http://192.168.8.1>.

(2)Admin Password Setting

There is no default password for the Admin Panel. You have to set your own password, which must be at least 5 characters long. Then, click Submit to proceed.

Set Your Admin Password

New Password

Confirm Password

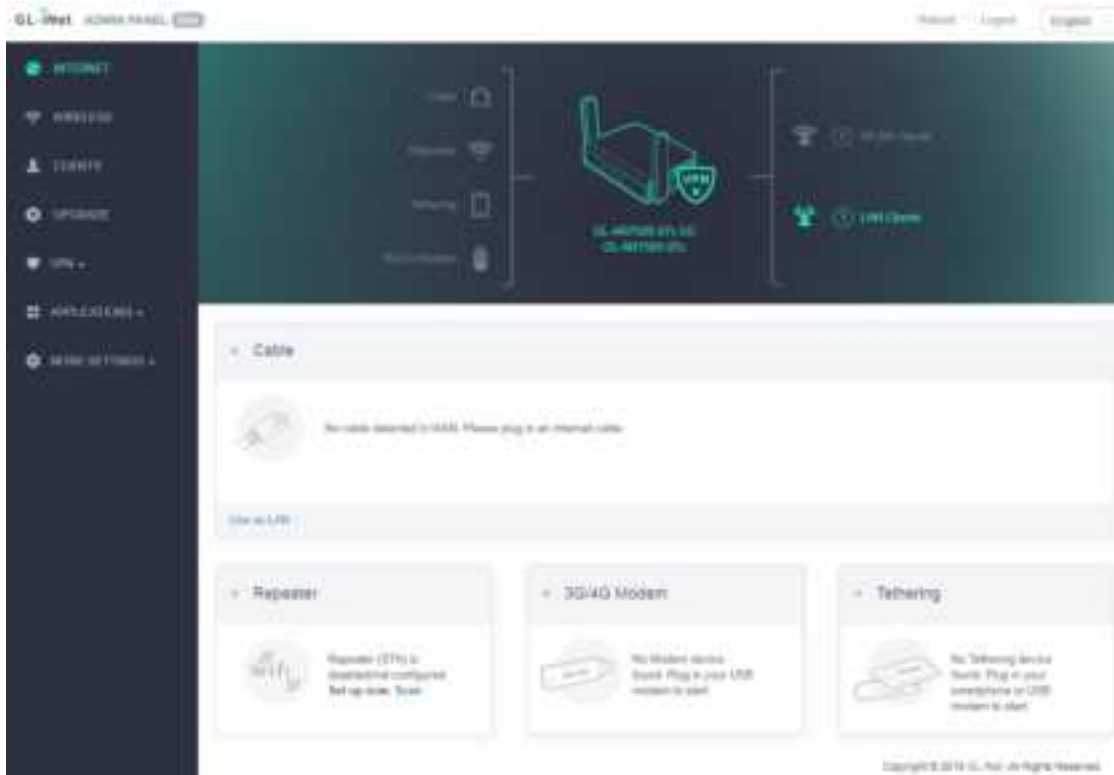
Your admin password will be used for configuring everything on the Admin Panel of your router. It is EXTREMELY important to keep it safe.

[Back](#) [Submit](#)

Note: This password is for this web Admin Panel and the embedded Linux system. It will not change your Wi-Fi password.

(3)Admin Panel

After the initial setup, you will enter the web Admin Panel of the router. It allows you to check the status and manage the settings of the router.

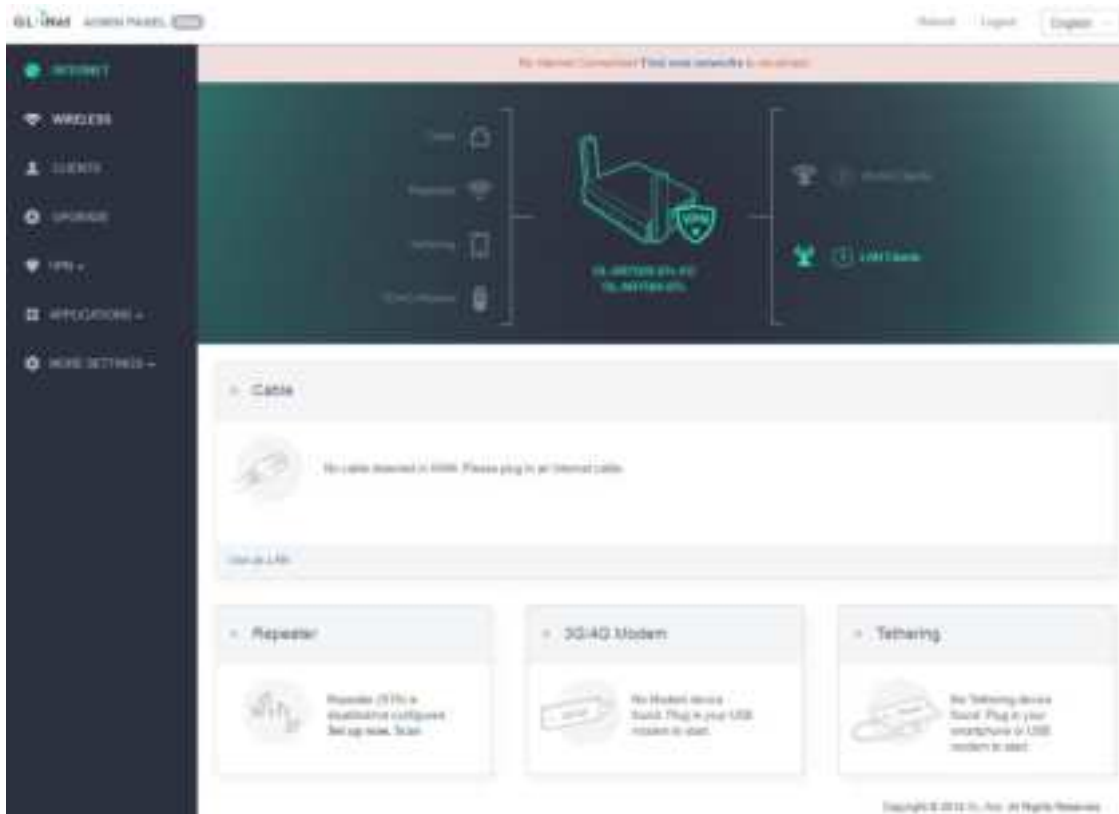


2. INTERNET

There are total 4 types of connection method that you can use to access the Internet: **Cable**, **Repeater**, **3G/4G Modem** and **Tethering**.



Click INTERNET to create an Internet connection.



2.1. Cable

Connect the router to the modem or main router via Ethernet cable to access the Internet.

Before plugging the Ethernet cable into the WAN port of the router, you can click Use as LAN to set the WAN port as a LAN port. That is useful when you are using the router as a [repeater](#). As a result, you can have one more LAN port.



Plug the Ethernet cable into the WAN port of the router. The information of your connection will be shown on the Cable section. DHCP is the default protocol. You can click Modify to change the protocol.



(1)DHCP

DHCP is the default and most common protocol. It doesn't require any manual configuration.



(2)Static

Static is required if your Internet Service Provider (ISP) has provided a fixed IP address for you or you want to configure the network information such as IP address, Gateway, Netmask manually.

The current settings will be automatically filled once you choose Static. Change it according to your needs and then click Apply.

The screenshot shows a network configuration window titled "Cable". The "Protocol" dropdown is set to "Static". The "IP Address" field contains "192.168.0.102", the "Gateway" field contains "192.168.0.1", and the "Netmask" field contains "255.255.255.0". There are two "DNS Server" fields, both containing "DNS Server". At the bottom, there are "Cancel" and "Apply" buttons. A cable icon is visible on the right side of the window.

(3)PPPoE

PPPoE is required by many Internet Service Providers (ISP). Generally, your ISP will give you a modem and provide you a username & password that you needed when you are creating the Internet connection.

Under PPPoE protocol, enter your username and password, then click Apply.

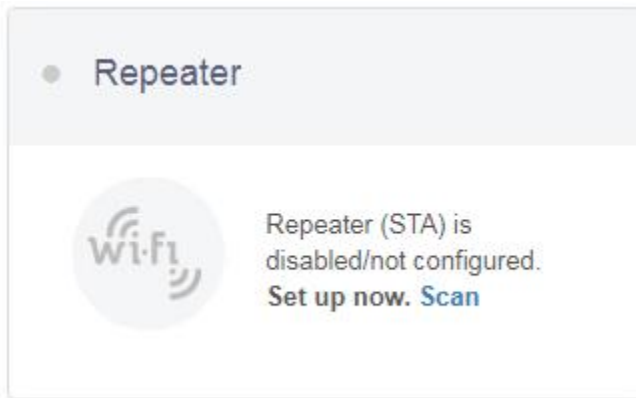
The screenshot shows a network configuration window titled "Cable". The "Protocol" dropdown is set to "PPPoE". The "User Name" field contains "User Name" and the "Password" field contains "Password". At the bottom, there are "Cancel" and "Apply" buttons. A cable icon is visible on the right side of the window.

2.2. Repeater

Using Repeater means connecting the router to another existing wireless network, e.g. when you are using free Wi-Fi in a hotel or cafe.

It works in WISP (Wireless Internet Service Provider) mode by default, which means that the router will create its own subnet and act as a firewall to protect you from the public network.

In Repeater section, click Scan to search for the available wireless networks nearby.



Choose a SSID from the drop-down list and enter its password. You can also enable the **Remember** button to save the current chose wireless network. Finally, click Join.



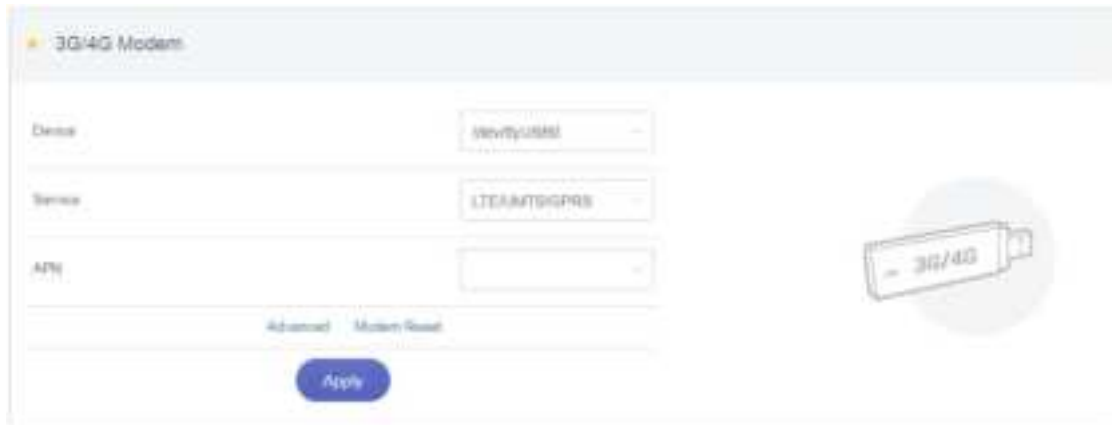
2.3. USB 3G/4G Modem

You can connect to the Internet using a USB 3G/4G modem. Insert your SIM card into the USB modem Plug the USB modem into the USB port of the router. Once it has been detected, the 3G/4G modem section will be activated and you will be able to set up your USB modem.

Be aware that some modems work in host-less mode, which will be configured through [Tethering](#) but not 3G/4G modem.

In General, you can set up your 3G/4G modem by the three basic parameters below. Click Apply to connect.


- **Device:** Choose `/dev/cdc-wdm0` if your modem supports QMI, otherwise you need to choose `/dev/ttyUSB`, which may include several `ttyUSB` from 0 to 3. You need to choose the correct one based on the modem spec. We suggest you to try `ttyUSB0` first.
- **Service Type:** Indicate the service type of your SIM card.
- **APN:** Confirm with your SIM card carrier.



The screenshot shows a configuration window titled "3G/4G Modem". It contains three dropdown menus: "Device" with the value "/dev/ttyUSB0", "Service" with the value "LTE/4G/3G", and "APN" which is currently empty. Below these fields are two tabs: "Advanced" and "Modem Status". At the bottom center is a blue "Apply" button. On the right side of the window, there is a circular icon of a USB modem labeled "3G/4G".

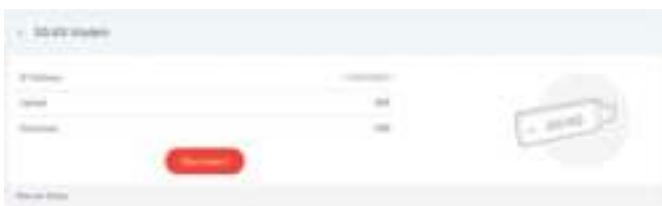
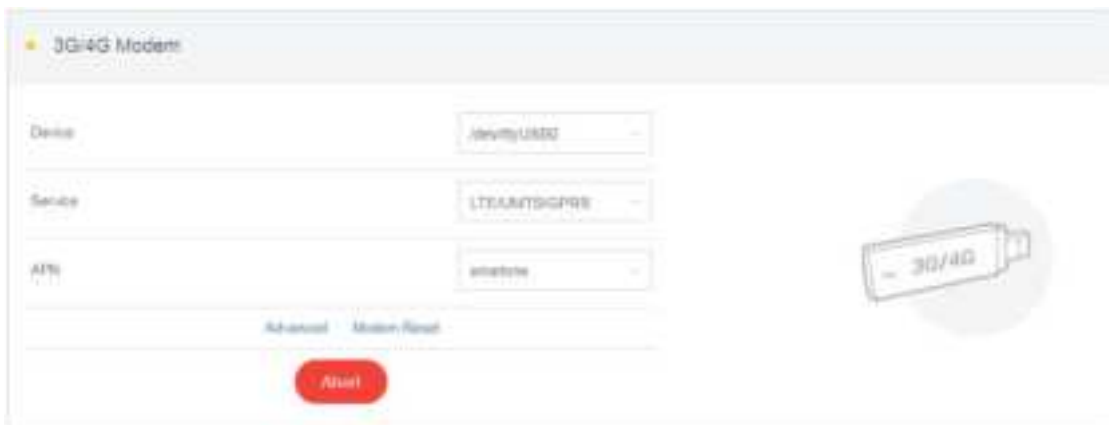
Advanced Settings:

- **Dial Number:** Generally, it is a default value and you don't need to set it manually. However, if you have this info, please input it.
- **Pincode, Username and Password:** Generally, these are not necessary for an unlocked SIM card. However, if you have a locked SIM card, please consult your service provider.

Pincode	<input type="text"/>
Dial number	<input type="text"/>
User Name	<input type="text"/>
Password	<input type="password"/> 

Apply

It is connected when the IP address of your SIM card shows up.



Compatible Modems

Here is a list of supported modems that we had tested before.

Model	3G/4G	Tested	Tested by	Comments*
Quectel EC20-E, EC20-A, EC20-C	4G	Yes	GL.iNet	
Quectel EC25-E, EC25-A, EC25-V, EC25-C	4G	Yes	GL.iNet	
Quectel UC20-E	3G	Yes	GL.iNet	
ZTE ME909s-821	4G	Yes	GL.iNet	
Huawei E1550	3G	Yes	GL.iNet	
Huawei E3276	4G	Yes	GL.iNet	
TP-Link MA260	3G	Yes	GL.iNet	
ZTE M823	4G	Yes	Arnas Risqianto	
ZTE MF190	3G	Yes	Arnas Risqianto	
Huawei E3372	4G	Yes	anonymous	
Pantech UML290VW (Verizon)	4G	Yes	GL.iNet/steven	QMI
Pantech UML295 (Verizon)	4G	Yes	GL.iNet/steven	Host-less
Novatel USB551L (Verizon)	4G	Yes	GL.iNet/steven	QMI
Verizon U620L (Verizon)	4G	Yes		Host-less

*QMI: This modem supports QMI mode. Please choose **/dev/cdc-wdm0** in the **Device** list.

*Host-less: This modem supports tethering mode, please set up by using Tethering but not 3G/4G modem.

You can also refer to <http://ofmodemsandmen.com/supported.html> for a well supported modem list.

2.4. Tethering

Using USB cable to share network from your smartphone to the router is called Tethering. Host-less modem works in Tethering during the setup of the modem as well.

For host-less modem tethering, plug it into the USB port of the router.

For smartphone tethering, connect it to the USB port of the router and click **Trust** to continue when the message pops up in your smartphone.

After plugging in your device, the Tethering section will update and your device will be shown on the device list. The device name will begin with **eth** or **usb** such as **eth2**, **usb0**. Choose your device and click Connect.



EasyTether

Some carriers prohibit the sharing of the data so that you may not be able to use tethering. However, you can try [easytethering](#).

Note: Easytether is not a free service and we have no affiliation with them.

3. WIRELESS

In WIRELESS, you can check the current status and change the settings of the wireless network created by the router. The wireless network can be turned on or off by switching the ON/OFF button.

