MF613 3G Wireless Router

Fixed Wireless Adapter

User Manual

ZTE CORPORATION
ZTE Plaza, Keji Road South,
Hi-Tech Industrial Park,
Nanshan District, Shenzhen,
P. R. China
518057
Tel: (86) 755 26779999
URL: http://www.zte.com.cn
E-mail: mobile@zte.com.cn

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WELCOME

Thank you for choosing the ZTE MF613 Wireless Router (hereinafter referred to as "router"). The Wireless Router comprises two parts, one is a MF613 Fixed Wireless Adapter, and the other is a USB modem. The router supports Voice and Internet service, and offers you the connection to the Internet with LAN or WLAN.

Notes:

When you only buy the MF613 Fixed Wireless Adapter, if you want to enjoy the Voice and Internet service，you must prepare a USB modem which supports voice and internet service.

To get the most from your router and to keep it in the best condition please read this manual carefully.

The pictures, symbols and contents in this manual are for reference only. They might not be completely identical with your router. ZTE operates a policy of continuous development. We reserve the right to update the technical specifications in this document at any time without prior notice.

Glossary

- AC: Alternating Current
- APN: Access Point Name
- DC: Direct Current
- DHCP: Dynamic Host Control Protocol
- DNS: Domain Name System (or Service or Server)
- DoS: Denial of Service
- EDGE: Enhanced Data GSM Evolution
- ESSID: Expanded Service Set Identifier
- Ethernet: A frame-based computer networking technology for local area networks (LANs)
- GSM: Global System for Mobile Communications
- GPRS: General Packet Radio Service
- HSDPA: High Speed Downlink Packet Access
- HSUPA: High Speed Uplink Packet Access
- IP: Internet Protocol
- LAN: Local Area Network
- LED: Light - emitting Diode
- MHz: Megahertz
- MTU: Maximum Transmission Unit
- PDP: Packet Data Protocol
- PIN: Personal Identification Number
- PPP: Point to Point Protocol
- PSTN: Public Switched Telephony Network
- PUK: PIN Unlocking Key
- RSSI: Radio Signal Strength Indicator
- RF: Radio Frequency
- SIP: Session Initiated Protocol
- UPnP: Universal Plug and Play
- (U)SIM: Subscriber Identification Module
- VOIP: Voice over Internet Protocol
- WCDMA: Wideband CDMA (Code-Division Multiple Access)
- WEP: Wired Equivalent Privacy
- WLAN: Wireless LAN

- WPA-PSK: Wi-Fi Protected Access–PreShared Key

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Chapter 1

General Information

Safety Precautions

- Some electronic devices may be susceptible to electromagnetic interference. Locate the router away from TV set, radio and other electronic equipment to avoid electromagnetic interference.
- The router may interfere with medical devices like hearing aides and pacemakers. Consult a physician or the manufacturer of the medical device before using the router.
- Do not use your router in dangerous environments such as oil terminals or chemical factories where there are explosive gases or explosive products being processed.
- Please use original accessories or accessories that are authorized by ZTE. Unauthorized accessories may affect the router performance, damage the router or cause danger to you.
- Do not attempt to dismantle the router. There are no user serviceable parts.
- Do not allow the router or accessories to come into contact with liquid or moisture at any time. Do not immerse the router in any liquid.
- Do not place objects on top of the router. This may lead to overheating of the device.
- The device must be placed in ventilation environment for use.
- Do not expose the router to direct sunlight or store it in hot areas. High temperature can shorten the life of electronic devices.
- Do not allow children to play with the router or charger.
- Keep the length of the cable between the router and the phone less than 10 meters.
- The router is for indoor use only. Do not use the router outside. Do not connect telephone extensions which run outside of the building. These can result in lightning damage to your unit.

Cleaning and Maintaining

- Use an antistatic cloth to clean the router. Do not use chemical or abrasive cleanser as these could damage the plastic case. Turn off your router before you clean it.
- Use the router within the temperature range of -10°C ~ +55°C, and the storage temperature range is -20°C ~ +65°C. The humidity range is 5%~95%.
- Do not use your router during a thunderstorm. Remove the mains power pack from the wall socket.
- Do not take out your (U)SIM card unnecessarily. The (U)SIM card may be easily lost or it can be damaged by static electricity.

Limited Warranty

- This warranty does not apply to defects or errors in the Product caused by:

  i. Reasonable Router Appearance Disfiguration.

ii. End User's failure to follow ZTE's installation, operation or maintenance instructions or procedures.

iii. End User's mishandling, misuse, negligence, or improper installation, disassemble, storage, servicing or operation of the Product.

iv. Modifications or repairs not made by ZTE or a ZTE-certified individual.

v. Power failures, surges, fire, flood, accident, actions of third parties or other events outside ZTE's reasonable control.

vi. Usage of products of third Parties, or usage in conjunction with third party products provided that such defects is due to the combined usage.

vii. Any other cause beyond the range of normal usage for Products. End User shall have no right to reject, return, or receive a refund for any Product from ZTE under the above-mentioned situations.

- This warranty is end user's sole remedy and ZTE's sole liability for defective or nonconforming items, and is in lieu of all other warranties, expressed, implied or statutory, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, unless otherwise required under the mandatory provisions of the law.

Limitation of Liability

ZTE shall not be liable for any loss of profits or indirect, special, incidental or consequential damages resulting from or arising out of or in connection with using of this product, whether or not ZTE had been advised, knew or should have known of the possibility of such damages, including, but not limited to lost profits, interruption of business, cost of capital, cost of substitute facilities or product, or any downtime cost.

Emergency Call

Do not rely on the 3G Wireless Router to provide emergency call in all situations.

Your 3G Wireless Router only supports emergency dialing when there is power and connection to the mobile network. If the power fails, the router can not work. If you have no network coverage you will not be able to make emergency calls. The 3G Wireless Router does not include a lifeline facility (wired access to the PSTN).

Chapter 2

Getting started

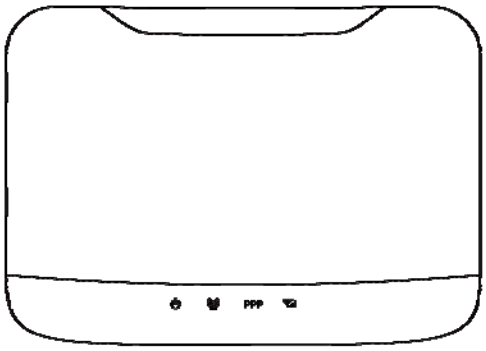
The router operates on the HSUPA/HSDPA/UMTS network and GSM/GPRS/ EDGE network and supports voice and data service.

Parts Supplied

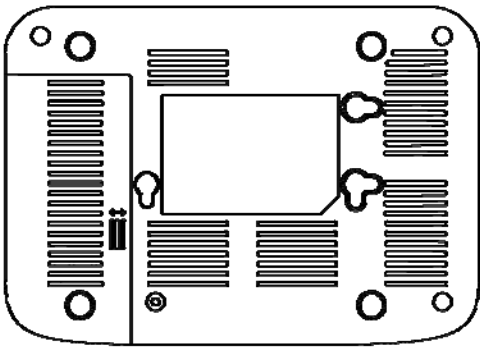
Parts	Quantity
3G Wireless Router	1
*USB Modem	1
External power adapter	1
User manual	1
Certificate of quality	1

*In this manual, the USB Modem is produced by ZTE.

Appearance

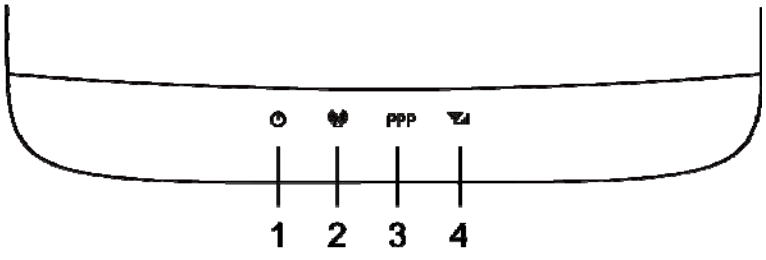


Top View



Bottom View

LED Indicator



LED Indicators

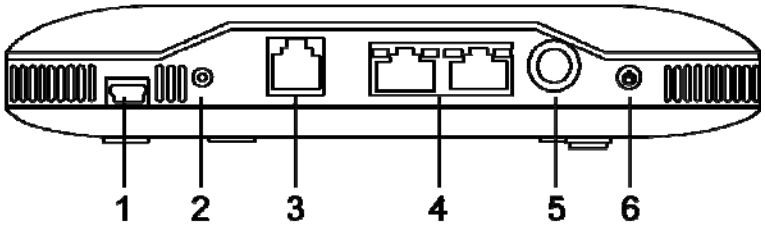
Indicator	State	Description
1. PWR	ON	External power supply works normally.
	OFF	External power supply is disconnected or power off.
2. Wi-Fi	ON	Wi-Fi works normally.
	Blinking	Data transmission
	OFF	Wi-Fi works abnormally.
3. PPP	ON	Internet connected
	Blinking	The router attempts to connect Internet.
	OFF	Internet disconnected and not attempt to connect.
4. RSSI	ON	RF signal is normal. Different color indicates different network. Red: GSM/GPRS/EDGE Yellow: UMTS Green: HSDPA/HSUPA
	Blinking	RF signal is poor.
	OFF	RF signal is not available.

Notes:

The indicators (including PPP and RSSI) are all blinking in green when:

- **The (U)SIM card has not been installed.**
- **The PIN code or PUK code is required.**
- **The router can not work normally.**

Interface Description



Rear View of Router

1. **USB**: Test and diagnostic interface for factory use only.
2. **WPS**: WPS button is used to start Wi-Fi Protected Setup authentication process.
3. **PHONE**: Standard RJ11 connector for Telephone.
4. **LAN 1~ LAN 2**: Ethernet connections to computer.
5. **POWER Socket**: Connection to the external power supply.

6. **POWER Switch**: Turn the router ON or OFF. Hold on for several seconds to restore the factory default settings.

Installation

This section will show you how to install the hardware.

Inserting the (U)SIM Card

Insert the (U)SIM card into the modem(supplied by ZTE).

1. Take down the modem cap, and then the USB connector is visible.
2. Pull the plastic socket above the USB connector out.

Notes:

Do not pull the (U)SIM socket rudely for the socket is fixed with the modem. Otherwise the socket will get damaged.