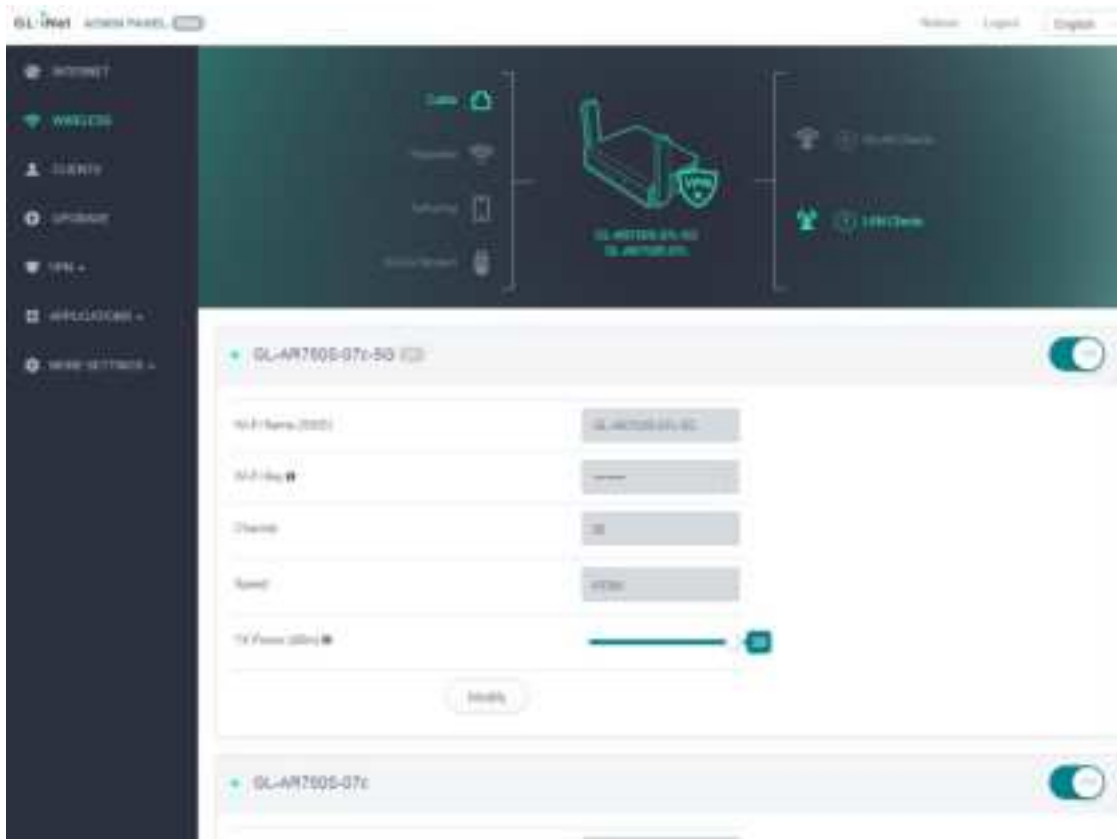
Wi-Fi Name (SSID): The name of the Wi-Fi. It is not suggested to use unicode characters such as **Chinese**.

Wi-Fi Key: The password of the Wi-Fi, which must be at least 6 characters long. We suggest you to change it when you receive the router.

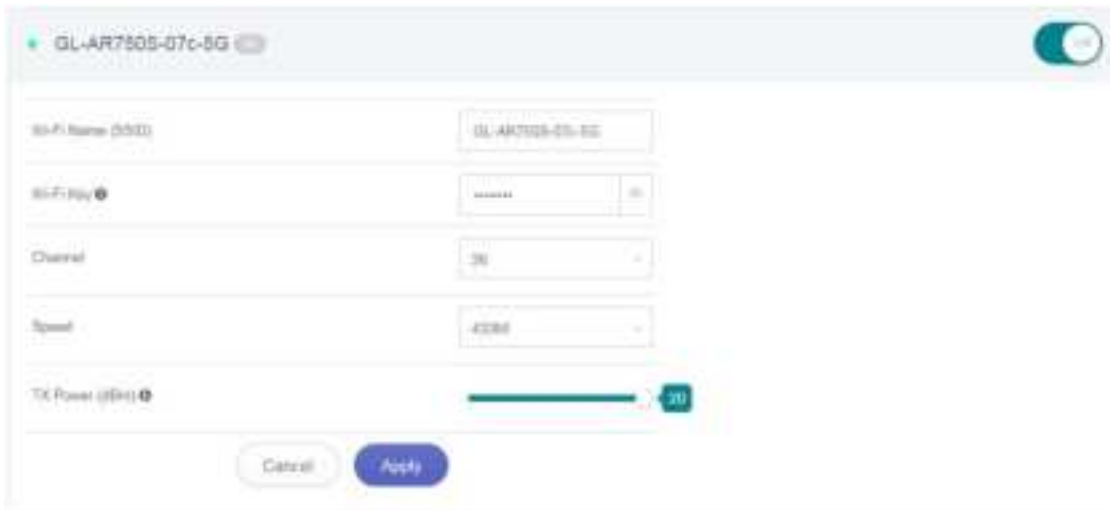
Channel: The router will not choose the best channel itself. You need to choose a channel manually. If your router is used as a Wi-Fi repeater, the channel will be fixed according to the connected wireless network.

Speed: The wireless speed of the router.

TX Power (dBm): It specifies the signal strength. The default value is 20 (Strongest).



Click Modify to change the settings of the wireless network.



4. CLIENTS

You can manage all connected clients in CLIENTS.

You can see their name, IP, MAC address and connection type.

Click the button on the right to block any unwanted client.



5. UPGRADE

Click UPGRADE to check any available update and upgrade the firmware.



5.1. Online Upgrade

You can find the current firmware version here. If your router is connected to the Internet, it will check for the newer firmware version available for download.



*Note: It is suggested to uncheck **Keep setting**. If you keep the settings and encounter problems after the upgrade, please reset the router.*

5.2. Upload Firmware

Click Local Upgrade to upload a firmware file to the router. Simply drag and drop your firmware file to the area indicated.



(1) Official OpenWrt/LEDE firmware

You can download the official firmware from our [website](#).

- GL-AR750(Crena): <https://dl.gl-inet.com/firmware/ar750/>
- GL-AR750S (Slate): <https://dl.gl-inet.com/firmware/ar750s/>

Find the available firmwares from the folder according to your device model, and they are located in different sub-folders:

V1/release: Official GL.iNet OpenWrt/LEDE firmware.

testing: Beta version of GL.iNet OpenWrt/LEDE firmware.

Note: You have to upload the .tar file. The .img file can only be flashed to the router through Uboot.

(2) Compile your own firmware

You can compile your own firmware and flash to the router. Please refer to github.com/domino-team/openwrt-cc.

(3)Third party firmware

You may also try other firmwares such as DDWRT.

Note: If you uploaded an incompatible firmware thus bricked the router, please use Uboot to re-install the correct firmware.

5.3. Auto Upgrade

You can enable auto upgrade. The router will search for available update and upgrade automatically according to the time that you set.



6. FIREWALL

In FIREWALL, you can set up firewall rules like **port forwarding**, **open port** and **DMZ**.



6.1. Port Forwards

Port Forwarding allows remote computers to connect to a specific computer or service behind the firewall in the local LAN (such as web servers, FTP servers, etc).

To set up port forwarding, click Port Forwards and input the required parameters or click Add a New One.

Name	Internal IP	External Ports	Internal Ports	Protocol	Status	Action
<input type="text" value="Required"/>	<input type="text" value="Required"/>	<input type="text" value="Required"/>	<input type="text" value="Required"/>	<input type="text" value="TCP/UDP"/>	<input type="text" value="Enabled"/>	<input type="button" value="Add"/>

Name: The name of the rule which can be specified by the user.

Internal IP: The IP address assigned by the router to the device which needs to be accessed remotely.

External Ports: The numbers of external ports. You can enter a specific port number or a range of service ports (E.g **100-300**).

Internal Ports: The internal port number of the device. You can enter a specific port number. Leave it blank if it is same as the external port.

Protocol: The protocol used, you can choose TCP, UDP, or both TCP and UDP.

Status: Activate or Deactivate the rule.

6.2. Open Ports on Router

The router's services, such as web, FTP and so on, require their respective ports to be opened on the router in order to be publicly reachable.

To open a port, click Open Ports on Router and input the required parameters or click Add a New One.



Name: The name of the rule which can be specified by the user.

Port: The port number that you want to open.

Protocol: The protocol used, you can choose TCP, UDP, or both TCP and UDP.

Status: Activate or Deactivate the rule.

6.3. DMZ

DMZ allows you to expose one computer to the Internet, so that all the inbound packets will be redirected to the computer you set.

Click DMZ and enable Open DMZ. Input the internal IP address (E.g. 192.168.8.100) of your device which is going to receive all the inbound packets.



7. VPN

GL.iNet routers have pre-installed VPN server and client in OpenVPN and WireGuard.

Shadowsocks is not a default function and you need to install packages in Plugins.

Please refer to the links below for the detailed setup instruction:

7.1. OpenVPN

GL.iNet routers have pre-installed OpenVPN server and client.

7.1.1. OpenVPN Server

You can set up an OpenVPN server on GL.iNet router. Click + Generate a configuration file.



(1) Server configuration

There are preset OpenVPN server configurations. You can also click Modify to change them manually. Click Apply when you finish.



(2) Export OpenVPN configuration file

Click Export Config to download the OpenVPN configuration file which you need to upload when you are configuring your OpenVPN client.

OpenVPN Server

Access Local Network 

IP Address	10.0.0.0
Network	255.255.255.0
Port	1194
Encryption	256-bit
Protocol	L2TP

[Modify](#) [Start](#) [Export Config](#)

(3) Start the OpenVPN server

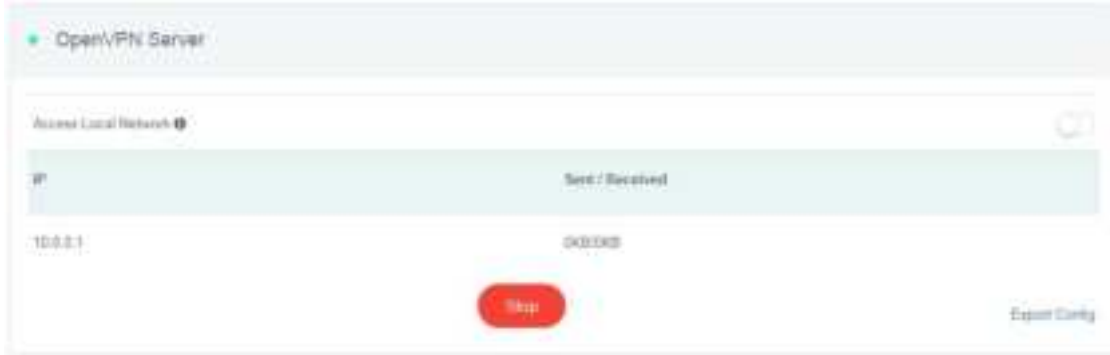
Click Start to start your OpenVPN server. Otherwise, you will not be able to connect to the OpenVPN server by using its configuration file.

OpenVPN Server

Access Local Network 

IP Address	10.0.0.0
Network	255.255.255.0
Port	1194
Encryption	256-bit
Protocol	L2TP

[Modify](#) [Start](#) [Export Config](#)



7.1.2. OpenVPN Client

OpenVPN client requires OpenVPN configuration file (.ovpn) to create the OpenVPN connection. If you have your own VPN service provider but you don't know how to get the configuration file, please refer to [Get your configuration file](#).

Click + Add a New VPN Configuration to upload the configuration file.



(1) Upload your OpenVPN configuration file

Simply drag and drop your file to the pop up windows. It can be a single .ovpn file or a zip/tar.gz file which contains multiple .ovpn files.

Be careful that some .ovpn files use separated ca, cert, crl files. These files must be zipped together with the .ovpn file before upload.

Add a New OpenVPN Configuration



Select a file or drag it here.

File types include .zip .tar .gz

Config Count 0

(2) Enter Description, Username and Password

Enter a description for your OpenVPN configuration file and then click Submit to finish the upload process. In some cases, it will ask you to enter your username and password.

Add a New OpenVPN Configuration

SUCCESS! Re-upload file.

openvpn.ovpn

Config Count 1

Description

User Name

Password

(3) Connect to the OpenVPN server

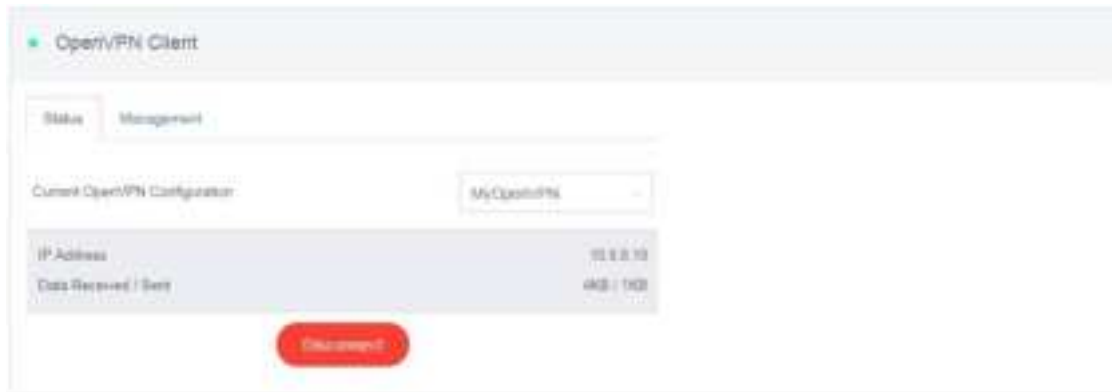
You can now click Connect to start the OpenVPN connection.

OpenVPN Client

Status Management

Current OpenVPN Configuration

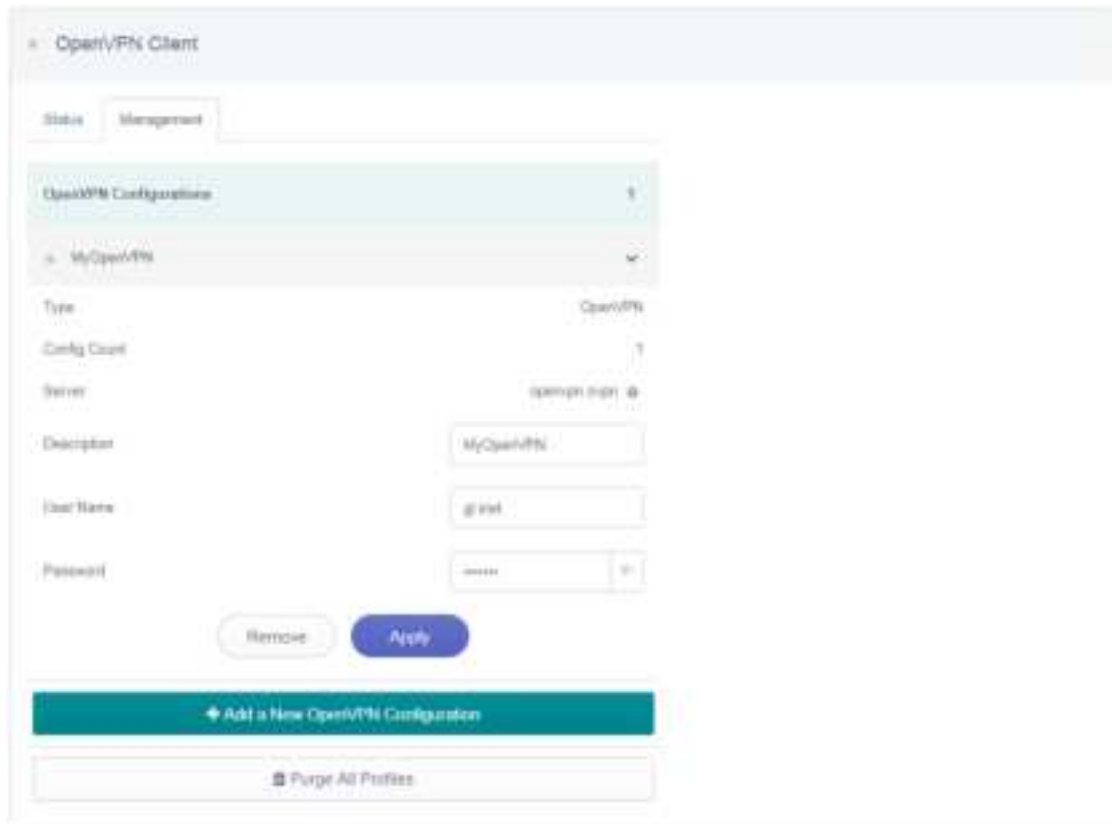
Once connected, you should find your IP address, data received/sent.



(4) Manage configuration files

Click Management to check the list of configuration files. You can modify the **Description**, **User name** or **Password** of each configuration file. You can also add, delete a configuration file or even purge all your uploaded configuration files.

If your configuration file is a zip/tar.gz file which includes multiple ovpn files, you can choose an individual .ovpn file that you would like to connect in **Server**.



Get your configuration file

We have tested different VPN service providers. Therefore, if you don't know how to get the configuration file, you can follow the instruction below. However, you have to contact your service provider for the configuration file if they are not listed below.

If you have any problem in the setup of OpenVPN, please contact support@glinet.com

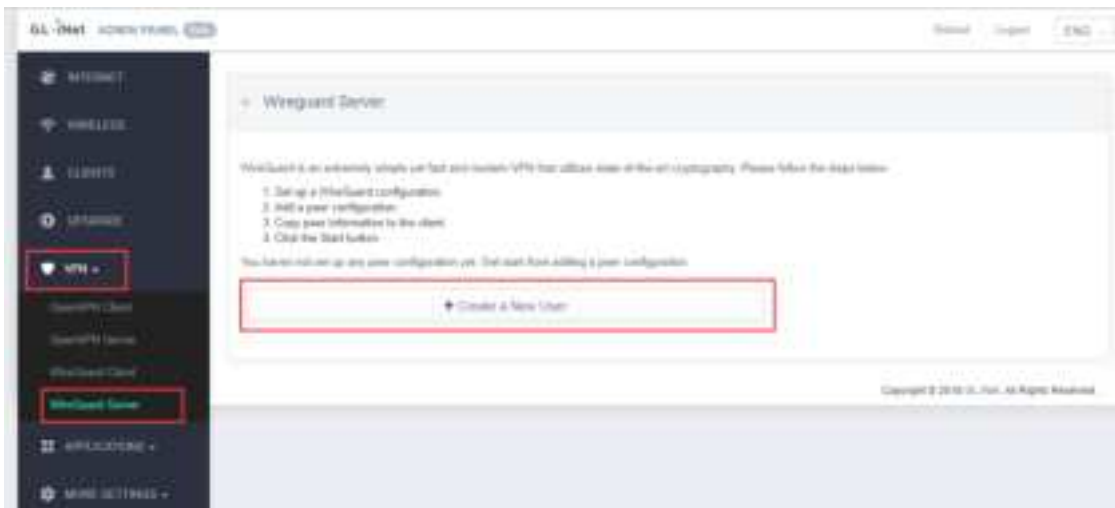
7.2. WireGuard

WireGuard is an extremely simple yet fast and modern VPN that utilizes **state-of-the-art cryptography**. It aims to be **faster**, **simpler**, leaner, and more useful than IPsec, while avoiding the massive headache. It intends to be considerably more performant than OpenVPN.

You can setup and use WireGuard easily in firmware 3.0, wireGuard server and clients are pre-installed in firmware 3.0.

7.2.1. WireGuard Server

You can set up a WireGuard server on GL.iNet router with firmware 3.0. Click + Create a New User.



(1) Start a WireGuard server

You can simply use the default parameters of **Local IP** and **Local Port**, or you can set your own value. Then click Start to start your own WireGuard server.



(2) Add a new client

You have to add a new user and apply the configurations when you are connecting to this WireGuard server.

Click Management tab and then Create a New User.



Specify the **Name** of the new client and then click Add.

The screenshot shows a form titled 'Add a New Wireguard Client'. It has a single text input field labeled 'Name' where the text 'MyPC-Client' has been entered. Below the input field, there are two buttons: a grey 'Cancel' button and a blue 'Add' button. The 'Add' button is highlighted with a red border.

(3) Get the configuration details for your client

You can now check the list of the clients you added. You can Delete any unwanted client. Please click Configurations to find the configuration details which you need to use when you are setting up WireGuard client. We provide QRcode, Plain Text and JSON configurations currently.

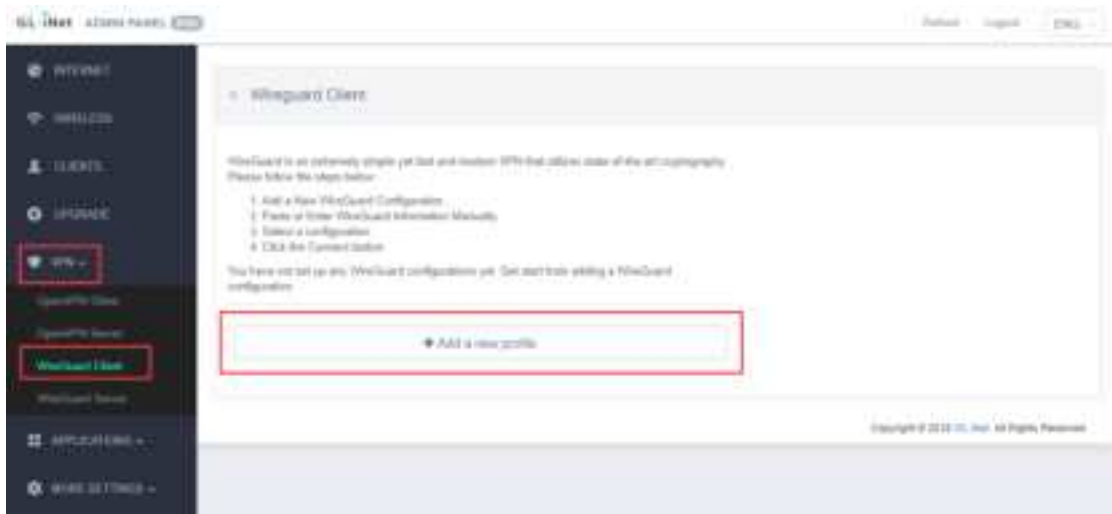


If you are using another GL.iNet router as a client, please copy the **JSON** configuration and paste it directly when you are setting up WireGuard client.



7.2.2. WireGuard Client

To set up a WireGuard client, please click + Add New Profiles.



(1) Specify the name of your server

Specify the name and then click Next.

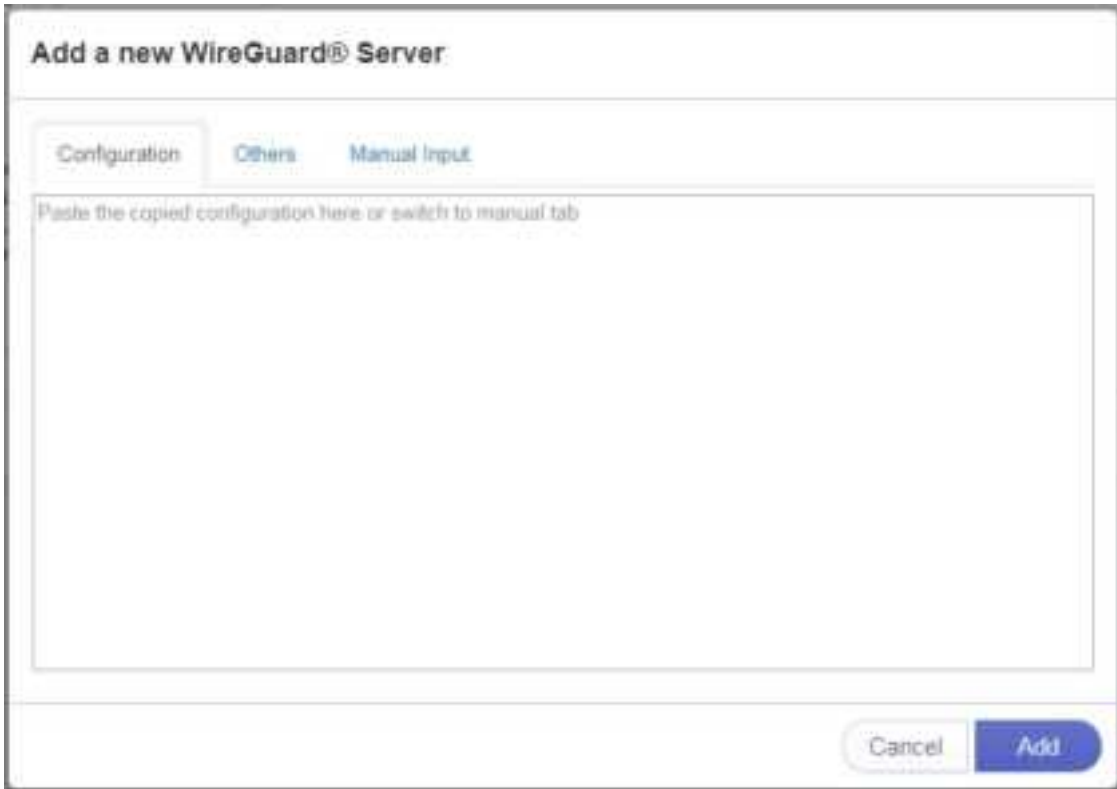


(2) Input the configurations

You can copy the JSON configurations from your server to Configuration or input the settings manually.

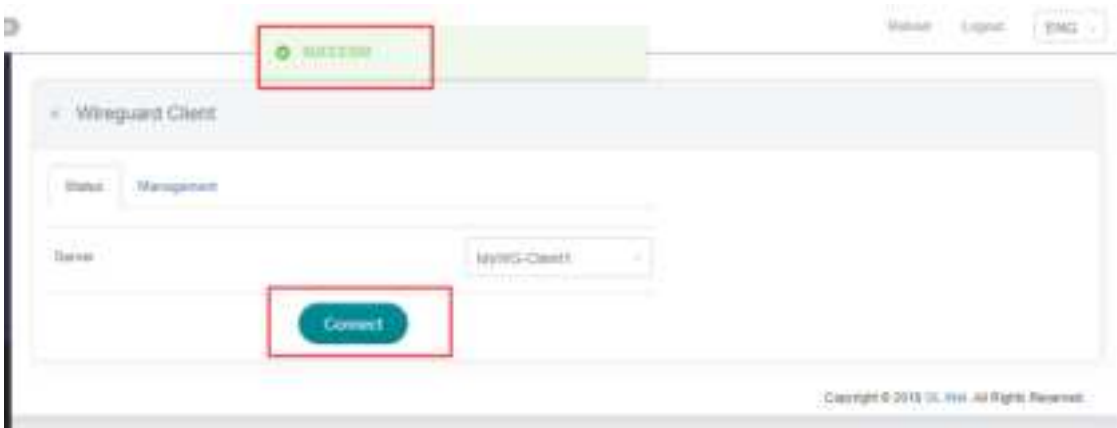
If you are using **Azirevpn** or **Mullvad**, you can click Others and use your **AzireVPN** or **Mullvad** account to set up WireGuard client directly.

Click Add to finish the WireGuard Client setup.



(3) Connect to the WireGuard server

Click Connect. You will see the upload and download traffic when it is connected successfully.



7.2.3. Wireguard App on mobile devices

You can also use WireGuard App on your mobile phone.

- Android: <https://play.google.com/apps/testing/com.wireguard.android>
- iOS: <https://itunes.apple.com/us/app/wireguard/id1441195209?mt=8>

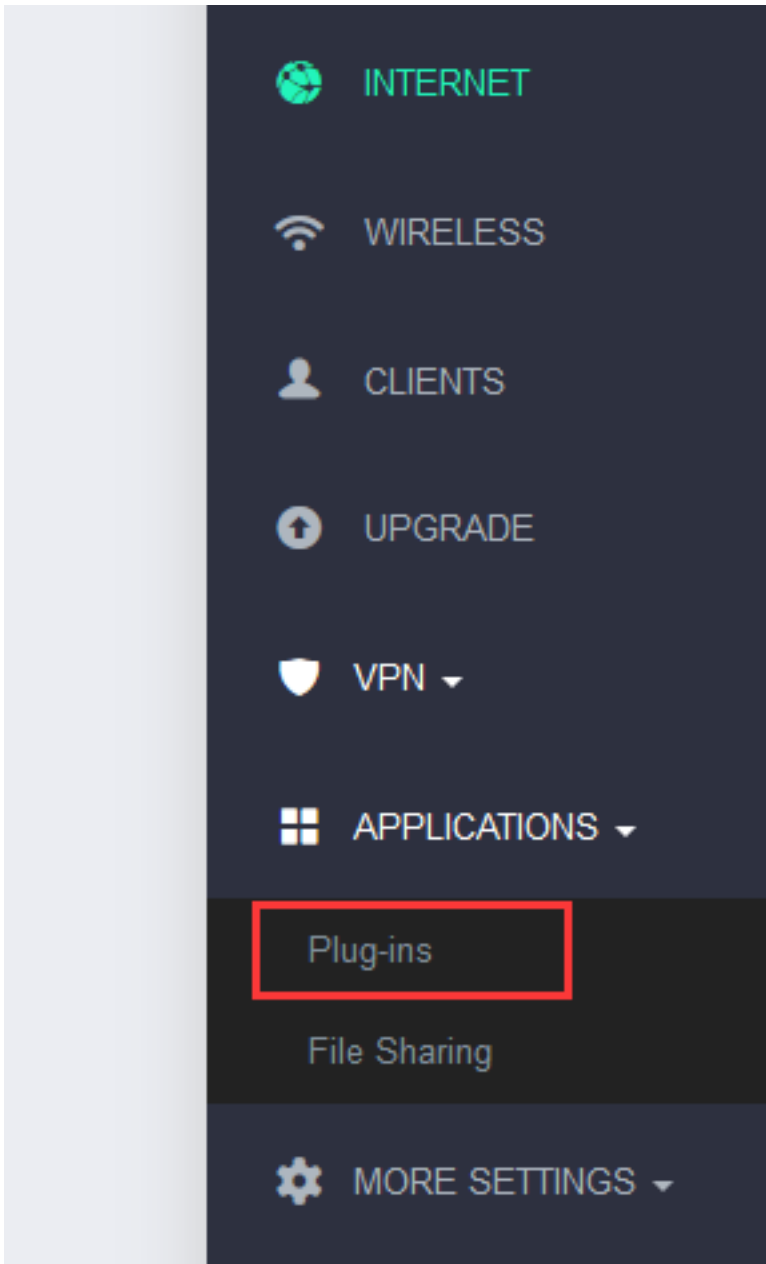
7.3. Shadowsocks

7.3.1. Shadowsocks (SS) Setting for UI 3.0

You will learn how to set up shadowsocks server and client in UI 3.0 on our mini routers in this guide. Because the UI 3.0 default excludes Shadowsocks, this guide is only for DIY purpose and provided as is. To do the following setup, you have to upgrade your Plug-ins.

(1) Update Plug-ins

- Login the router, finish your first-time setup and internet setup, ensure you are connecting the internet.
- Select **APPLICATIONS** -> **Plug-ins** on UI 3.0 web management left side.



- Click **Update** on top-right corner.

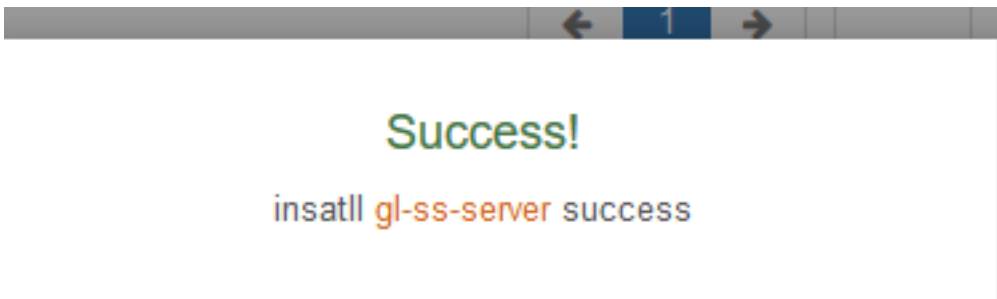


(2) Install the following packages in the Plug-ins:

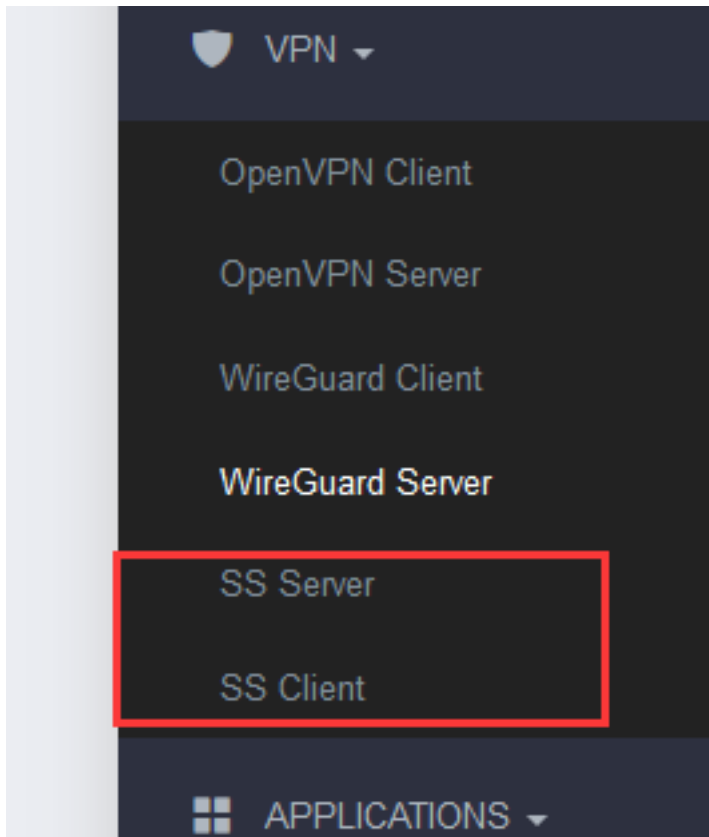
- (1). gl-ss
- (2). gl-ss-server

Name	Version	Description	Action
gl-ss	1	Shadowsocks libev endpoint op for gl.inet.	Install
gl-ss-server	1	Shadowsocks libev endpoint op for gl.inet.	Install

The following Success window will pop-up each time when installed a package.