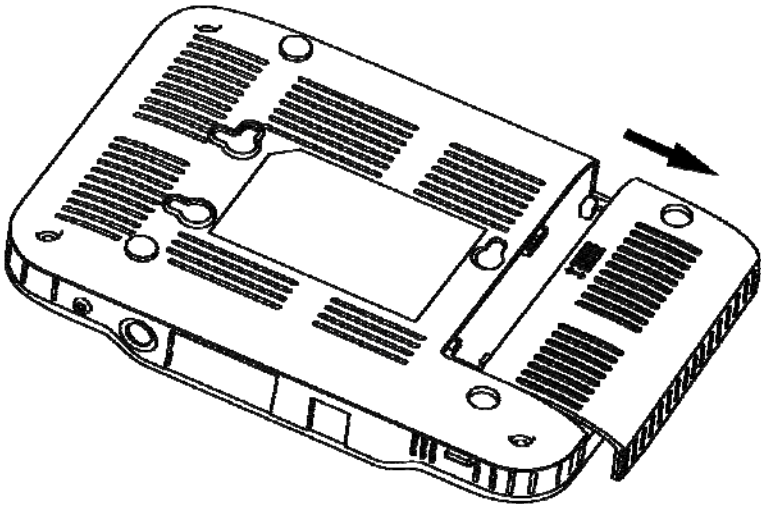
3. Insert the (U)SIM card into the socket, and make sure that metal contact area facing to the modem.

4. Insert the plastic socket into the modem. You can hear a click when the (U)SIM card socket locks into place.

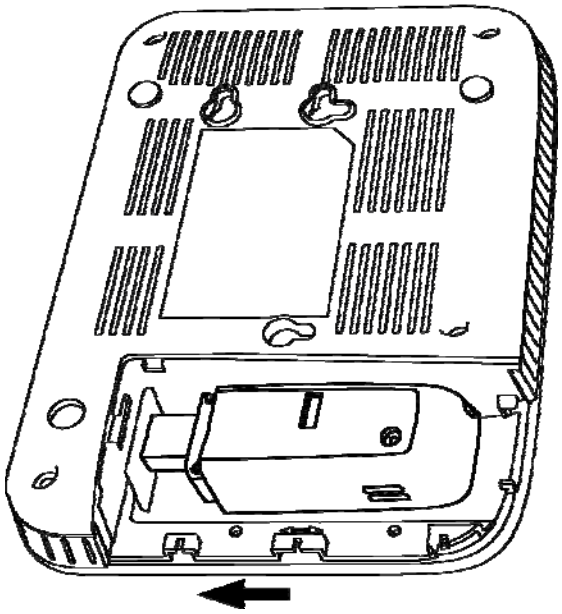
Inserting the modem

Insert the modem into the router.

1. Slide the back cover and remove it.



2. Plug the USB connector into the USB port.



3. Close the back cover.

Warning:

Please power off the router and remove the external power adapter before removing or inserting the modem, if not, the router or modem may be damaged.

Connecting phone

Connect the telephone to the PHONE interface using phone cable(RJ11).

Connecting computer

Connect your computer to the LAN interface using the Ethernet cable (RJ45).

Notes:

The router will adapt the Ethernet cable style (crossover or straight) automatically.

Connecting the external power

1. Connect the external power adaptor to a standard power outlet.
2. Insert the plug into the socket at the rear of the router.

Switching on your device

1. Turn the power switch on to get started. Make sure that the phone is on hook before power on.

Notes:

Do not put anything on the top of router. Do not lay routers to overlap each other when using.

2. Wait 1~2 minutes after turning the router on before you use the service. The RSSI & PWR indicator should be lit on.

Notes:

When the router is turned off, an incoming caller will hear the prompt like "The number you have dialed is currently unavailable."

If the RSSI (Radio Signal Strength Indicator) LED is blinking constantly then try moving the router to another location. The router takes 1~2 minutes to initialize, attach to the network and obtain an IP address.

Power supply

For normal operation connect the router to the external power adapter. In case of power failure or when there is no available external power supply, the router can not work.

About (U)SIM card

Avoid handling the (U)SIM card unnecessarily. Hold the card by the edges to prevent static damage. Keep the (U)SIM card away from electrical and magnetic appliances.

Notes on Service and Coverage

If you cannot get service, make sure that：

- You are in an area which has sufficient network coverage.
- You are using the correct (U)SIM card.
- If necessary you need enter your PIN or PUK code.
- If the RSSI (Radio Signal Strength Indicator) LED is blinking constantly then try moving the modem to another location.
- Please wait 1-2 minutes for the modem to initialize, attach to the network and obtain an IP address.

Chapter 3

Voice Calls

Making a Call

Before making a call, make sure:

- The (U)SIM card is inserted.
- The modem is inserted properly.
- The telephone cable (RJ11) is connected properly.
- The PWR light is on.
- The RSSI light is on.

To make a call:

1. Pick up the handset.
2. Key in the telephone number.
3. You can either press # key on the telephone to send the call, or wait 4~8 seconds for the call to be connected automatically.
4. Call will be connected.

Notes:

If there is no RSSI indication, the RF signal is unavailable. Change the location of the router and make sure nothing is blocking it.

Making a Trunk Call

If you are making a trunk call, add the area code as normal.

E.g. 0396 12345678

Making an International Call

If you are making an international call, key in the international access code followed by the country code, area code and number.

E.g. 00 11 64 12345678

Answering the Call

When the phone rings, pick up the handset to answer it. If the telephone has hands-free function you can answer the call by pressing the **Hands-free** button. Press the hands-free button again to end the call.

Chapter 4

Internet Access

The router does not require any drivers, and it supports all operating systems with Ethernet LAN capability, such as Windows 2000, XP, Vista , MAC OS X and Linux. The router supports two computers surfing on internet using Ethernet cable at the same time, and also supports Wireless LAN connection.

Notes:

All the parameter settings in this chapter are just for your reference. Please contact your service provider for detail.

Preparation

Before using the data service, make sure:

- The (U)SIM card is installed into the modem.
- The modem is inserted into the router.
- The Ethernet cable is connected properly.
- The PWR light is on.
- The RSSI light is on.
- The PPP light is on.

Web browser requirement:

It is suggested that you use one of these web browsers to connect to the internet.

- IE 6.0 or above
- Firefox 2.0
- Netscape version 9.0

Settings

Do not change any settings unless instructed by your service provider. To make changes to your settings you need to disconnect the router from the network. After making changes reboot your router by turn off and on again.

Login

The router can be connected by RJ45 or by Wi-Fi (the SSID is “ZTE Wireless Network”). By either connection mode, you should set to obtain an IP address automatically in the attribution setting of Internet protocol(TCP/IP).

After your computer gets the IP address (like 192.168.0.101) from the router, open a web browser and type “ http://192.168.0.1” in the address bar, and then input the username and password to log in.

User Name: admin

Password: admin

Click **Login** to log in the router. Check **Save** to let the Explorer keep the user name and password.

When you successfully login, the router status web page appears:

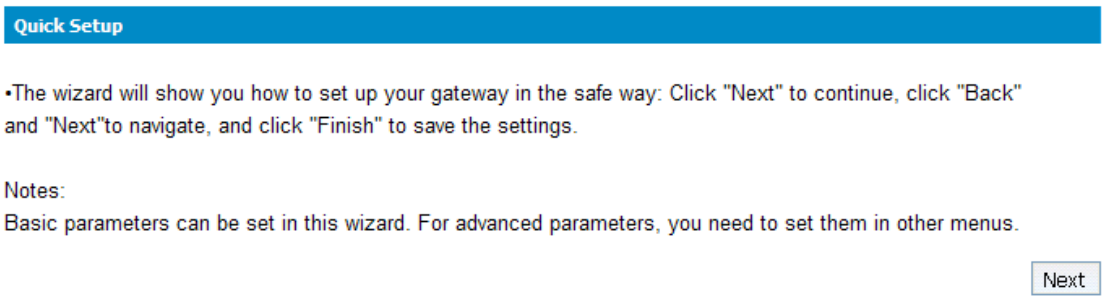
The whole page is divided into two parts. Related functions can be executed by operation in the related areas.

- **Index area**: Show configuration list for your router.
- **Content area**: Show the detail configuration.

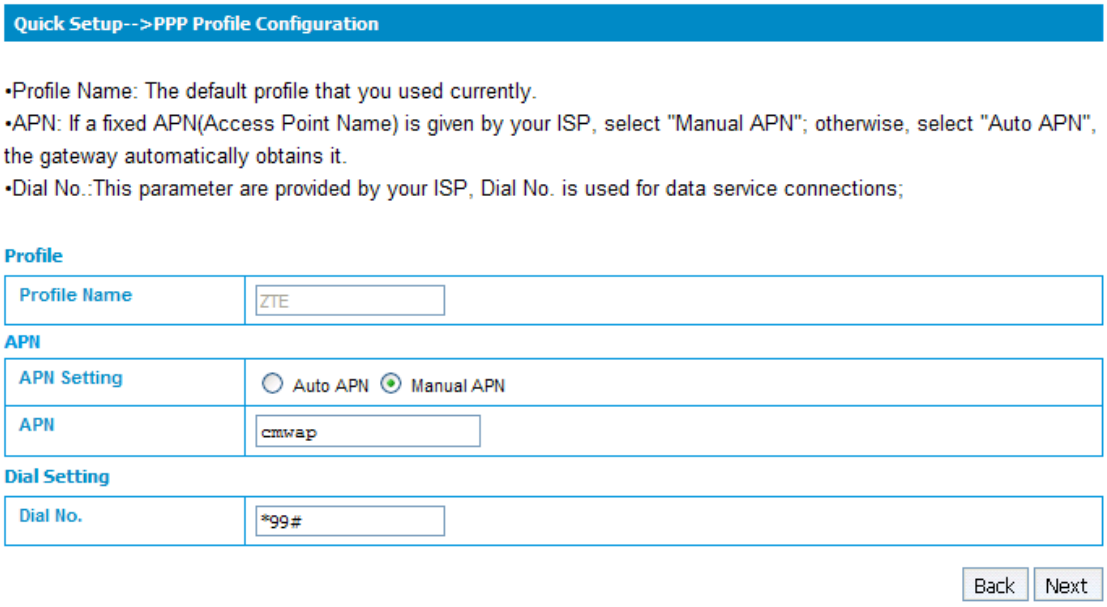
Quick Setup

The **Quick Setup** helps you to quickly set the basic settings of your router. The following sections describe the steps and parameters of **Quick Setup**.

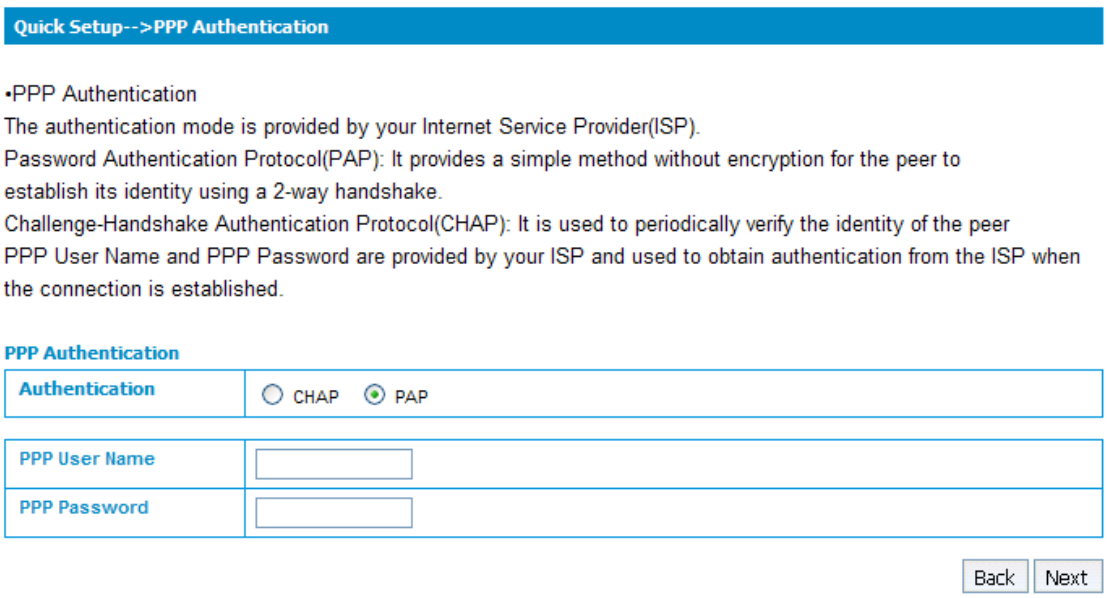
1. Read the guide carefully, and then click **Next**.



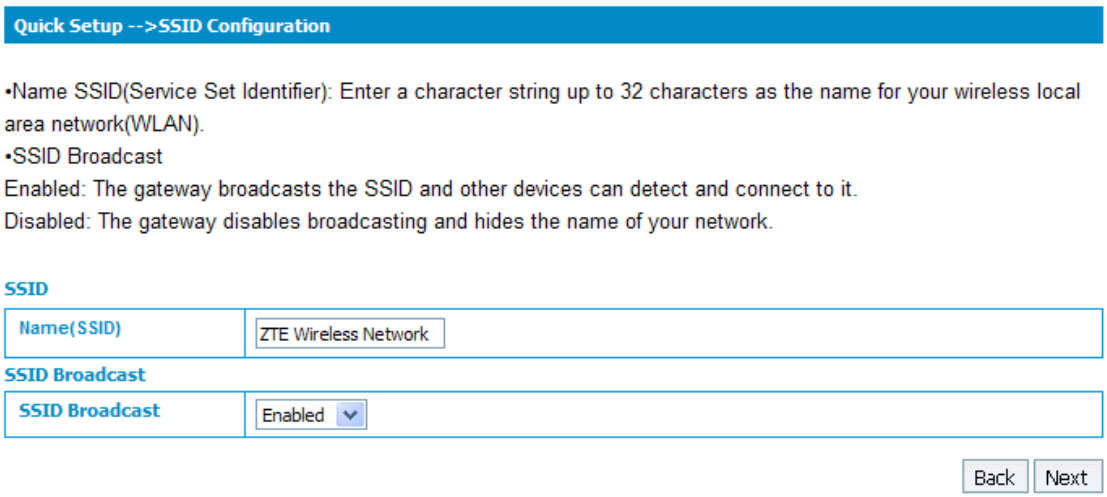
2. Set the PPP Profile Configuration and then click **Next**.



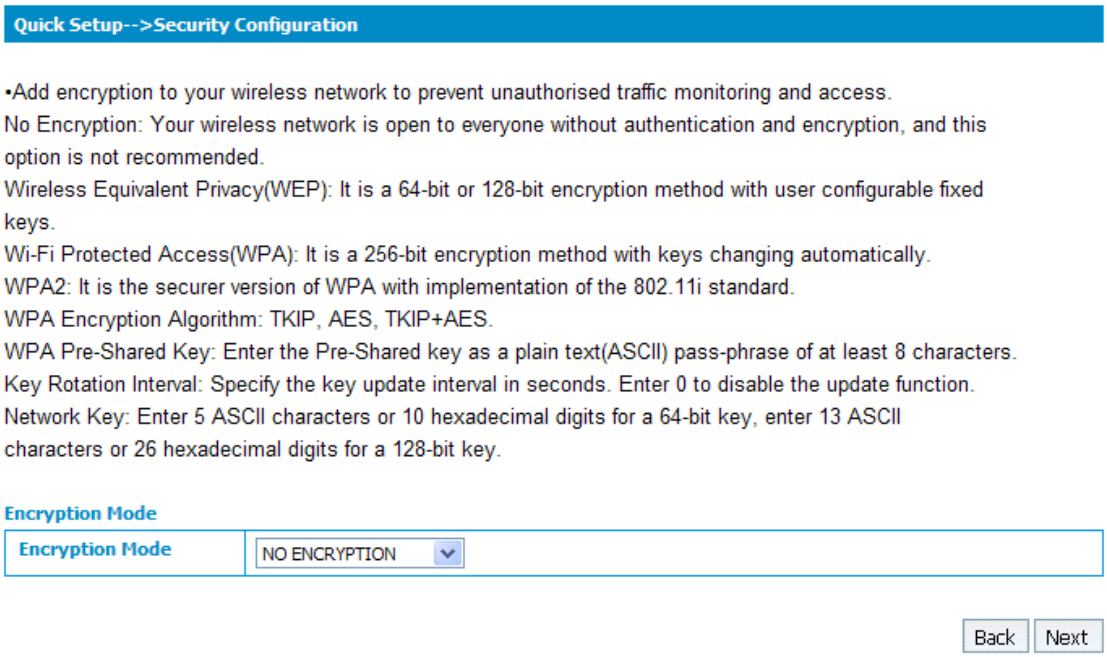
3. Set the PPP Authentication and then chick **Next**.



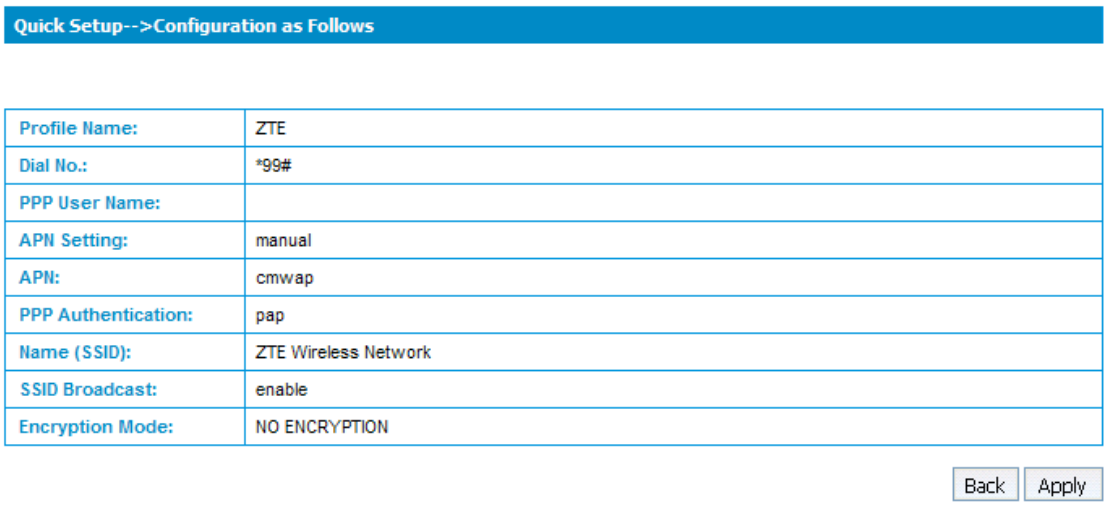
4. Set the SSID Configuration and then click **Next**.



5. Set the Security Configuration and then click **Next**.

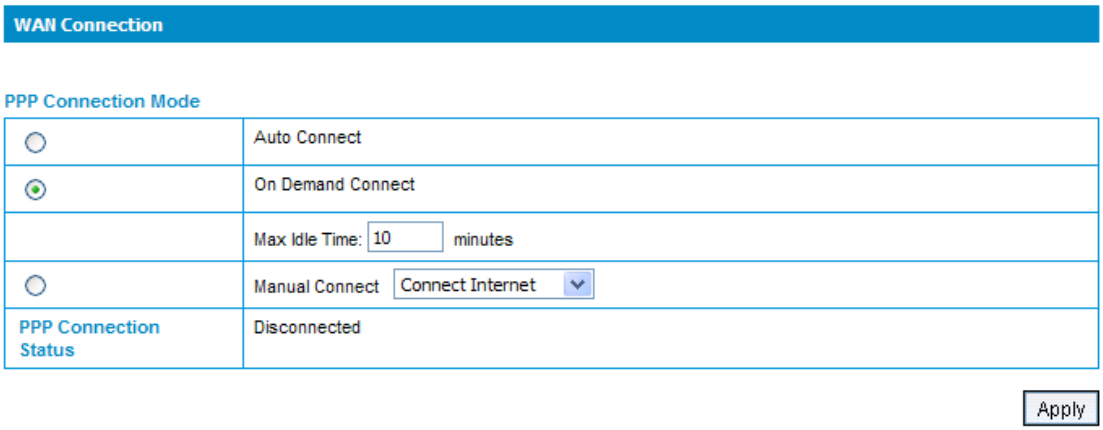


6. Show all the configurations and then click **Finish** to complete. If you want to modify, please click **Back**. (The figure is only for your reference as shown below).



WAN Connection

Click **WAN Connection**, you can configure how to connect to the Internet.