And after all packages installed, you can find 2 more selections, "SS Server" and "SS Client" are displayed at left side in VPN pull-down menu.



7.3.2. Setup SS-Server and Start SS services

Click **VPN-> SS Server** on the left side, main setup page of SS Server will be shown as following:

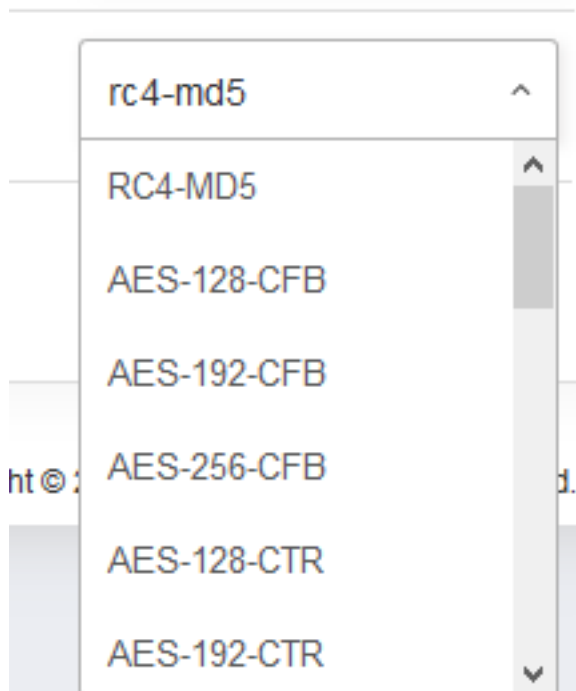


Input 3 parts in the right table.

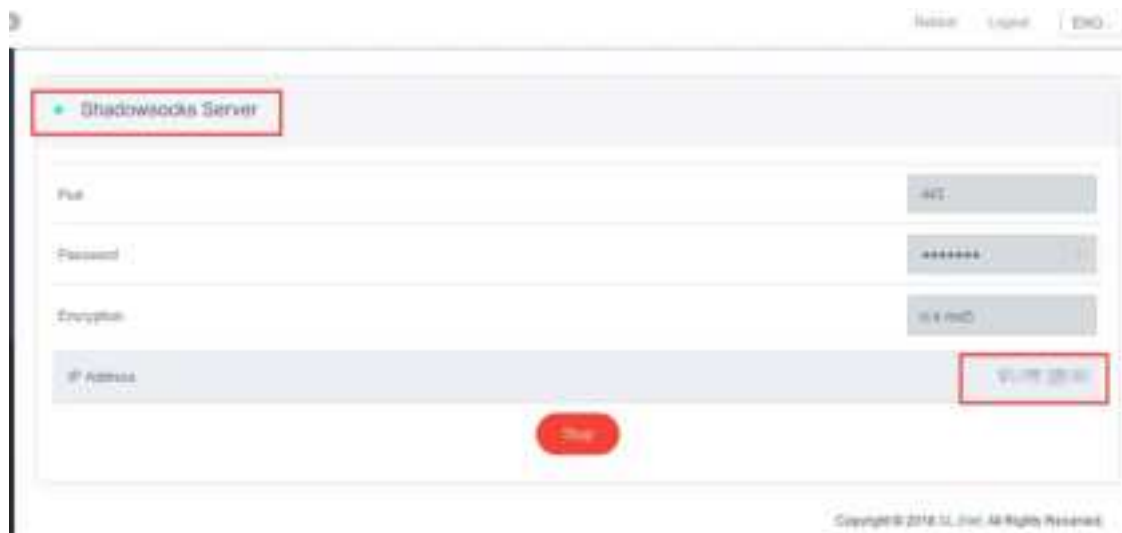
Port - SS Server Port

Password - SS services password to be used when client connect to this server

Encryption Method - Select one of the encryption method list.



After all sections setup finished, you can click the green "Start" button to start SS server. Then the dot before Shadowsocks Server will turn to green and IP Address will display. This is the SS server Public IP.



7.3.3. Using SS on PCs or Smartphones

- Download the clients of your OS platform:

<https://shadowsocks.org/en/download/clients.html>

- Setup your client on different devices

Install the Shadowsocks Client on your device (iOS, Android or Windows devices), then setup the following information:

Host: **your Public IP address** (you checked in step 2.3)

Port: 443

Password: **your password** (same as you setup in ss-server)

Encryption: rc4-md5 (same as you select in ss-server)

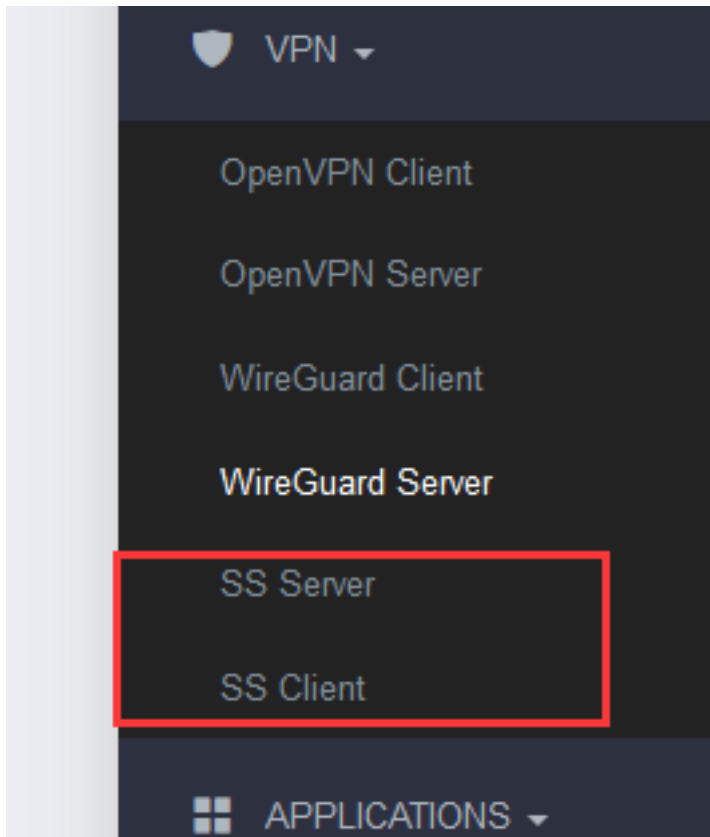
- Start using Private Shadowsocks Services

After setup, you just start your shadowsocks on your devices, enjoy it.

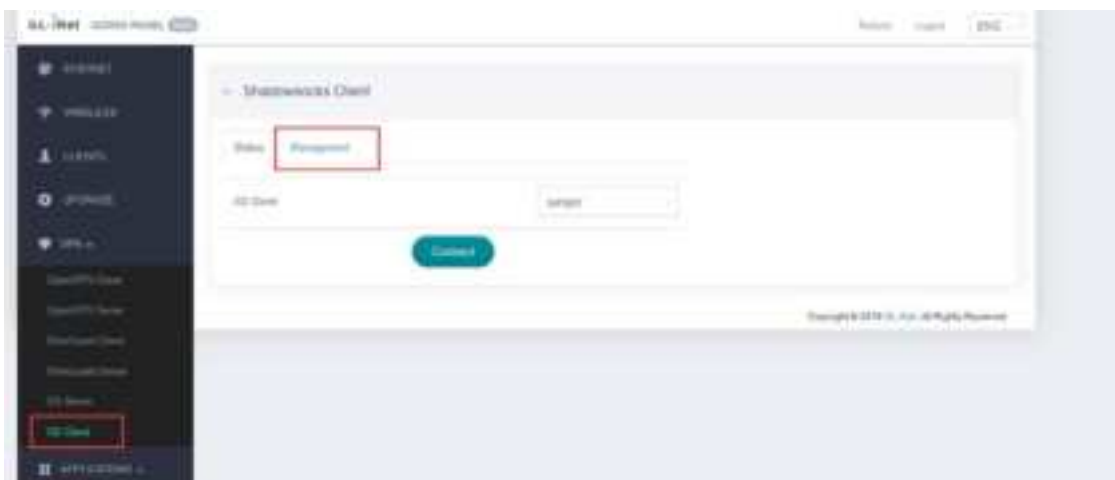
You can test or check whether it's workable by open a web browser on your smartphone (use 3G/4G data but not WiFi), then go to a IP address checking website to check if the IP address is same as your SS-server public IP address.

7.3.4. Shadowsocks Client Setup on the router

- Select "SS Client" in the VPN pull-down menu.



- Click "Management" tab to setup SS-Client for GL-AR750s



- 4.3. Click "Add a New Shadowsocks Client", fill the following information in the pop-up window:

Add a New Shadowsocks Client

Description	Required
Encryption	RC4-MD5
IP Address	Required
Port	Required
Password	Required

Cancel Add

Description : Your SS server description

Server Address: "**Your Public IP**"

Server Port: 443

Password: "**Your Password**"

Encrypt Method: RC4-MD5

Click "**Add**",

Add a New Shadowsocks Client

Description	SS Client
Encryption	RC4-MD5
IP Address	Your Public IP
Port	443
Password	*****

Cancel Add

The setup will finish and auto return to the **Status** page, now you can select the previously configuration in the pull-down menu of SS Client.

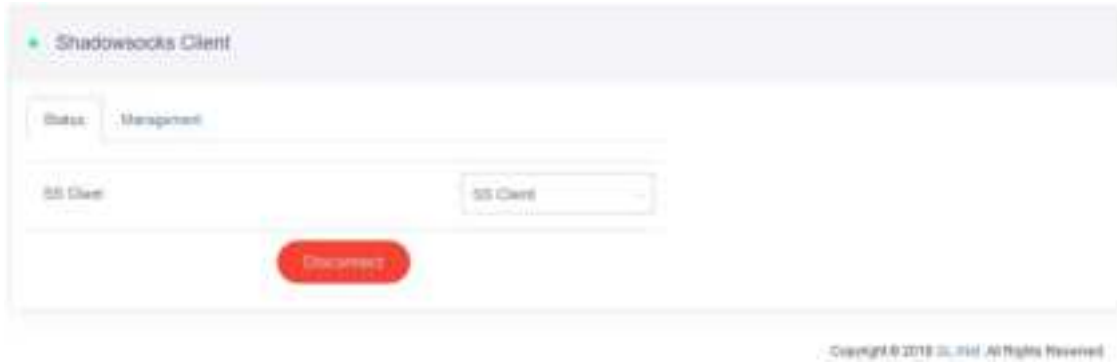
Status Management

SS Client

sample
sample
SS Client

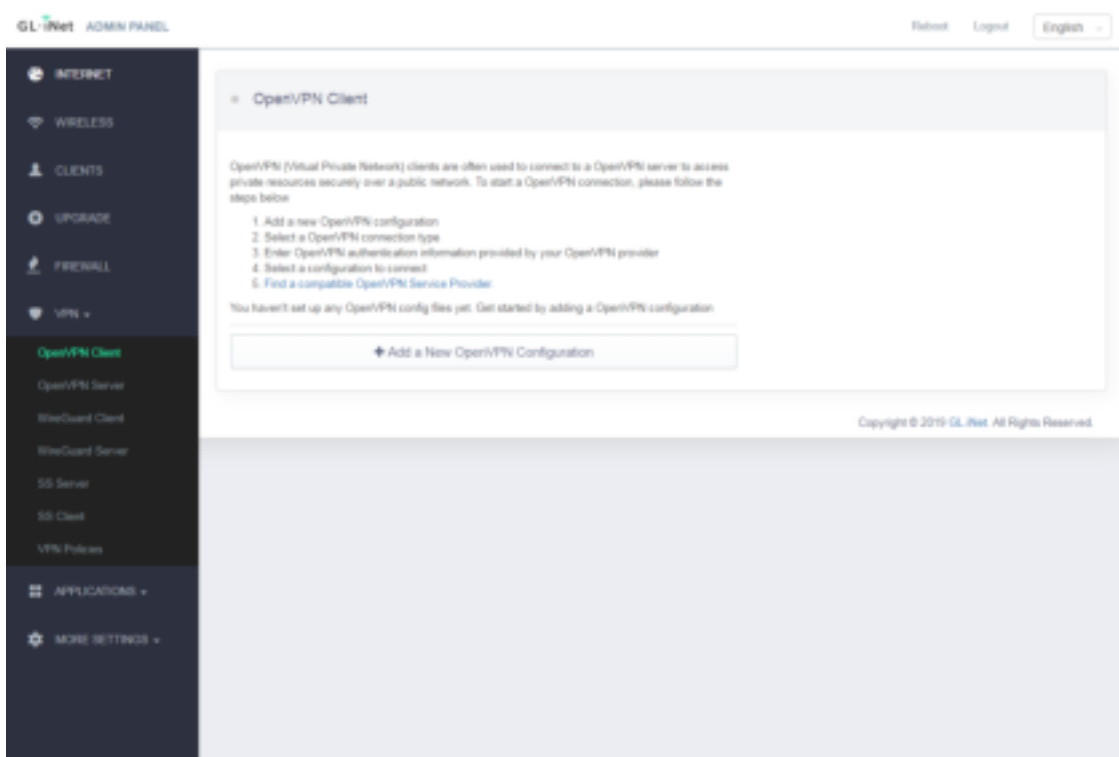
Connect

Click green "**Connect**" button, then the connection shall be established.

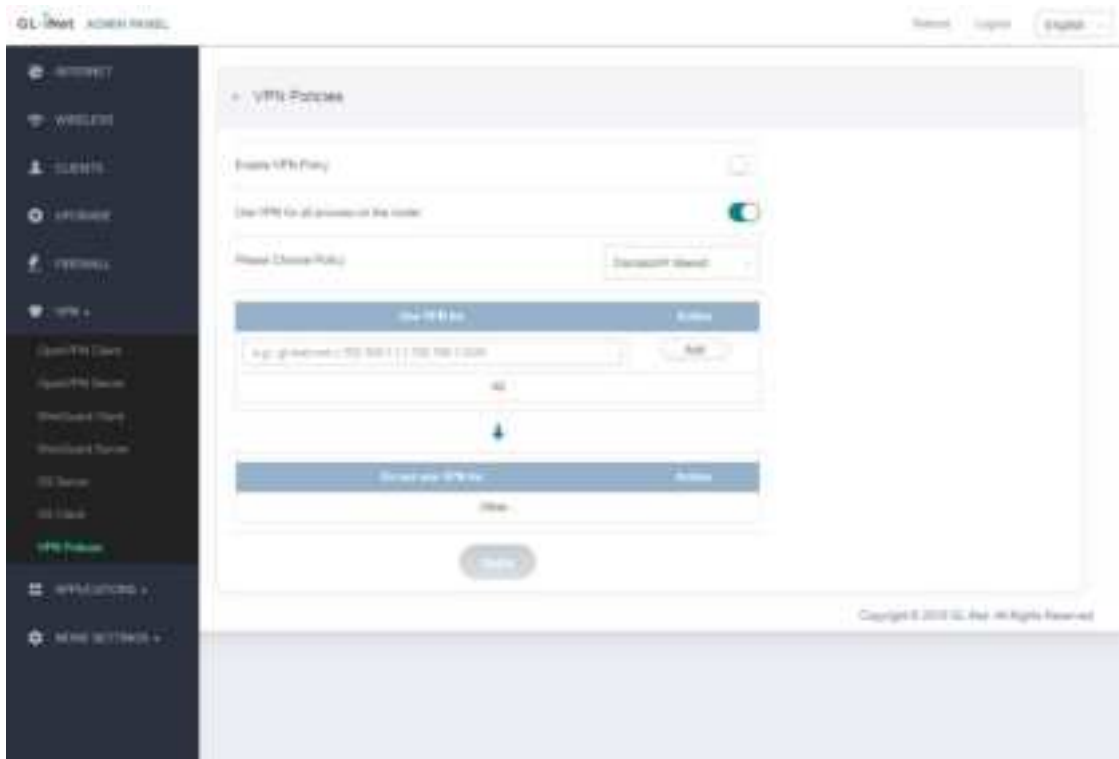


If you successfully connected the SS-client to SS Server, the dot before Shadowsocks Client will turn green and Green "**Connect**" button will become Red "**Disconnect**".

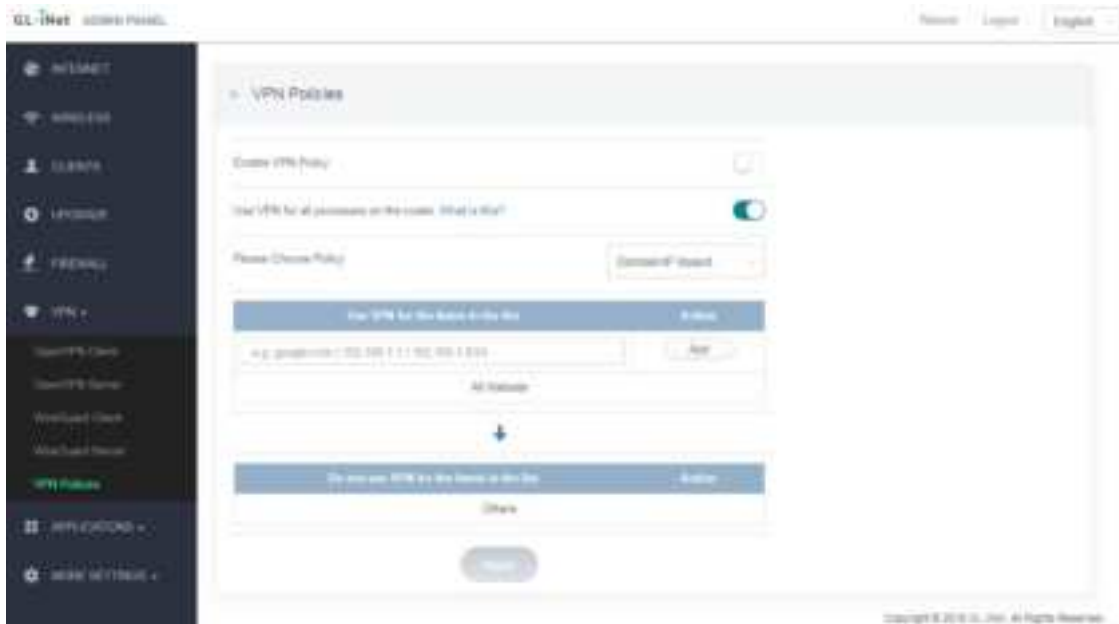
Enjoy your SS services.



7.4. VPN Policies



Starting from firmware version 3.022, users can define VPN routing policies. For example, it is possible to use VPN for a specific website/IP while maintaining a normal Internet traffic without VPN for others.



7.4.1. Settings

Enable VPN Policy: Turn on/off VPN policies.

Use VPN for all process on the router: Generally, the traffic of all processes running on the router such as GoodCloud will be routed through VPN if there is a connected VPN client (e.g. WireGuard, OpenVPN, Shadowsocks). In this case, these processes will lose Internet if VPN is disconnected. In order to ensure a proper operation of these processes, you can disable this option. As a result, they will not use VPN.

Please Choose Policy: The item can be either **Domain/IP** (e.g. gl-inet.com / 192.168.1.1 / 192.168.1.0/24) or **Mac address** (24:F0:94:5C:8E:F9).



7.4.2. Add VPN policy

You can only configure either **Use VPN for** or **Do not use VPN for**. Click the arrow to switch among **Use VPN for** and **Do not use VPN for**. To add a policy, enter the domain/IP or Mac address into the box and then click Add. Finally, click Apply to activate the policy.

For example, if we want to route only the traffic of gl-inet.com through VPN, we need to add *gl-inet.com* under **Use VPN for**.

Use VPN for the items in the list	Action
e.g. google.com 192.168.1.1 192.168.1.0/24	Add
gl-inet.com	Delete



Do not use VPN for the items in the list	Action
Others	

However, if we want to route all traffic through VPN except *gl-inet.com*, we need to add *gl-inet.com* under **Do not use VPN for**.

Use VPN for the items in the list	Action
Others	



Do not use VPN for the items in the list	Action
e.g. google.com 192.168.1.1 192.168.1.0/24	Add
gl-inet.com	Delete

7.4.3. Clear DNS cache

If you are using domain-based policy, it may not work unless you clear your DNS cache. Please follow the instructions below to clear your DNS cache.

Windows: Press **Win + R** and run **cmd**. Execute command `ipconfig /flushdns`.

MacOS: Open **Terminal** and execute command `sudo killall -HUP mDNSResponder`.

Ubuntu: Open **Terminal** and execute command `sudo service network-manager restart`.

Use VPN for the items in the list	Action
gl-inet.com	Add
All Website	

↓

Do not use VPN for the items in the list	Action
Others	

If you want your Domain-based policy take effect immediately, you need to clear your DNS cache. Help?

[Apply](#)

You may also need to clear DNS cache in your browser.

Chrome: Visit <chrome://net-internals/#dns>. Click Clear host cache.

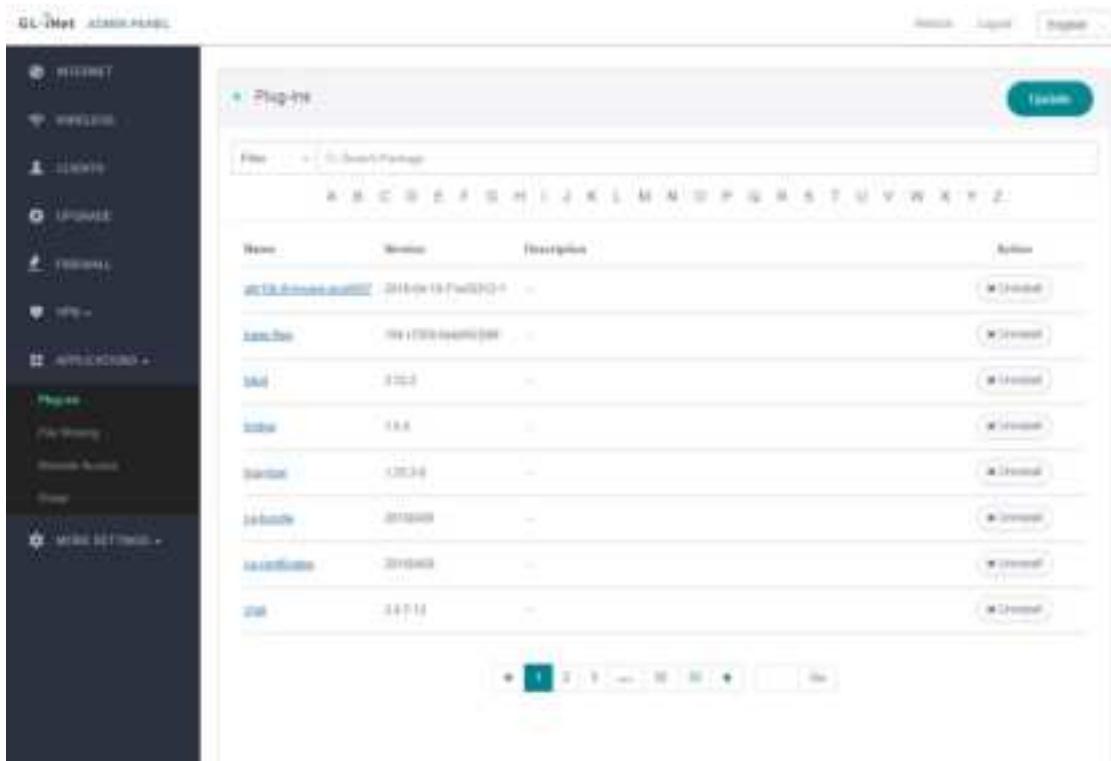
Firefox: Open Firefox and press Ctrl + Shift + Delete. Select **Time range to Everything** and check only **Cache**. Finally, click Clear Now.

8. APPLICATIONS

8.1. Plug-ins

Plug-ins allows you to manage OpenWrt packages. You can install or remove any package.

Remember to click Update whenever you access this packages repository.



8.2. File Sharing

You can use an external USB storage or a MicroSD card with GL.iNet router. The file sharing features of the external storage device can be configured in **File Sharing**.

Share via LAN: Share the contents of the external storage device with all connected clients.

Share via WAN: The contents of the external storage device can be accessed from the WAN.

Writable: The contents of the external storage device can be edited.

8.2.1. Router settings

The contents of the external storage device are shared to LAN but not WAN and they are unwritable by default. Please click on your router model below to check how to change the file sharing settings of the router.

Supported external storage devices

Router Model	USB Stick	USB Hard Drive	MicroSD Card
GL-MT300N*	✓	✓	-
GL-MT300N-V2*	✓	✓	-
GL-AR150 Series	✓	✓	-
GL-AR300M Series	✓	✓	-
GL-USB150	-	-	-
GL-MiFi	✓	✓	✓
GL-AR750	✓	✓	✓
GL-AR750S-Ext (Slate)	✓	✓	✓
GL-B1300*	✓	✓	-

*Firmware 3.0 for this model has not released yet.

Note: The power consumption of USB hard drive is quite high. You should use it with an external power supply. Otherwise, it may cause malfunction.

8.2.2. Access the storage device

You can access the contents of the external storage device from your computer or smart phone. Please check the following guidance for the using of file sharing among different operating systems.

Windows

1) Your network must be Home/Private. Otherwise you may not be able to see your router in **Network**. if you are using Win10, you also need to enable SMB 1.0.

- Win7

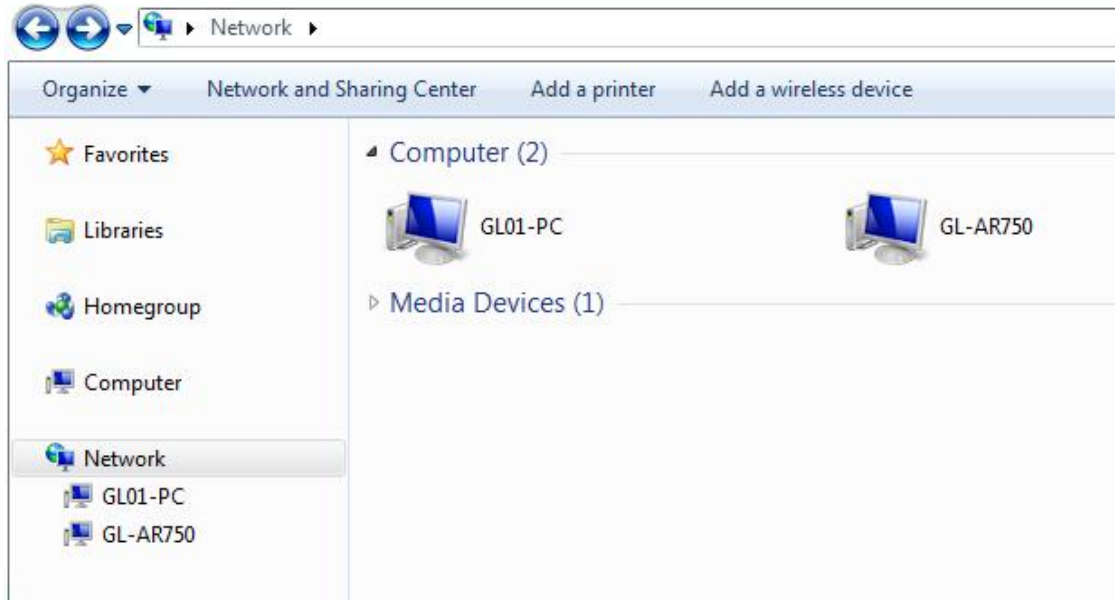
Go to Control panel -> Network and Internet -> Network and Sharing Center. Find if your active network is **Home network**. If not, click it and change it to **Home network**.

- Win10

Go to Control panel -> Network and Internet -> HomeGroup. Click **Change network location**.

Go to Control Panel -> Programs and Features -> Turn Windows features on or off -> Find SMB 1.0/CIFS file sharing support, check all SMB1 related items, click apply and restart your computer.

2) Open a Windows explorer, you can find **Network** in the folder directory. Double click your router to access its contents.



Mac

1) Go to System Preferences -> Sharing -> File sharing. Click Options and then enable SMB.

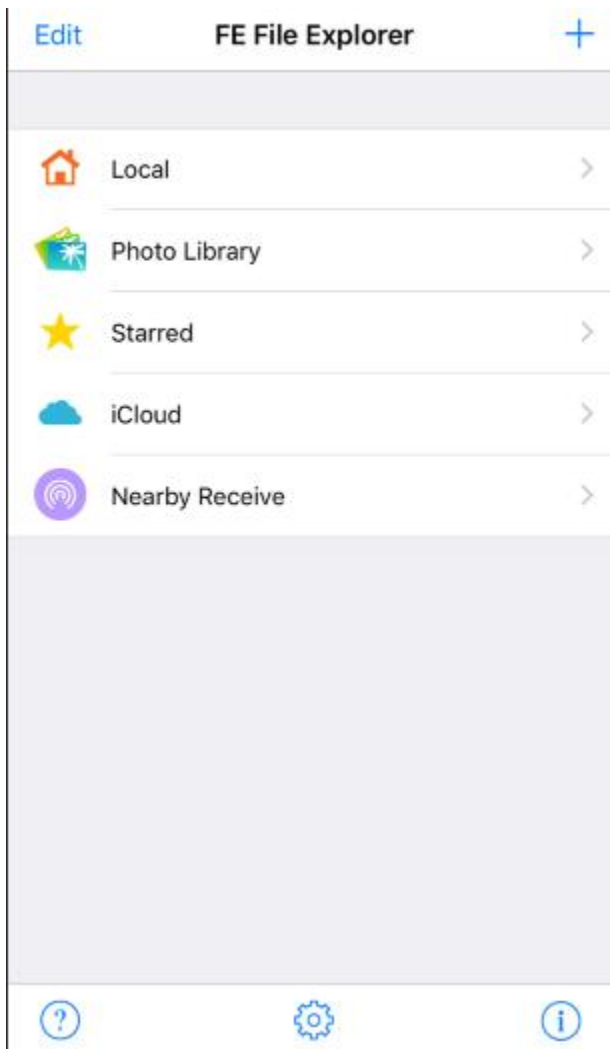
2) Open Finder. You should be able to find your router under Shared.

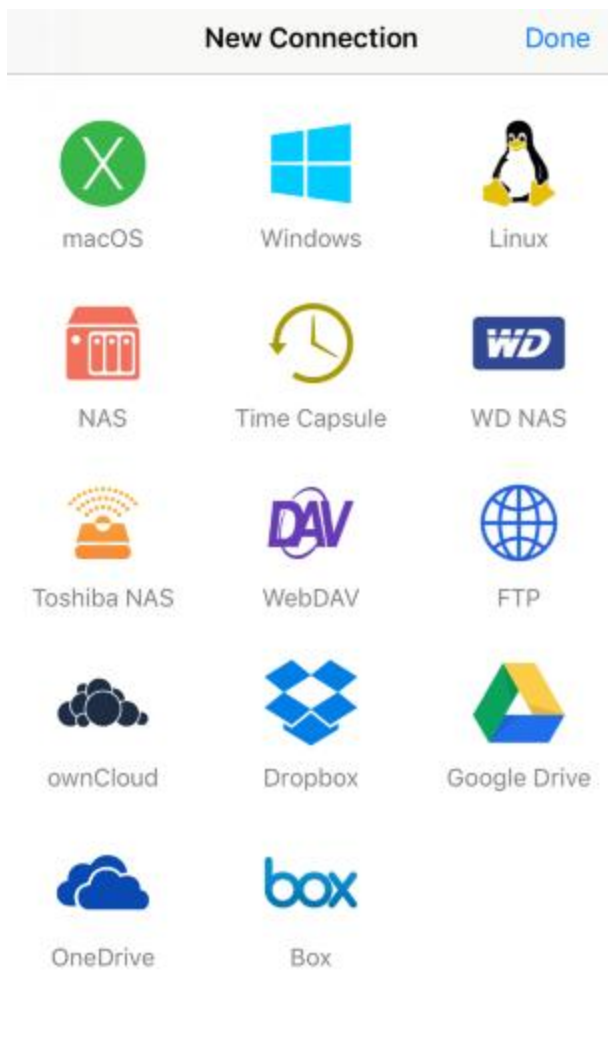
IOS

You have to use file manage app to access the contents of your external storage device.

You may use **FE File Explorer**:

1) Click + to create a Windows connection.





2) Enter the **IP address** of your router (192.168.8.1). The **User Name** is root and the **Password** is the one that you use to login the web Admin Panel. Finally, click Save.