There are three connection mode:

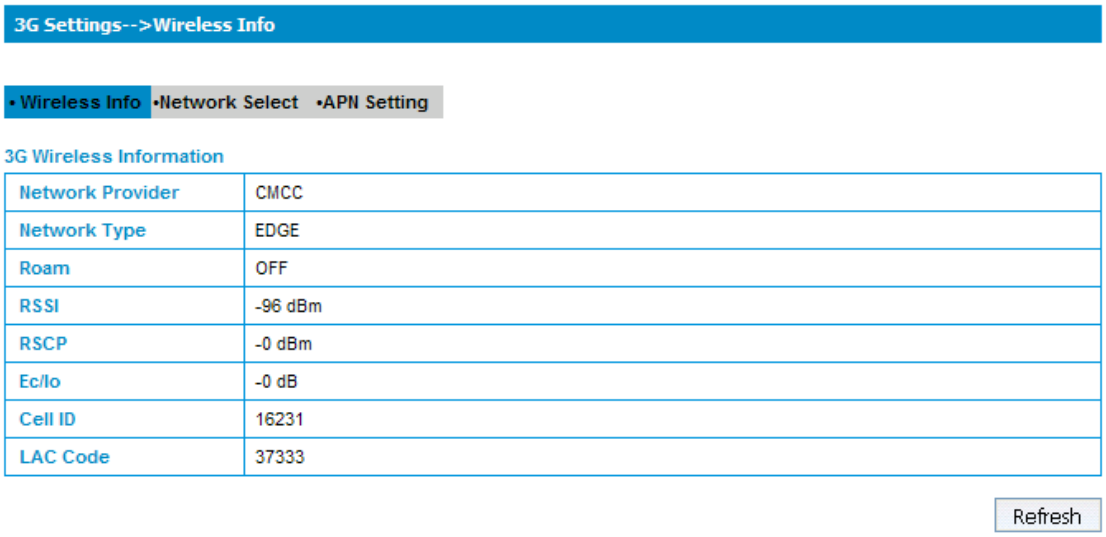
- **Auto Connect**: The router will automatically connect to WAN when it is powered on.
- **On Demand Connect**: The connection will be established when data transmission are required.
- **Max Idle Time**: The router will disconnect from the Internet if there are no data transmission for a specific time. The default value is 10 minutes
- **Manual Connect**(Default): Connect to Internet or disconnect from Internet manually.

Click **Apply** to confirm your configuration, and then the PPP connection status will be shown in the figure.

3G Settings

Wireless Info

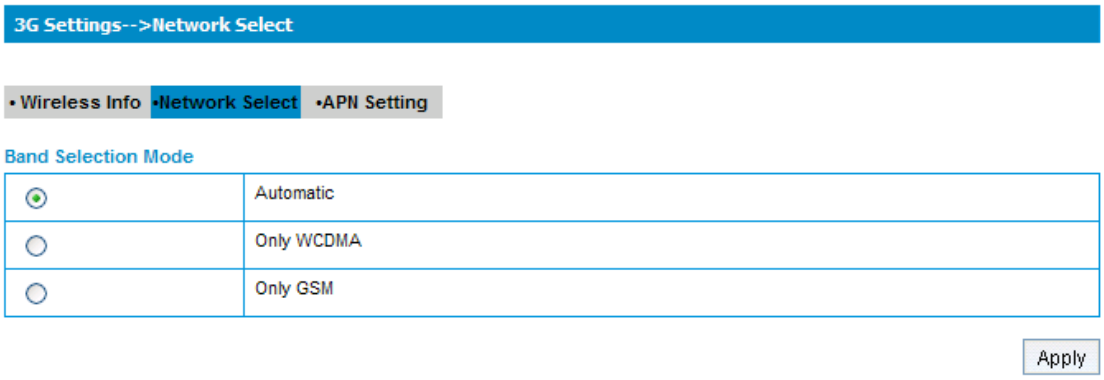
Select **3G Settings** > **Wireless Info**, the 3G wireless information is shown in the following figure:



Click **Refresh** to update the wireless information.

Network Select

Select **3G Settings > Network Select**, the Band Selection Mode is shown in the following figure:

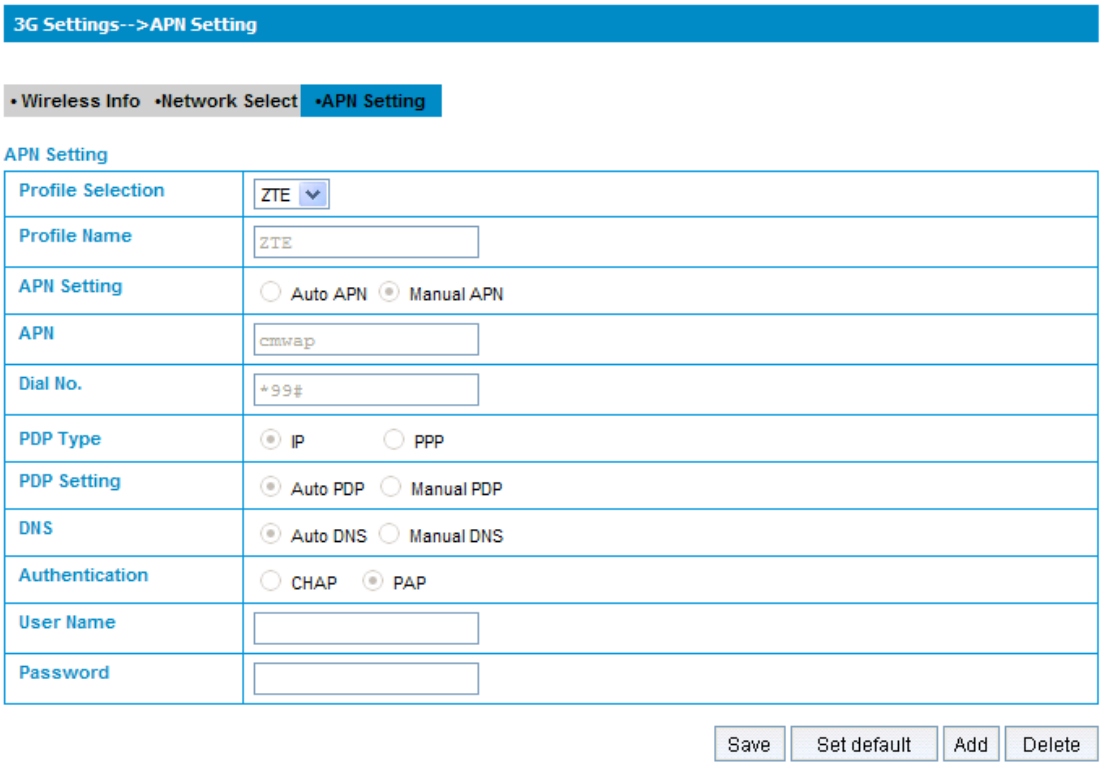


- **Automatic**: Router searches for valid network according to the wireless network.
- **Only WCDMA**: Router searches for WCDMA network only.
- **Only GSM**: Router searches for GSM network only.

Click **Apply** to confirm your configuration.

APN Setting

Select **3G Settings > APN Setting**, the APN parameters are shown in the following figure:



- **Profile Selection**: Select the profile which you want to use for the internet connection.
- **Profile Name**: The profile which is set as default.
- **APN Setting**: APN address mode. If a fixed APN is given by your service provider, select Manual APN. Otherwise select the Auto APN, and the router will automatically obtain this parameter.
- **APN**: Access Point Name.
- **Dial No.**: This dial number is used for data service connection.
- **PDP Type**: **IP** (Default)or **PPP**.
- **PDP Setting**: PDP address mode. If a fixed IP address is given by your service provider, select Manual PDP. Otherwise select the Auto PDP and the router will automatically obtain this parameter.
- **DNS**: Select **Auto DNS** or **Manual DNS**.
- **Authentication**: Select **CHAP** or **PAP**.
- **User Name**: Set user name for this APN .
- **Password**: Set password for this APN.

To add a new APN profile:

1. Click **Add** to define a new APN profile.
2. Input those parameters as shown above.

Notes:

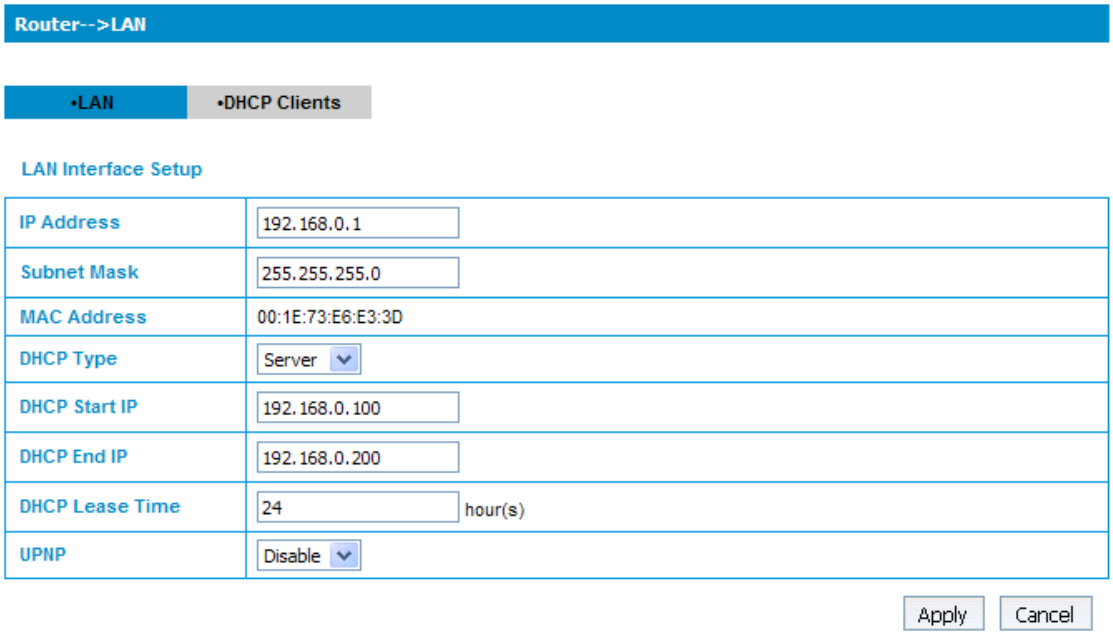
If you have any problem, please contact with your service provider.

3. Click **Save** to save this new profile.
4. Click **Set default** to set this profile as default.

Router

LAN

Select **Router > LAN**, the LAN parameters are shown in the following figure:

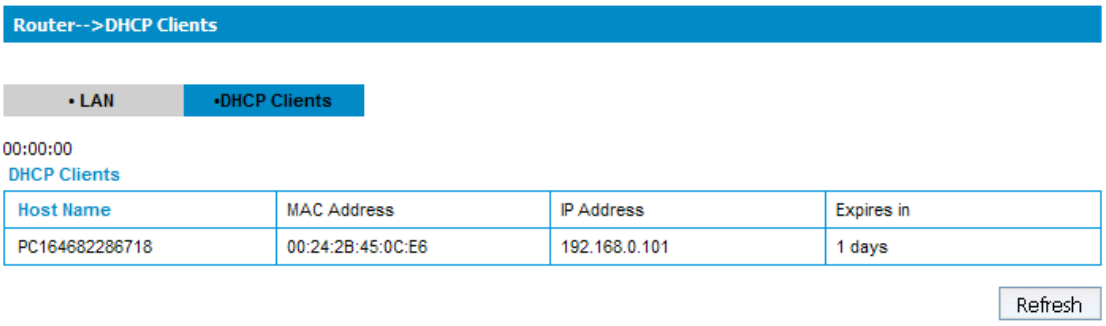


- **IP Address**: LAN IP address of the router.
- **Subnet Mask**: Subnet mask of the router.
- **MAC Address**: MAC address of the LAN interface.
- **DHCP Type**: The router is set up as a DHCP server, which provides IP address in IP pool range for all the computer connections.
- **DHCP Start IP**: Allocate start IP address for IP pool.
- **DHCP End IP**: Allocate end IP address for IP pool.
- **DHCP Lease Time**: Define how long the leased IP address will be expired.
- **UPNP**: Enable or Disable the Universal Plug and Play function.

Click **Apply** to confirm your configuration.

DHCP Clients

Select **Router > DHCP Clients**, All of the DHCP clients information will be shown in the following figure.

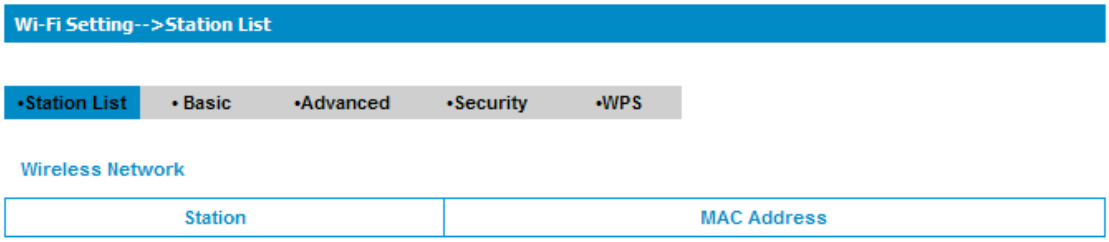


Wi-Fi Settings

Station list

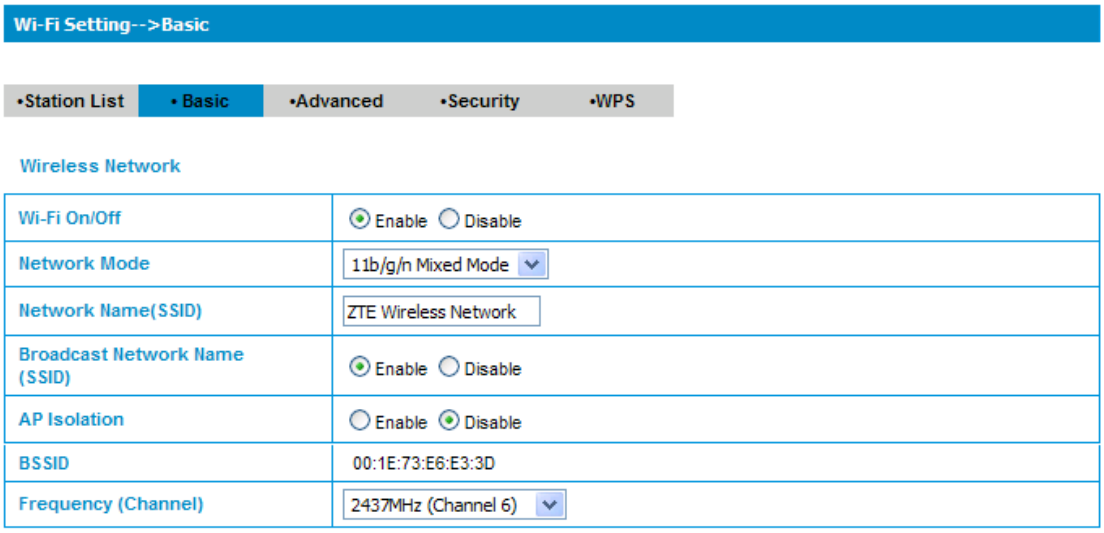
Select **Wi-Fi Setting > Station List**, All of the wireless network stations information will be shown in the

following figure:



Basic

Select **Wi-Fi Setting** > **Basic**, the wireless network parameters and WDS mode are shown in the following figure:



- **Wi-Fi On/Off**: Click this button to set the router Wi-Fi **On** or **Off**.
- **Network Mode**: Including 11b/g Mixed Mode, 11b only,11g only and 11b/g/n Mixed Mode.
- **Network Name(SSID)**: Service Set Identifier. Enter a string less than 32 characters as the name for your wireless local area network(WLAN).
- **Broadcast Network Name(SSID)**: Disable or Enable(Default) this function. The router broadcasts the SSID, and other devices can detect and connect to it by selecting Enable. The router disables broadcasting and hides the name of your network by selecting Disable.
- **AP Isolation**: When enable this function, each of your wireless client will not be able to communicate with each other.
- **BSSID**: Show the MAC address of the Wi-Fi.
- **Frequency(Channel)**: The frequency band in which the WLAN operates. If some channels in your area may have interference from other electronic devices, please choose the clearest channel to optimize the performance and coverage of your wireless network. The default value is 2437MHz(Channel 6).

The Wireless Distribution System allows the router to communicate with other APs wirelessly. To make it work, please make sure that the router and these APs are in the same channel with the same SSID.

Wireless Distribution System(WDS)

WDS Mode	Repeater Mode
Phy Mode	CCK
EncrypType	NONE
AP MAC Address	
AP MAC Address	
AP MAC Address	
AP MAC Address	

- **WDS Mode**: Lazy Mode, Bridge Mode and Repeater Mode are available. The default value is Disable.
- **Phy Mode**: Physical layer transmission mode. CCK, OFDM, HTMIX and GREENFIELD are available.
- **EncrypType**: The encryption type including NONE, WEP, TKIP or AES. If you select **NONE**, any data will be transmitted without encryption and any station can access the router.
- **AP MAC Address**: For WDS Mode of Bridge Mode and Repeater Mode, you have to fill in the other AP MAC address.

The HT physical Mode parameters are shown in the following figure:

HT Physical Mode

Operating Mode	Mixed Mode / Green Field
Channel BandWidth	20 / 20/40
Guard Interval	long / Auto
MCS	Auto
Reverse Direction Grant(RDG)	Disable / Enable
Extension Channel	2457MHz (Channel 10)
Aggregation MSDU(A-MSDU)	Disable / Enable
Auto Block ACK	Disable / Enable
Decline BA Request	Disable / Enable

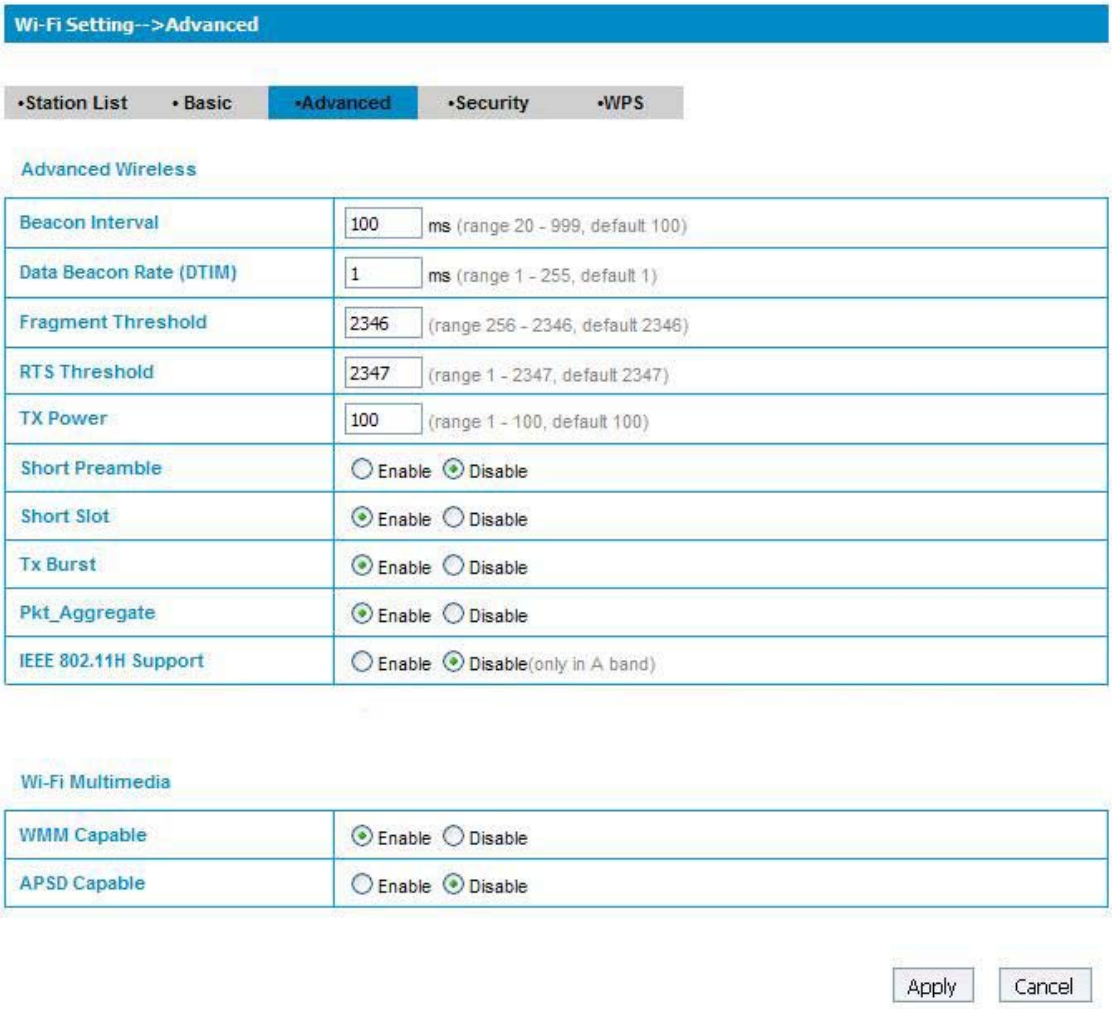
Apply Cancel

- **Operating Mode**: Set the HT physical operating mode.
- **Channel Bandwidth**: Set the HT physical channel bandwidth.
- **Guard Interval**: Set the HT physical guard interval.
- **MCS**: Set fix MCS rate for HT rate.
- **Reverse Direction Grant(RDG)**:Enable **RDG** or not.
- **Extension Channel**: Set extension channel. The extension channel is also able to send and receive data.
- **Aggregation MSDU(A-MSDU)** : Mark to enable Hyper Throughput TX Aggregate MAC Service Data Unit, and clear by selecting **Disable**.
- **Auto Block ACK**: Block ACK(Acknowledge Number) or not during data transferring.
- **Decline BA Request**: Reject peer BA-Request or not.