[← New Connection](#) [Save](#)

CONNECTION

Display Name	Optional
Host Name/IP	192.168.8.1
DNS Domain	Optional
Path	Optional
Port	445
Show Hidden Files	<input type="checkbox"/>
Show Admin Shares	<input type="checkbox"/>
Support DFS	<input type="checkbox"/>

CONNECT AS

User Name	root
Password	●●●●●●

If you try to access network share in domain, please input 'Domain\User' or 'User@Domain' in User Name

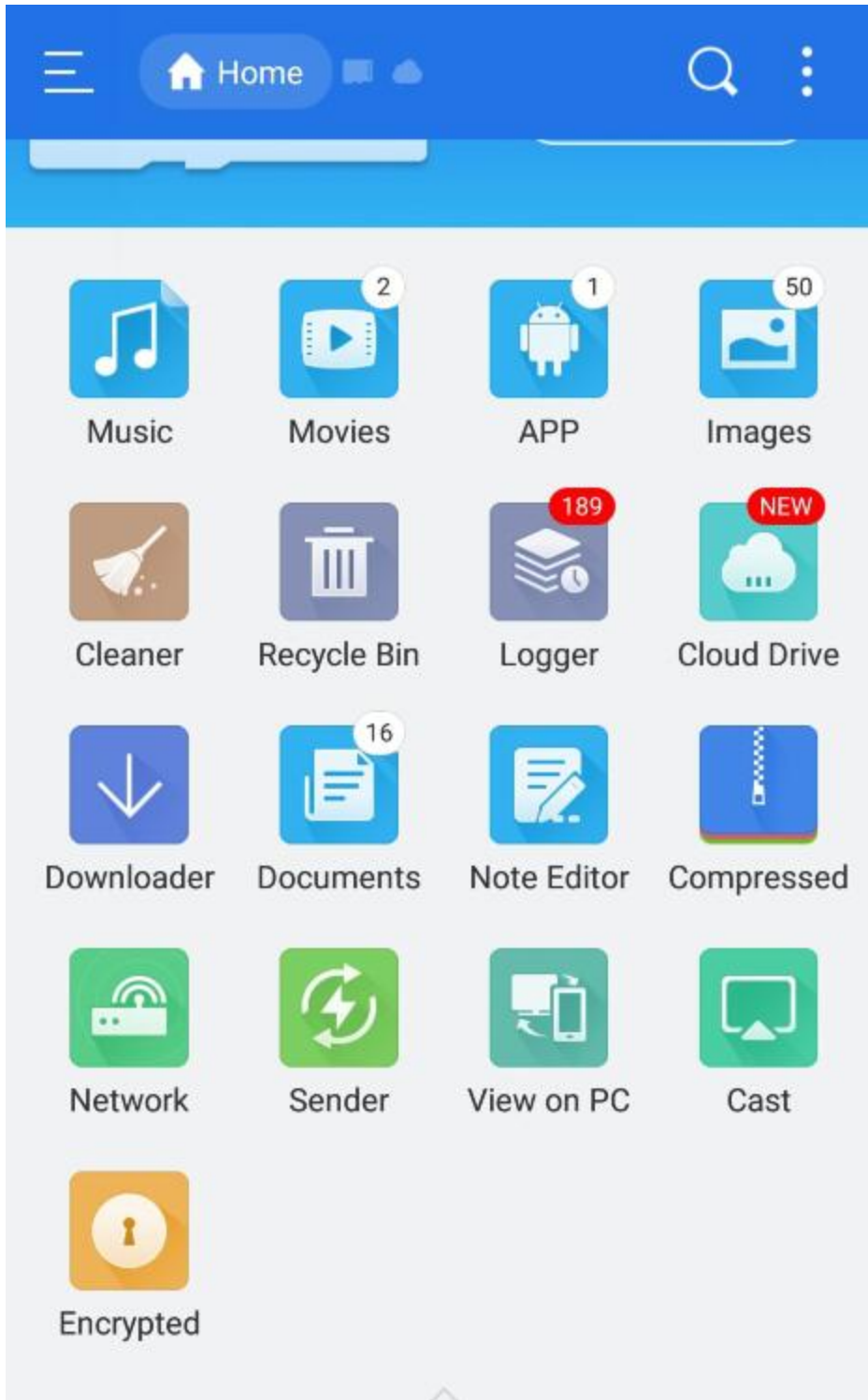
3) Click your newly created connection to access the contents.



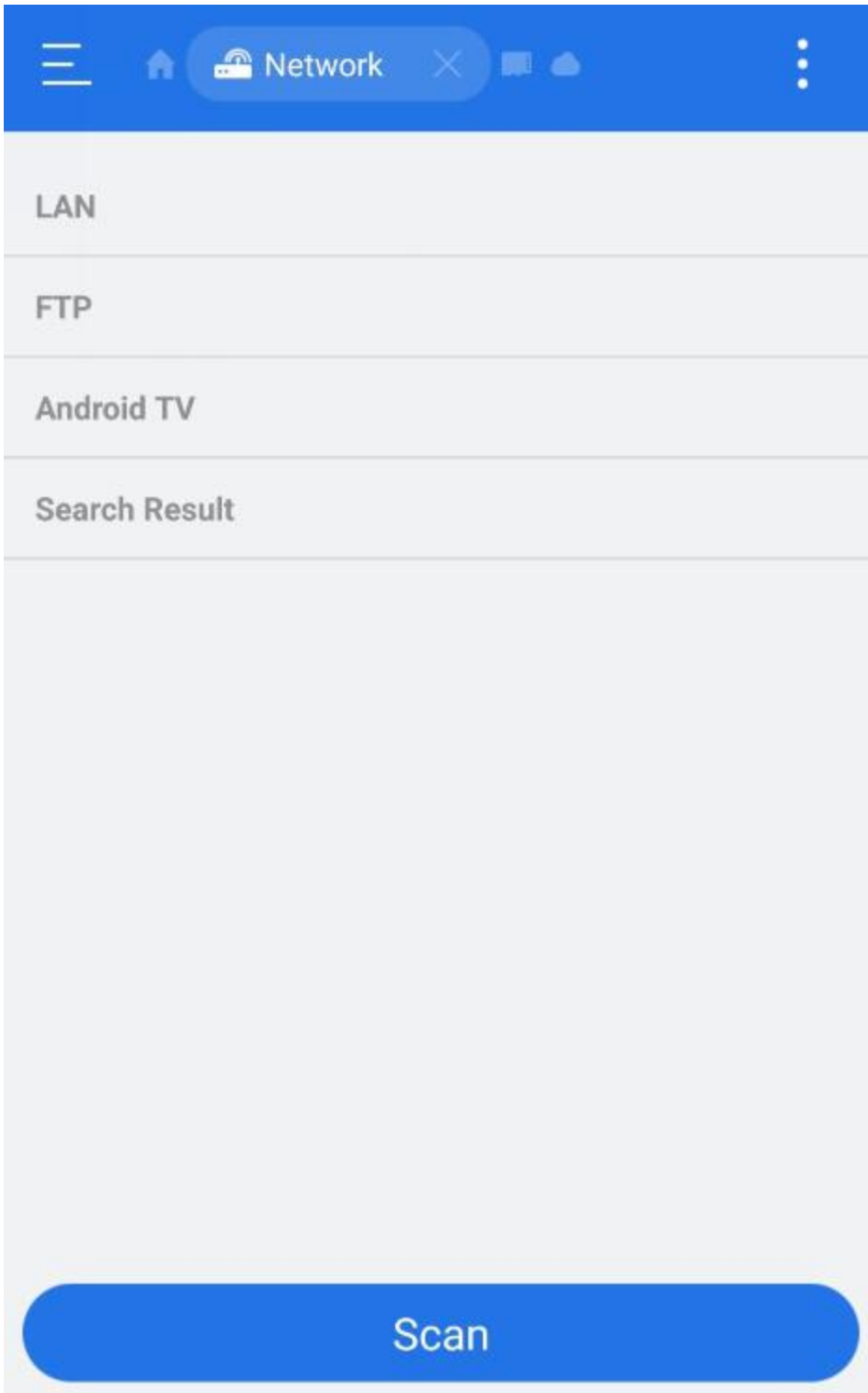
Android

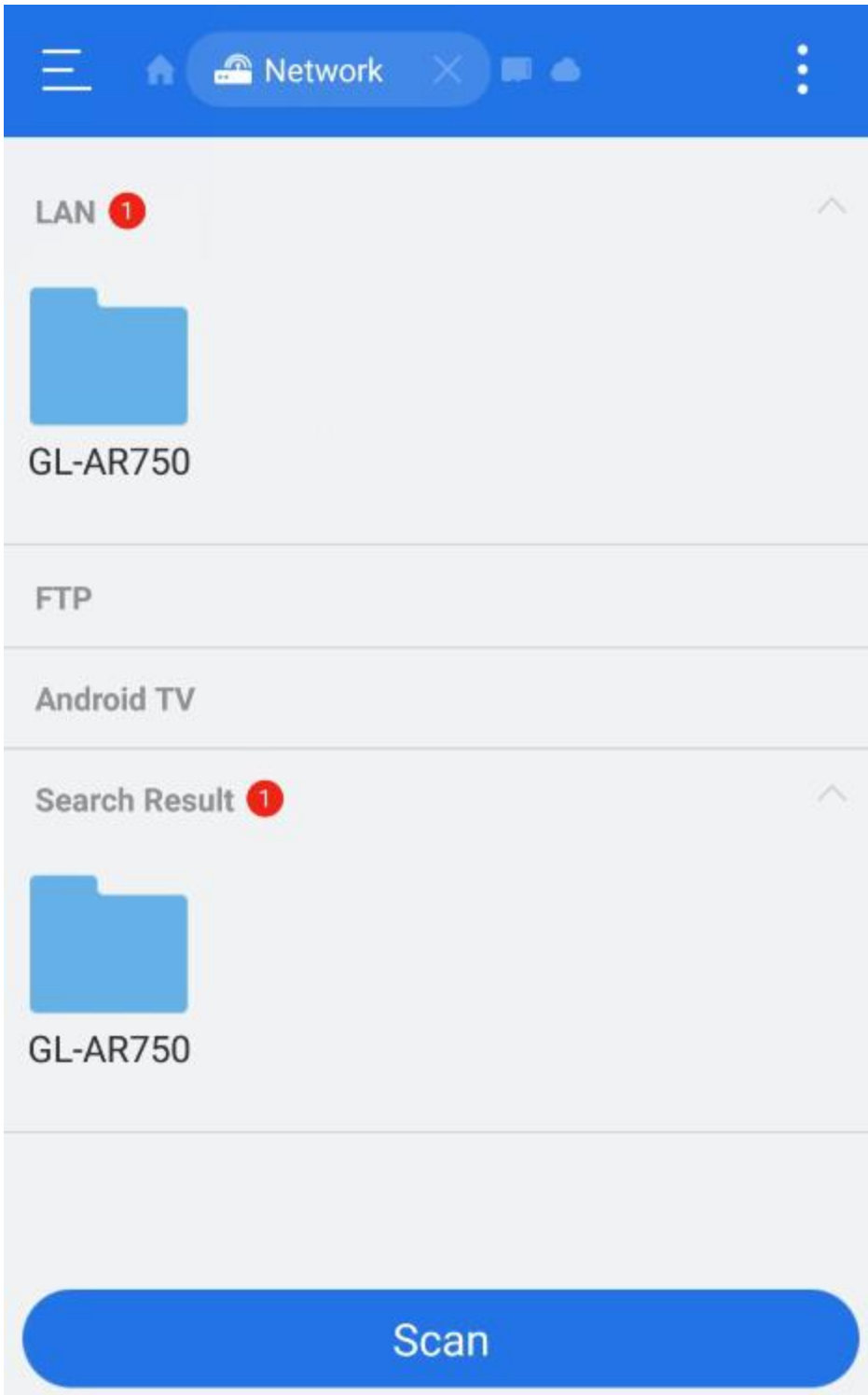
Most Android devices have file manager which you can use to access the contents of your external storage device. Or you can use **ES file explorer**:

1) Open the app and then click Network.



2) Click Scan to find your network storage device.



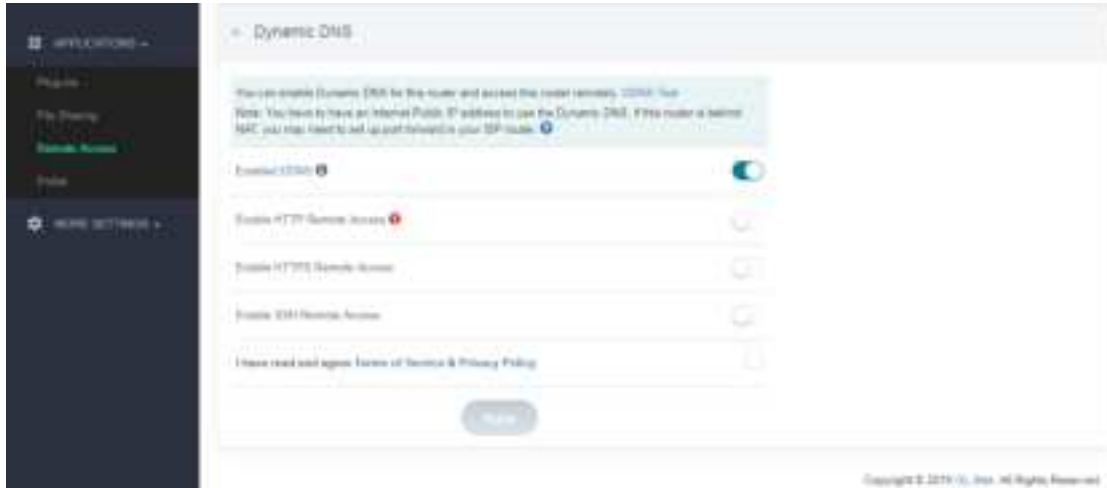


8.3. DDNS

Dynamic Domain Name Service(DDNS) is a service used to map a domain name to the dynamic IP address of a network device.

You can remotely access your router by url though this function.

In 3.021 version or above it is a default function, other 3.0 version need to install packages in Plug-ins.



8.3.1. Install gl-cloud-ui plug

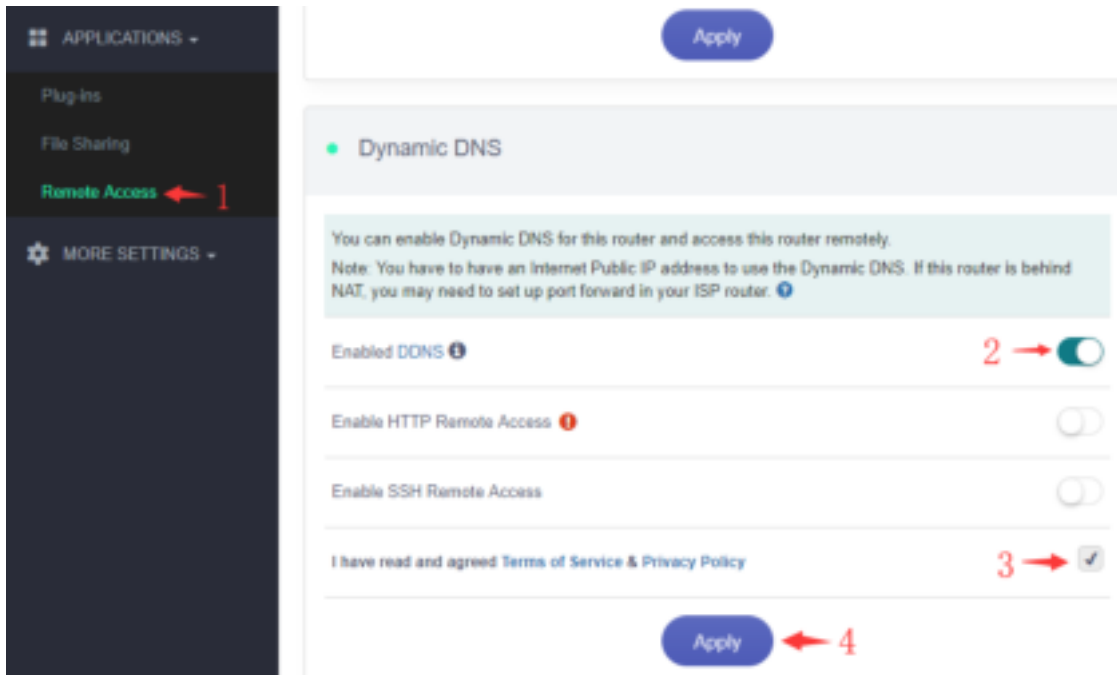
(If your firmware version is equal or greater than v3.021, please jump to Step 2)



Access to router Admin Panel (default is <http://192.168.8.1>), at the left sidebar, APPLICATIONS -> Plug-ins, click "Update" button to update Plug-ins, then input

"gl-cloud-ui" and click "Install" button. After installation, press "F5" to refresh Admin Panel, a new item "Remote Access" will appear inside APPLICATIONS.

8.3.2. Enable DDNS



At the left sidebar, APPLICATIONS -> Remote Access, toggle "Enabled DDNS", agree Terms of Services & Privacy Policy, click "Apply" button. Generally it take several minutes to take effect.

Move mouse to hover the icon besides "Enabled DDNS", it will display the DDNS url of your device.



The DDNS domain printed on the back label of router has changed. If your DDNS url is xxxxxx.gl-inet.com on the back of router, new DDNS url will be xxxxxx.glddns.com.

8.3.3. Check if DDNS is enabled

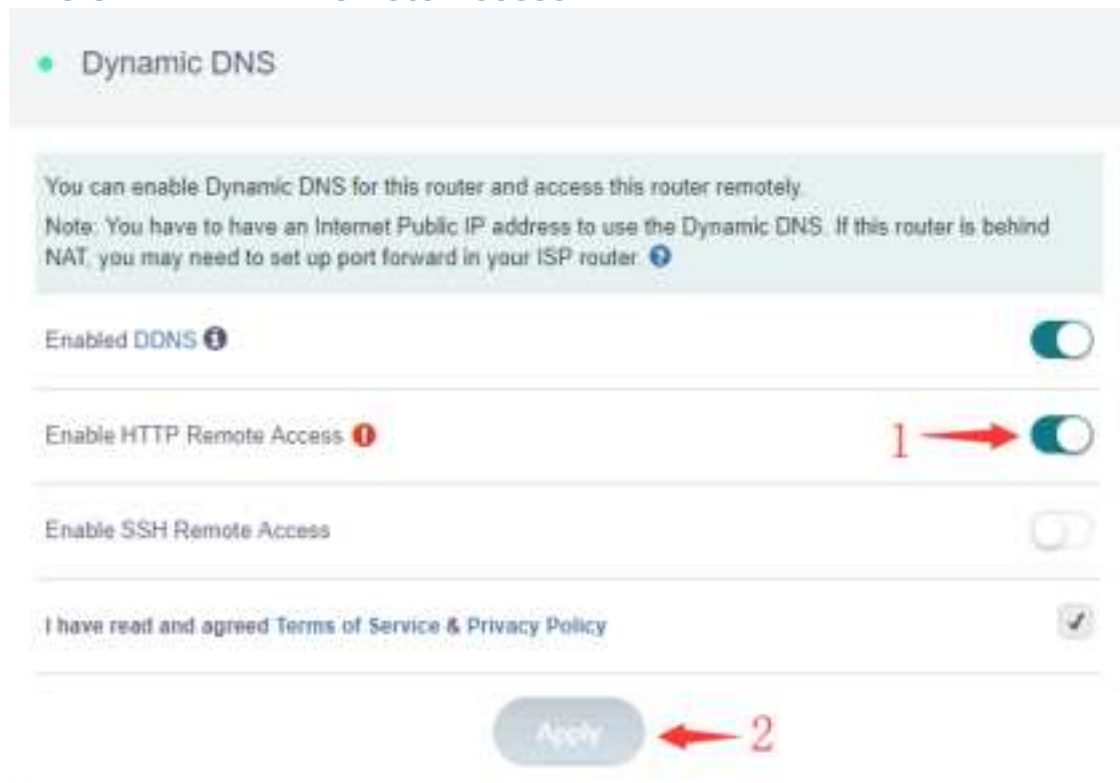
Use nslookup command to check if your DDNS is enabled. Make sure you use your DDNS url when use nslookup command.

```
nslookup xx5007c.glddns.com 8.8.8.8
```

```
C:\Users\User>nslookup xx5007c.glddns.com 8.8.8.8
Server: google-public-dns-a.google.com
Address: 8.8.8.8

Non-authoritative answer:
Name: xx5007c.glddns.com
Address: 223.111.111.111
```

8.3.4. HTTP Remote Access



Dynamic DNS

You can enable Dynamic DNS for this router and access this router remotely.
Note: You have to have an Internet Public IP address to use the Dynamic DNS. If this router is behind NAT, you may need to set up port forward in your ISP router. ⓘ

Enabled DDNS ⓘ

Enable HTTP Remote Access ⓘ 1 →

Enable SSH Remote Access

I have read and agreed Terms of Service & Privacy Policy

Apply ← 2

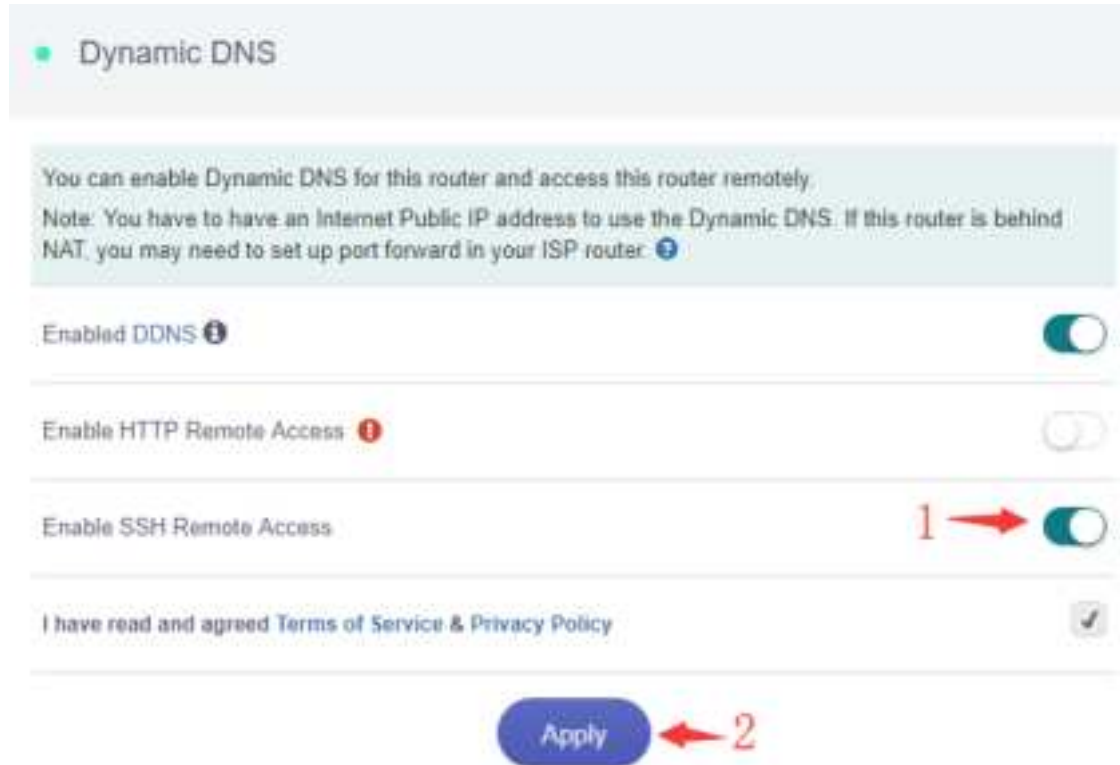
Follow the steps above, to enable HTTP Remote Access.

*** HTTP is not encrypted, use at your own risk.***

If your router is behind NAT, you may need to set up port forward in higher level router.

After you enable HTTP Remote Access, you can access Admin Panel anywhere by your DDNS url as you in LAN.

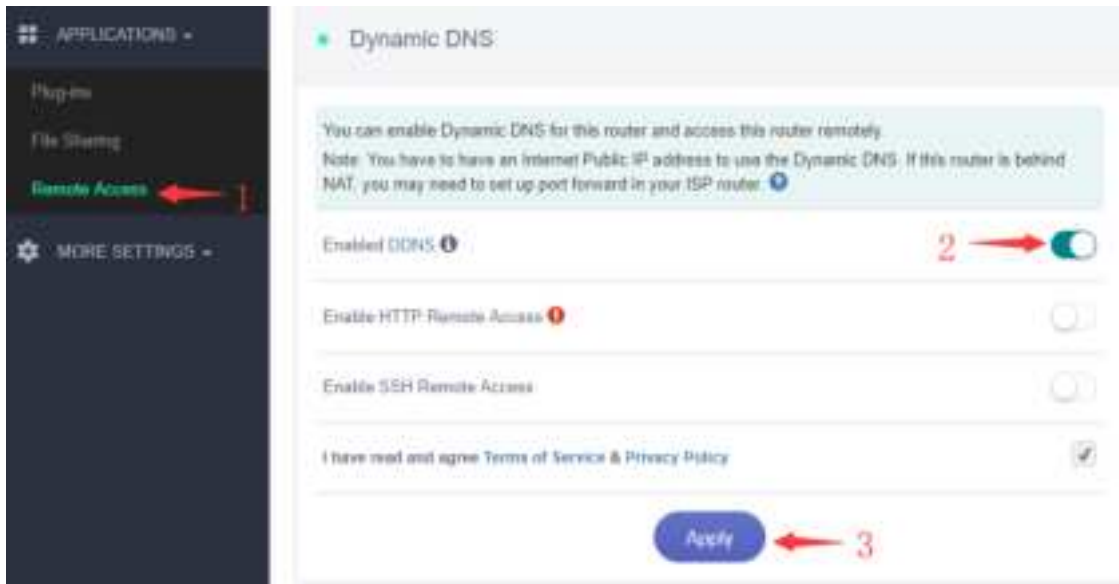
8.3.5. SSH Remote Access



Follow the steps above, to enable SSH Remote Access, then you can use Terminal tools to ssh anywhere.

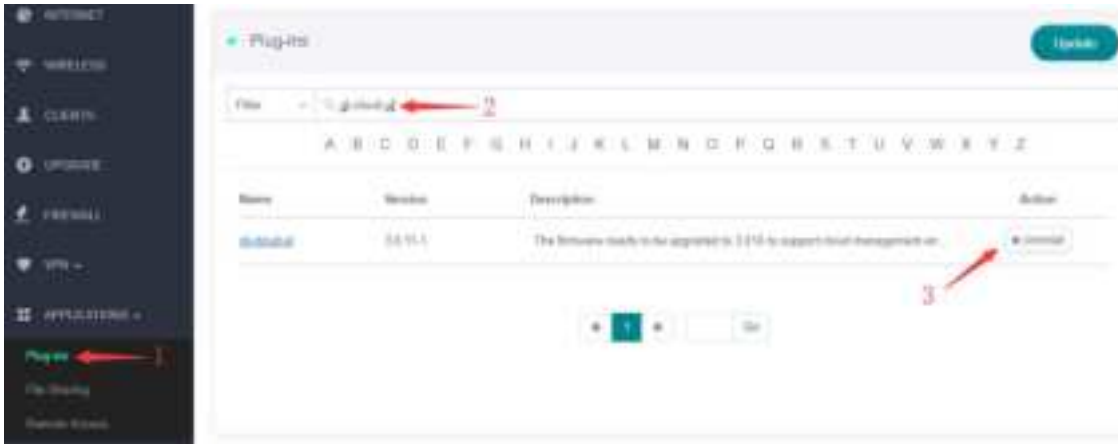
8.3.6. Uninstall

If you don't want DDNS, just disable it.

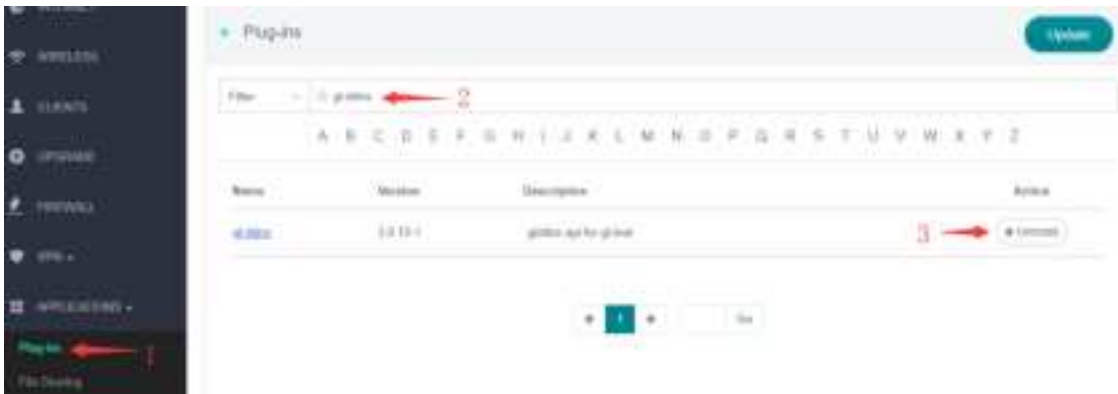


After disable DDNS, the interface is like above.

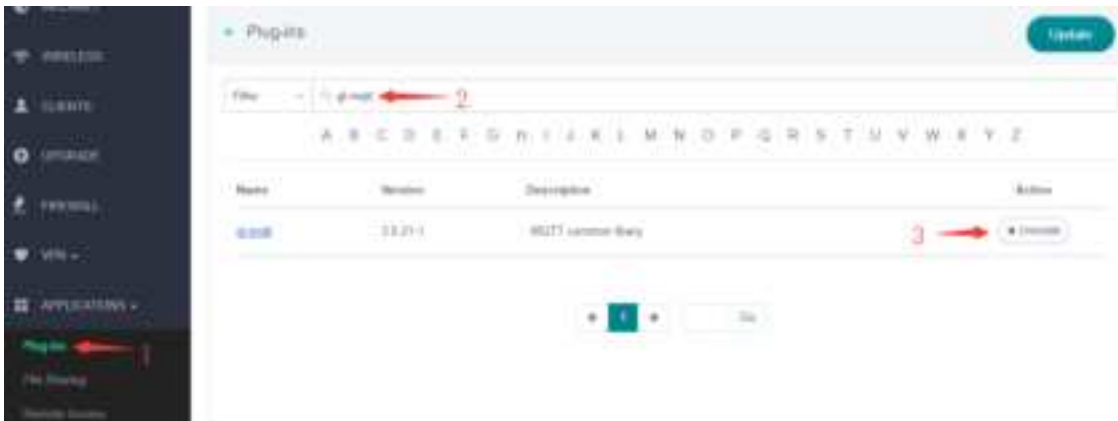
If you want uninstall DDNS feature to save space, you need to uninstall gl-cloud-ui, gl-ddns, and gl-mqtt plug-ins.



Follow the steps above, to uninstall gl-cloud-ui plug-in.



Follow the steps above, to uninstall gl-ddns plug-in.



Follow the steps above, to uninstall gl-mqtt plug-in.

8.4. Cloud

GL.iNet GoodCloud cloud management services provide an easy and simple way to remotely manage routers.

In our website, you can remotely check your router status, change the password, control clients, even set email alarm when a device is online or offline.

In 3.021 version or above it is a default function, other 3.0 version need to install packages in Plug-ins.



For the details, please refer to [Cloud](#).

8.5. Portal

You can set a **captival portal** in our routers, when newly users connect to wifi, they need to access a web page before access the internet.

Only support 3.022 version or above.



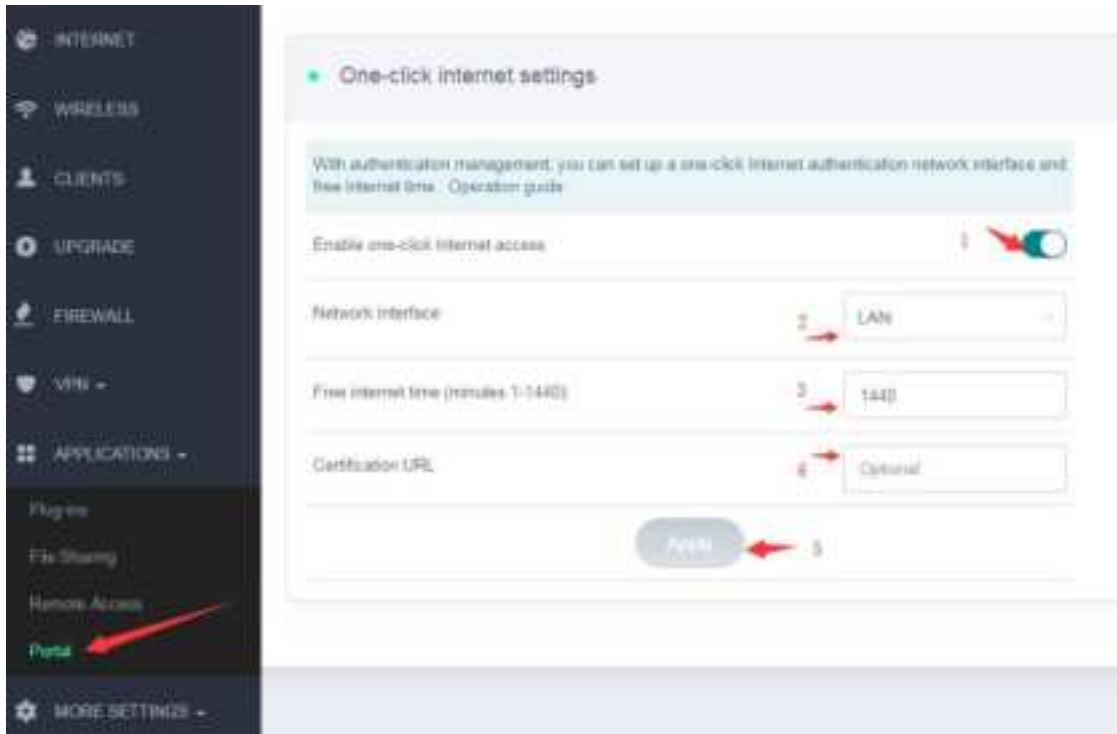
A captive portal is a web page accessed with a web browser that is displayed to newly connected users of a Wi-Fi network before they are granted broader access to network resources.

Captive portal feature need firmware version is equal or greater than v3.022, please visit this to download latest firmware and upgrade.

8.5.1. Turn on Captive Portal

Open a web browser (we recommend Chrome) and to access router Web Admin Panel(default url is <http://192.168.8.1>).

At the left sidebar, APPLICATIONS -> Portal, follow the steps below to enable Captive Portal.



1) Turn on one-click Internet access

2) Choose the network that you want to use Portal. LAN is for LAN clients, include wired clients. Guest is for Guest clients which access by Guest Wi-Fi.

3) Set free internet time.

4) Certification URL is the default page that clients will force redirect to when they are connected, e.g. <https://www.gl-inet.com>

5) Apply the configuration.

For wired desktop client, please use browser to access a http(not https) website, e.g. <http://neverssl.com> or <http://apple.com/?> , then you will see the portal.

Below is the Portal on iPhone, click the "GET CONNECTED" button to access the internet. On Android and desktop platform, it's a similar interface.