Click **Apply** to confirm your configuration.

Advanced

Select **Wi-Fi Setting** > **Advanced**, the advanced wireless network parameters and Wi-Fi multimedia parameters are shown in the following figure:



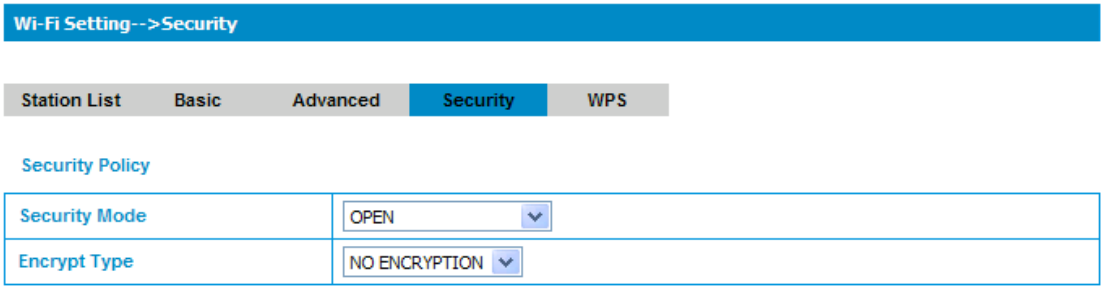
- **Beacon Interval**: The router broadcasts beacon message to announce that it has buffered frames to deliver. The default value is 100 (ms).
- **Data Beacon Rate(DTIM)** :Set the wireless network data beacon rate.
- **Fragment Threshold**: Set the wireless network fragment threshold.
- **RTS Threshold**: Set the wireless network RTS threshold.
- **TX Power**: Set the wireless network TX power.
- **Short Preamble**: Disable short preamble or not.
- **Short Slot**: Enable short slot or not.
- **Tx Burst**: Enable Tx burst or not.
- **Pkt_Aggregate**: Enable packet aggregation or not.
- **IEEE 802.11H Support**: Support IEEE 802.11H or not.
- **WMM Capable**: Enable Wi-Fi Multimedia(WMM) or not.
- **APSD Capable**: Enable APSD or not.

Click **Apply** to confirm your configuration.

Security

Select **Wi-Fi Setting** > **Security**, the Security parameters and Wireless MAC Filtering parameters are

shown in the following figure:



- **Security Mode**: Including **OPEN**, **SHARED**, **WEPAUTO**, **WPA-PSK**, **WPA2-PSK** or **WPA-PSK/WPA2-PSK**.
- **Encrypt Type**: Use WEP Encryption or not.

The Wireless MAC Filtering is used to control the wireless network access.

- **Add MAC Filtering Rule**: Choose the type of MAC filtering, Wireless Disable, Wireless Allow or Wireless Reject.
- **MAC Address**: Add the MAC addresses to the rule list.

Click **Apply** to confirm.

Notes:

- **For Add MAC Filtering Rule of Wireless Allow: The devices with the MAC address added in the list can communicate with the router. And others can not.**
- **For Add MAC Filtering Rule of Wireless Reject: The devices with the MAC address added in the list can not communicate with the router. And others can.**

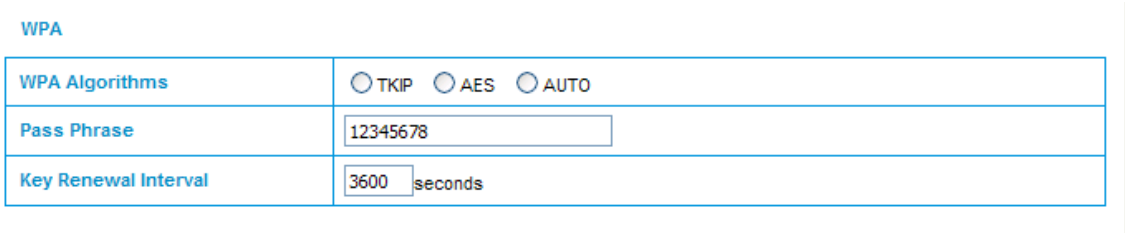
The security modes are described below:

- **Open**: You can authenticate successfully with a SSID, whether it is valid or empty.
- **SHARED**: The WLAN clients who have the same WEP key with wireless gateway can pass the authentication and access the wireless network.
- **WEPAUTO**: Select WEP security automatically.
- **WPA-PSK**: WPA Pre-Shared Key, Enter the Pre-Shared key as a plain text (ASCII) pass-phrase of at least 8 characters.
- **WPA2-PSK**:It is the securer version of WPA with implementation of the 802.11i standard.
- **WPA-PSK/WPA2-PSK**:Apply both the WPS-PSK and WPA2-PSK scheme.

If the Authentication type is **Shared** or **WEPAUTO**, or you select **Open** and set the **Encrypt Type** as **WEP**, the WEP parameters are shown in the following figure.

- **Default Key**: Set the WEP Key as the default.
- **WEP Keys**: At most four keys can be set in the blank. Choose the primary key index. The primary key is the only key in use at a given time. Whatever keys you enter for an access point, you must also enter the same keys for the client adapter in the same order. In other words, WEP key 1 on the AP must match WEP key 1 on the client adapter, WEP key 2 on the AP must match WEP key 2 on the client adapter, etc. A WEP is either 10 or 26 hexadecimal digits (0~9,a~f and A~F)based on whether you select 64 bits 128 bits or 152 bits in the Encryption Strength drop-down list.

If the Authentication type is **WPA-PSK** , **WPA2-PSK** or **WPA-PSK/WPA2-PSK** , the WPA parameters are shown in the following figure.

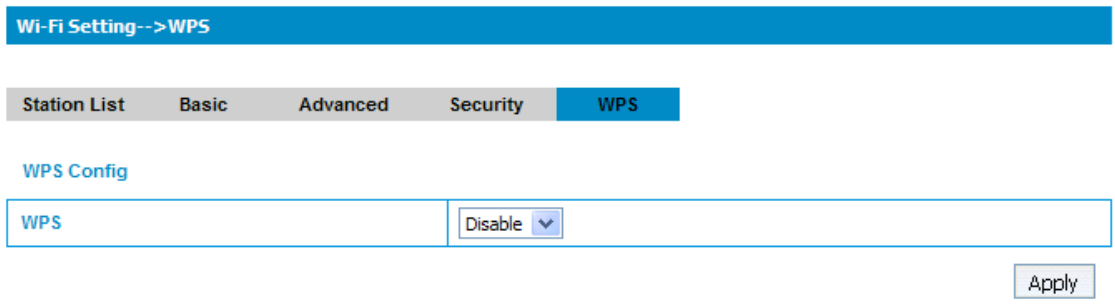


- **WPA Algorithm**: **TKIP**, **AES** or **AUTO**.
- **Pass Phrase**: You can input hexadecimal digits up to 64 characters or input ASCII characters choose a length of 63 characters or less.
- **Key Renewal Interval**: Define how long the key should be renewed.

Click **Apply** to confirm your configuration.

WPS

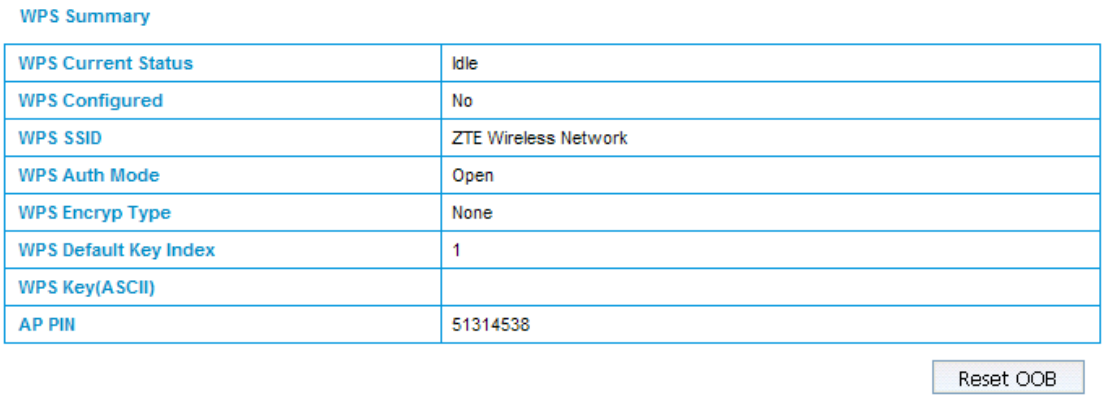
Select **Wi-Fi Setting > WPS**, the WPS page shown in the following figure:



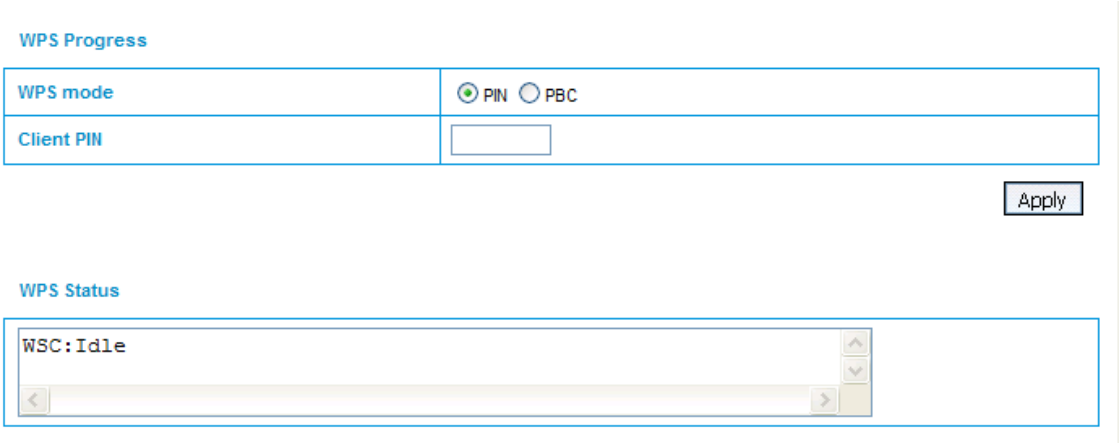
WPS: This function is to simplify the security setup of Wi-Fi networks. This Router supports the configuration setup using PIN configuration method or PBC configuration method.

Select **Enable** , and then click **Apply** to configure the details.

The following figure shows you the current configuration of WPS. Click **Reset OOB** on this page to restore the default value.



The following figure shows you the WPS mode and status.

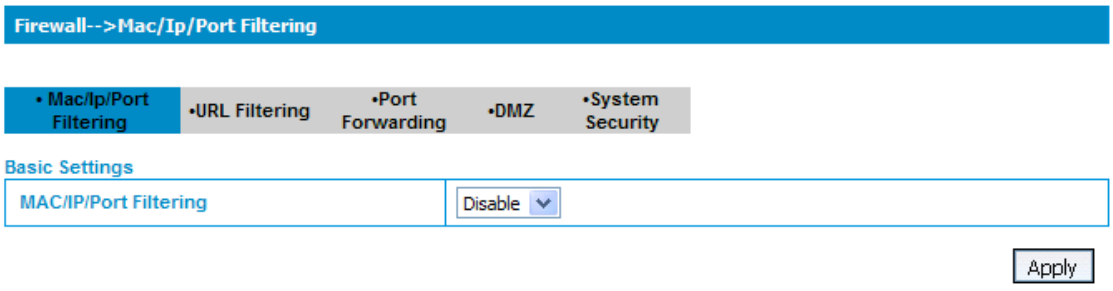


- **WPS mode**: Select PIN or PBC mode. If you select **PIN** mode, you need fill in the **Clinet PIN** which you can get from other wireless device, or input the router's PIN(**AP PIN** in the WPS Summary) in the other wireless device. If you select **PBC** (Push Button Communication) mode, click **Apply** or press the WPS Key at the rear of the router to active this function, and then you need enable the WPS function on the other wireless device in two minutes to start authentication process with the router.
- **Client PIN**: Fill in the PIN code of the other wireless device if selecting PIN mode as the WPS Config method.
- **WPS Status**: Show the authentication process of WPS

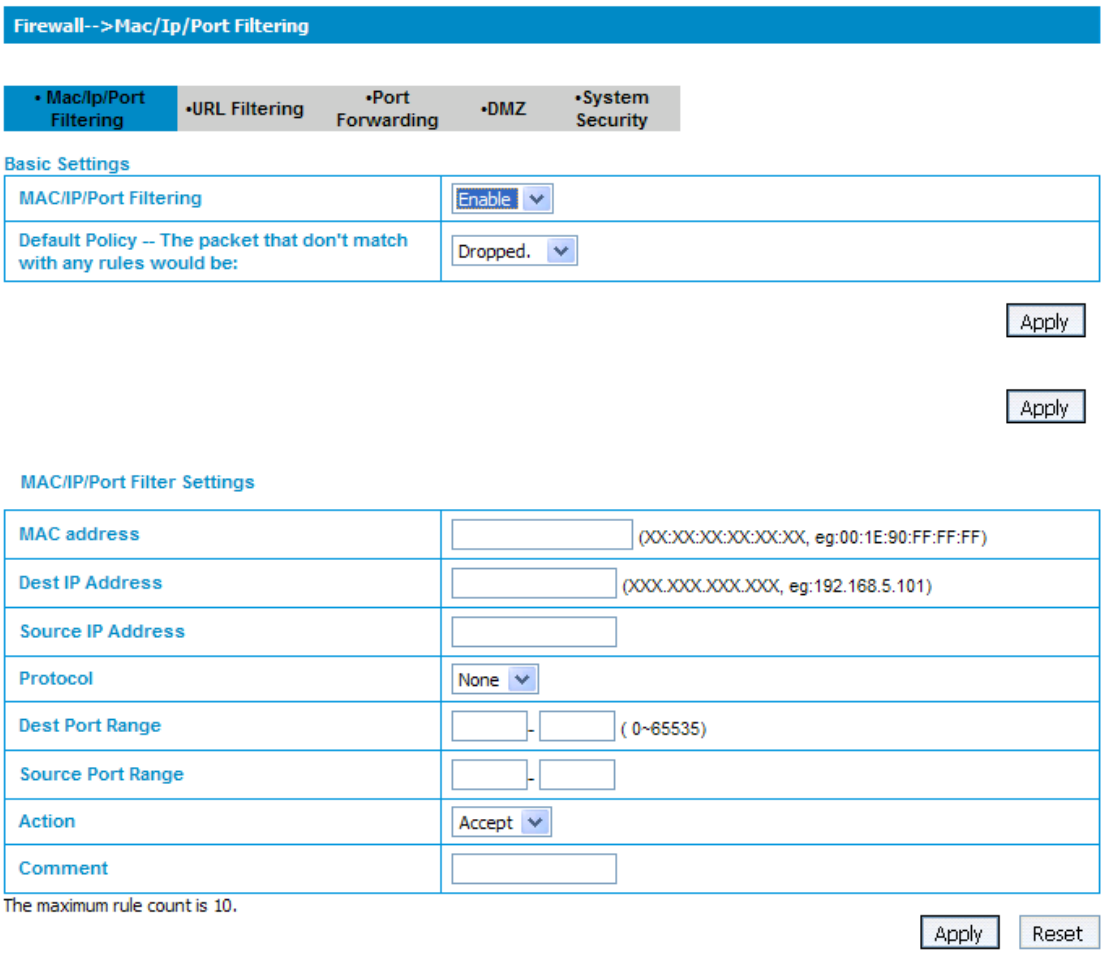
Firewall

MAC/IP/Port Filtering

Select **Firewall > Mac/Ip/Port Filtering**, the Mac/IP/Port Filtering is shown in the following figure:



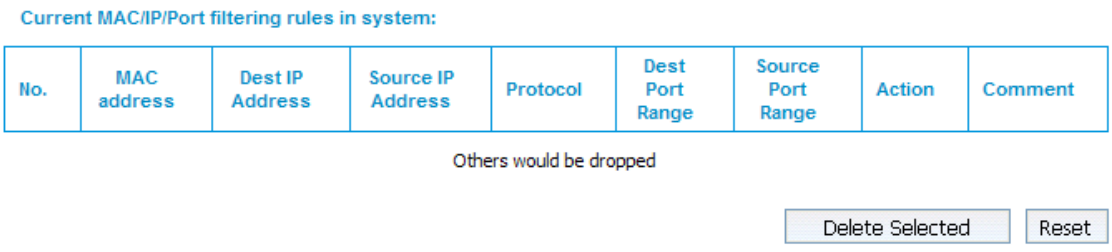
If you select Enable, the filter settings will appear:



- **Default Policy**: Set how to handle the packet if none of the rules matches.
- **MAC address**: Set the MAC address that will be filtered.
- **Dest IP Address**: Set the destination IP address that will be filtered.
- **Source IP Address**: Set the source IP address that will be filtered.
- **Protocol**: Set which protocol will be used for filtering.
- **Dest Port Range**: Set the destination port numbers that will be filtered.
- **Source Port Range**: Set the source port numbers that will be filtered.
- **Action**: Set how to handle the packet if it matches with the rule.
- **Comment**: type comment for the filter settings.

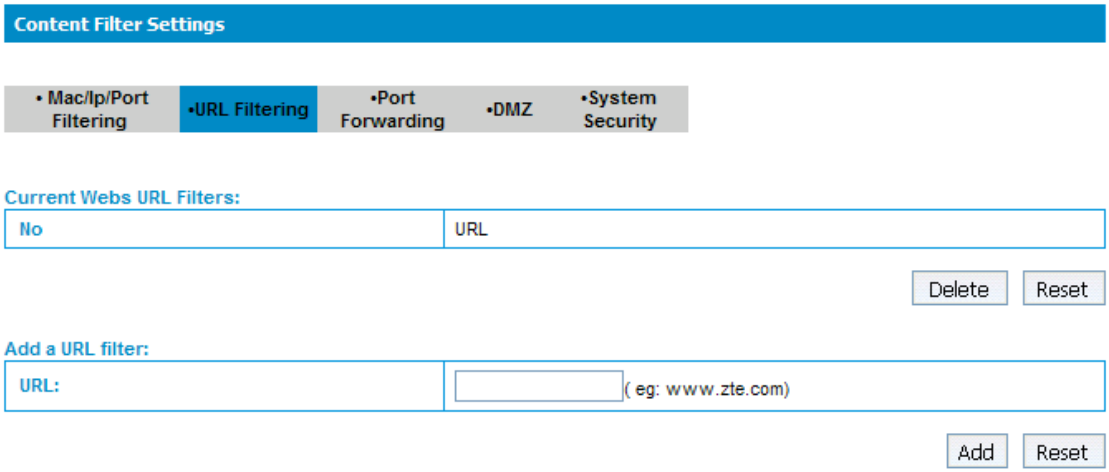
Click **Apply** to confirm your configuration.

The following figure shows you the current MAC/IP/Port filtering rules in system.