8.5.2. Change the default page

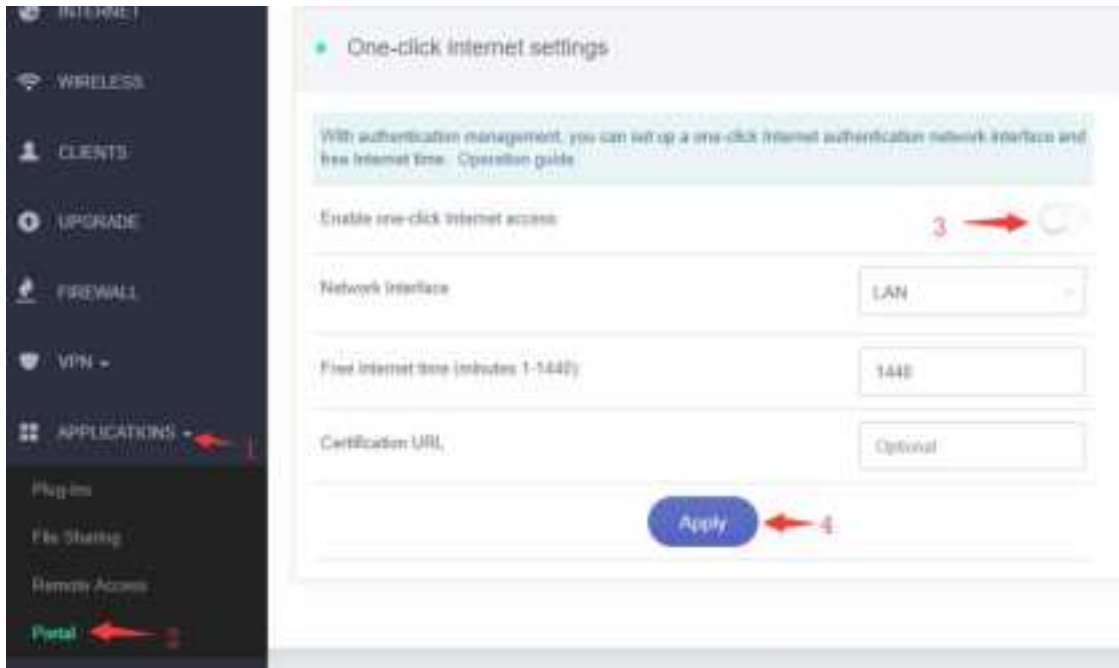
The default page is located `/etc/nodogsplash/htdocs/`, use SSH or WinSCP to change this page. For more information about how to use SSH and WinSCP, please access this. You may need basic HTML and CSS knowledge to change this page, please learn these from w3school or other sites.

If you want to change the picture on the default page, just replace the image on `/etc/nodogsplash/htdocs/portal_login.png`.

After you had change the page, it need to disable Portal and enable Portal again to enable the modified default page.

8.5.3. Disable Captive Portal

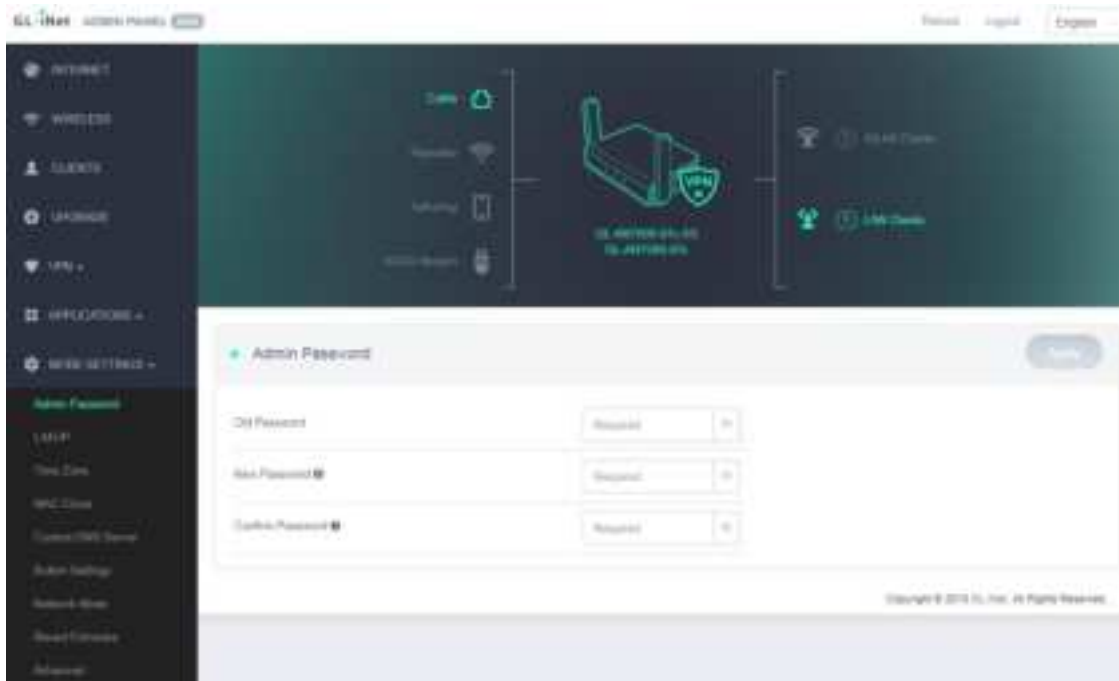
Follow the steps below to disable Captive Portal.



9. MORE SETTINGS

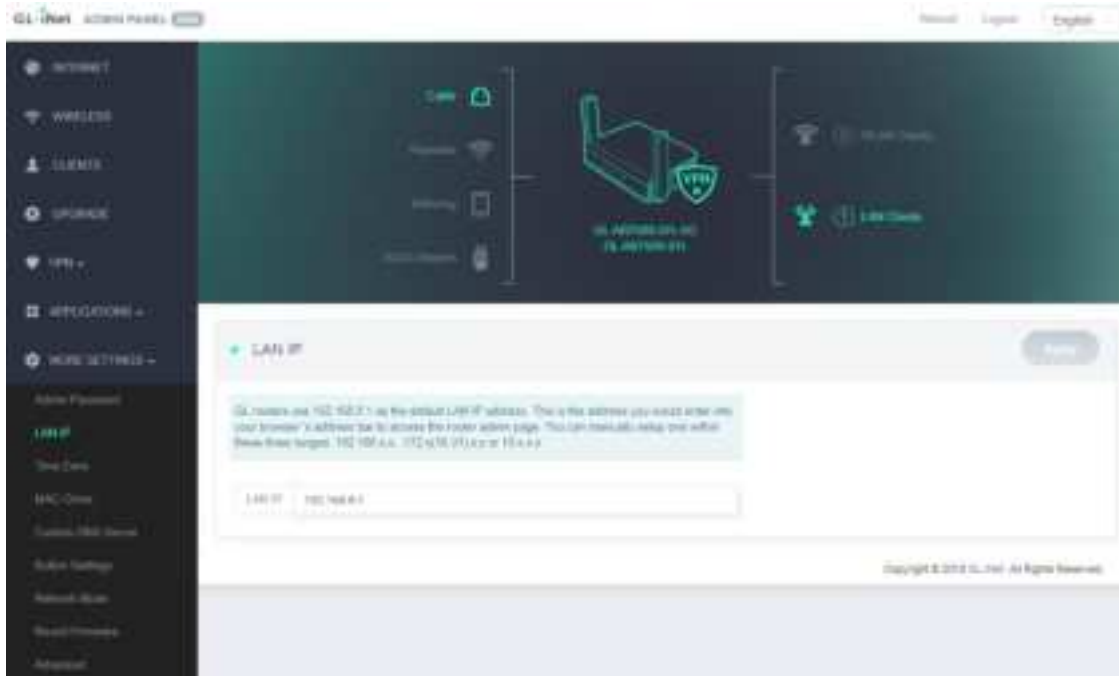
9.1. Admin Password

Change the password of the web Admin Panel, which must be at least 5 characters long. You have to input your current password in order to change it.



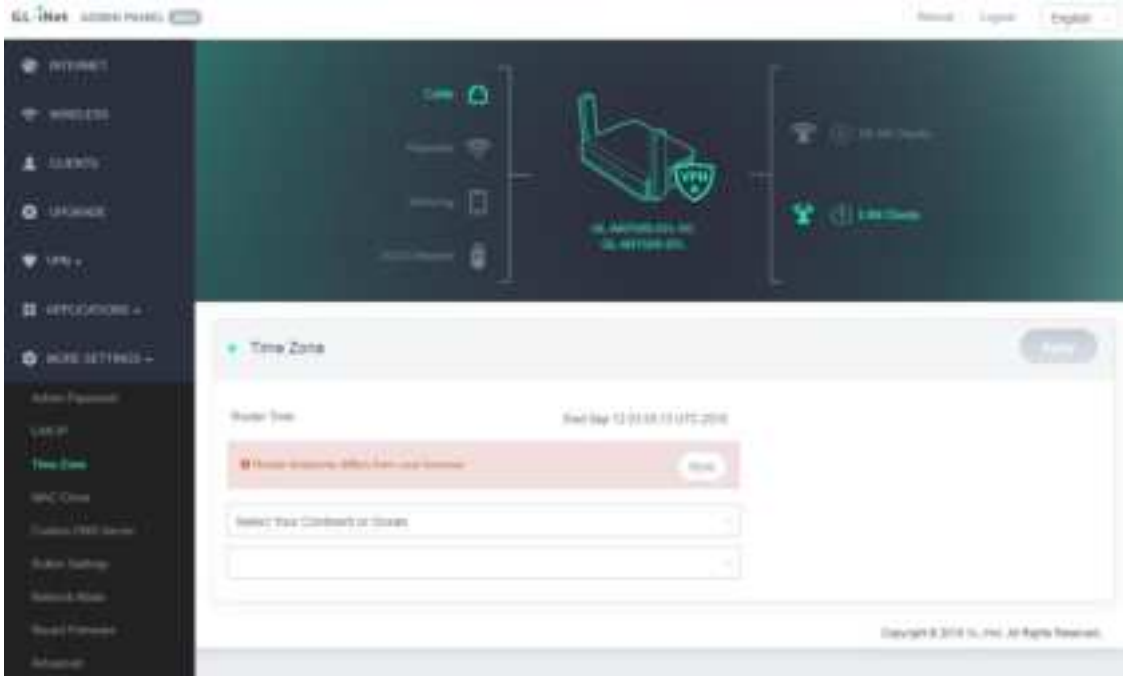
9.2. LAN IP

LAN IP is the IP address that you use to connect to this router. The default IP address of GL.iNet router is 192.168.8.1. If it conflicts with the IP address of your main router, you can change it.



9.3. Time Zone

The time of the router's activities will be recorded according to the router time. Therefore, choosing the time zone of your location is recommended.



9.4. MAC Clone

Clone the MAC address of your current client to the router. It is used especially in hotel when the network checks your MAC address. For example, if you got your smartphone registered on the network, you can clone the MAC address of your smartphone to the router so that the router can also connect to the network.



9.5. Custom DNS Server

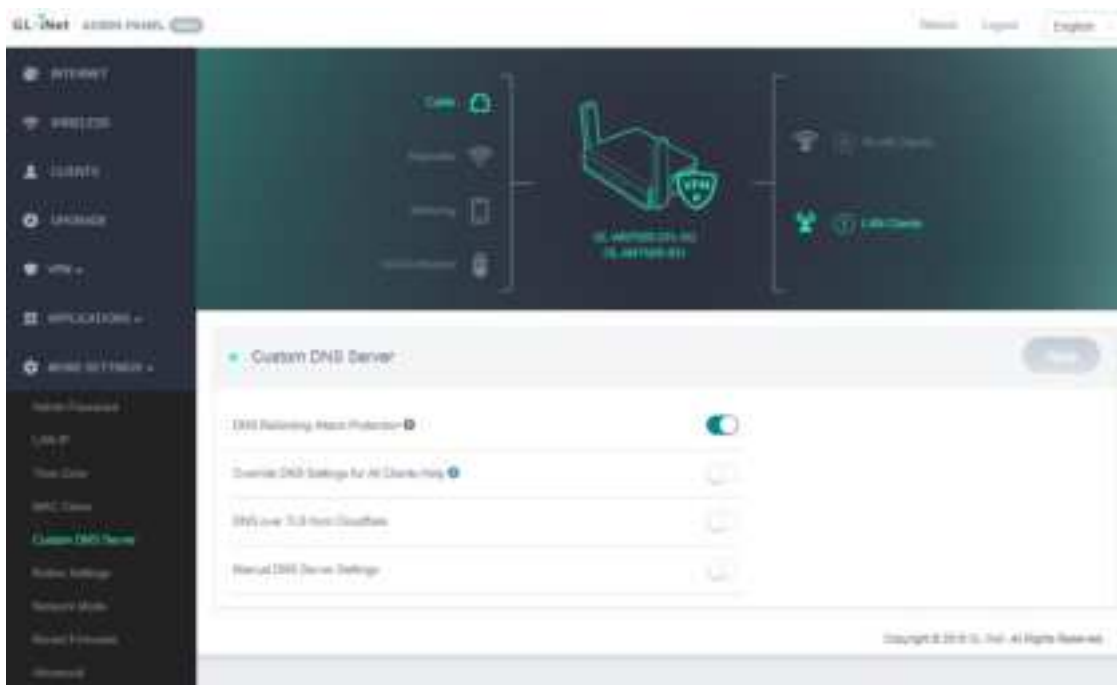
You can configure the DNS server of the router in order to prevent DNS leak or other purposes.

DNS Rebinding Attack Protection: Some network may require authentication in captive portal. Disable this option if the captive portal of your network cannot be resolved.

Override DNS Settings for All Clients: Enabling this option will capture DNS request from all connected clients.

DNS over TLS from Cloudflare: Cloudflare DNS over TLS uses the TLS security protocol for encrypting DNS queries, which helps increase privacy and prevent eavesdropping.

Manual DNS Server Settings: Input a custom DNS server manually.



9.6. Button Settings

Configure the function of the mode switch. It doesn't have any function by default. You can set it as a toggle to turn on or off Wireguard/OpenVPN client.



9.7. Network Mode

Change the network mode to cater your usage scenario. You may need to reconnect your client device whenever you change the network mode of the router.

Be aware that you may not be able to access the web Admin Panel with the default IP 192.168.8.1 if you use the router in **Access Point**, **Extender** or **WDS** mode. If you want to access the web Admin Panel in this case, you have to use the IP address assigned by the main router to the GL.iNet router.

Router: Create your own private network. The router will act as NAT, firewall and DHCP server.

Access Point: Connect to a wired network and broadcast a wireless network.

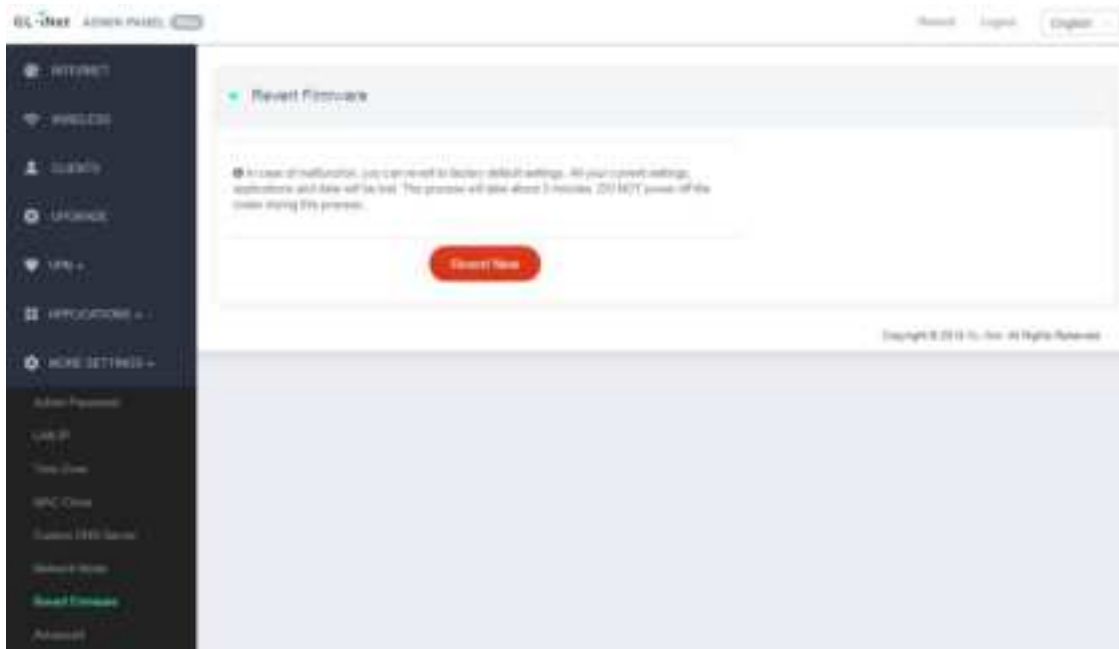
Extender: Extend the Wi-Fi coverage of an existing wireless network.

WDS: Similar to Extender, please choose WDS if your main router supports WDS mode.



9.8. Revert Firmware

Revert the router to factory default settings. All your settings, applications and data will be erased.



9.9. Advanced

Click Advanced to direct to Luci which is the default web interface of OpenWrt. You can check the detailed system log or conduct more advanced configurations there.



*Note: The username is **root**. The password is same as the one that you use to access the web Admin Panel.*