URL Filtering

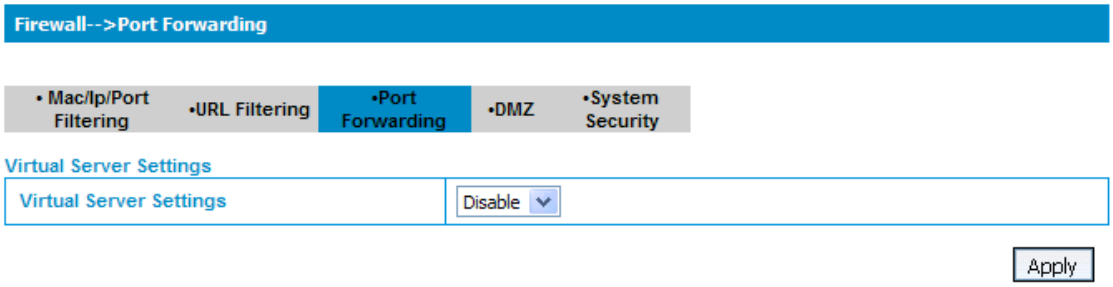
Select **Firewall > URL Filtering**, the URL Filtering is shown in the following figure:



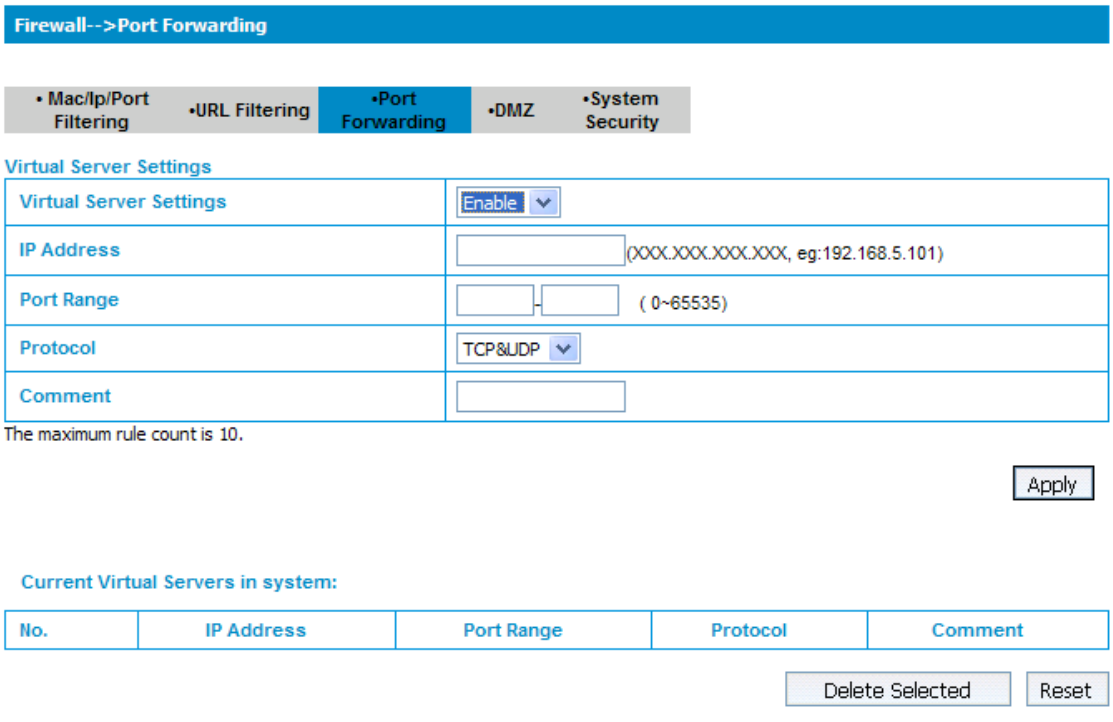
Type URL address, and then click **Add** to add the URL address into the filtering list. The new URL filtering item will be shown in the **Current Webs URL Filters** area.

Port Forwarding

Select **Firewall > Port Forwarding**, the port forwarding is shown in the following figure:



If you select **Enable**, the Virtual Server Settings will appear:

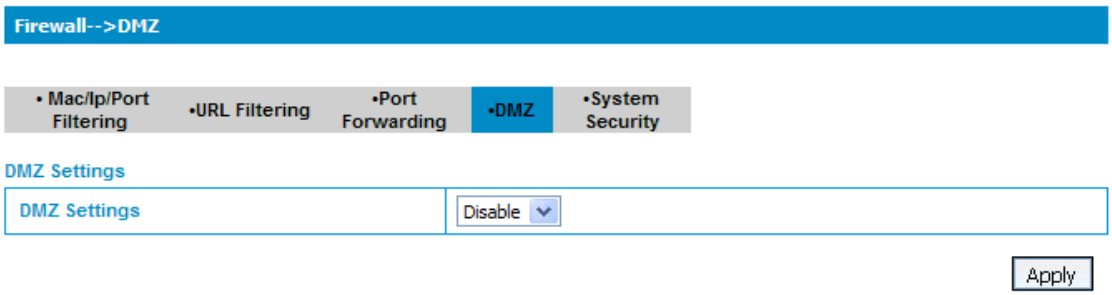


- **IP Address**: Set IP address for the virtual server.
- **Port Range**: Set port numbers for the virtual server.
- **Protocol**: Set protocol for the virtual server.
- **Comment**: Type comment for the virtual server settings.

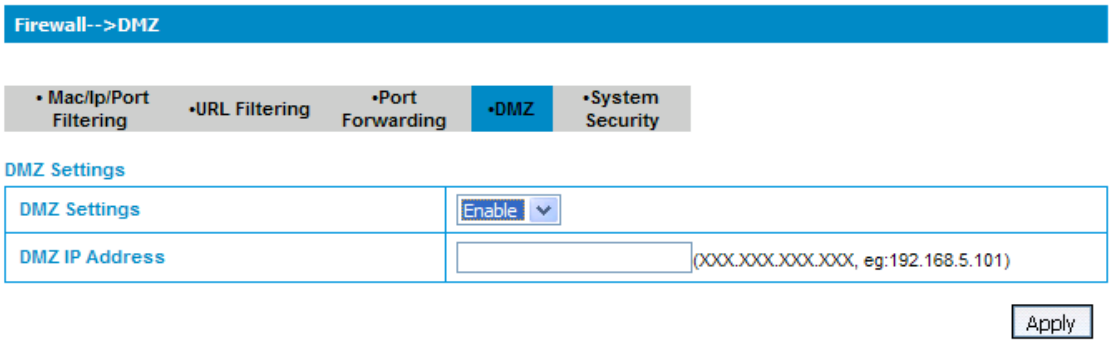
Click **Apply** to confirm your configuration. And the current virtual servers will be shown in the Current Virtual Servers in system area.

DMZ

Select **Firewall > DMZ**, the DMZ setting is shown in the following figure:

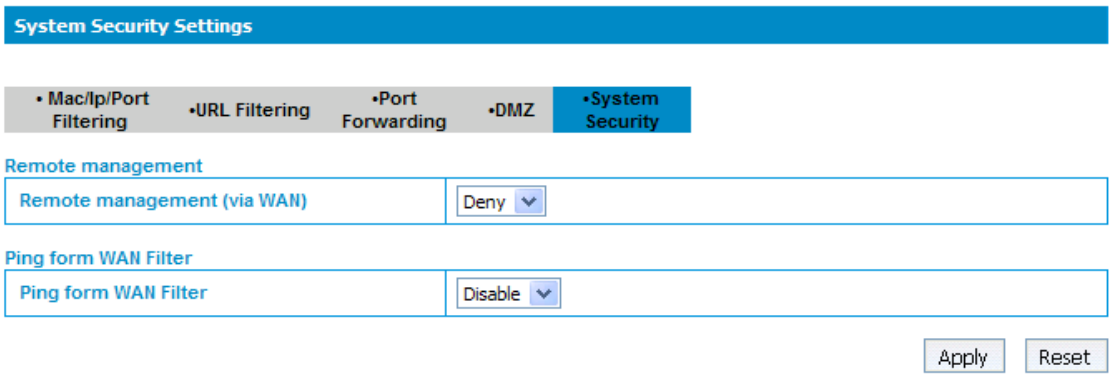


If you select **Enable**, set the DMZ IP address, and then click **Apply** to confirm your configuration.



System Security

Select **Firewall > System Security**, the system security setting is shown in the following figure:

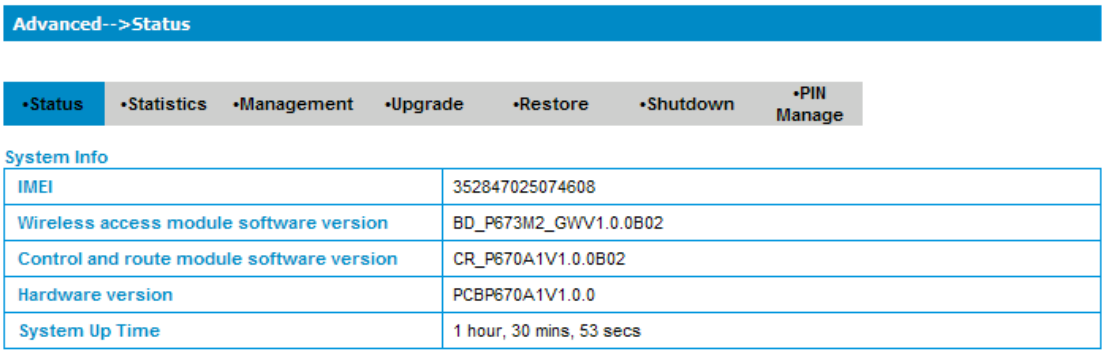


Allow or **Deny** the remote management function and **Enable** or **Disable** ping from WAN filter on requirement, and then click **Apply** to confirm your configuration..

Advanced

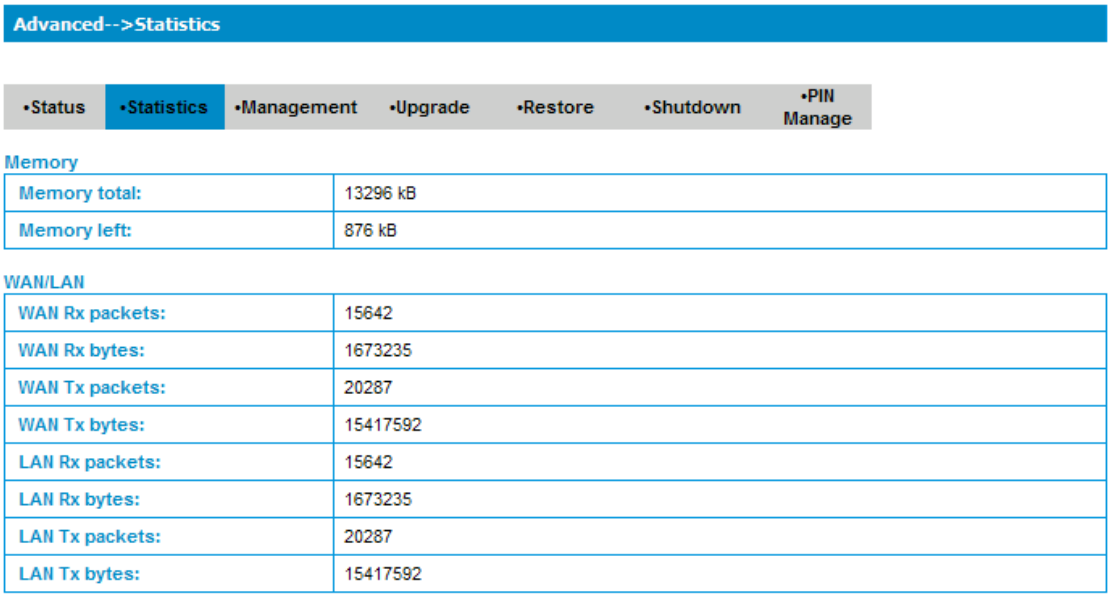
Status

Select **Advanced > Status**, the system information is shown in the following figure:



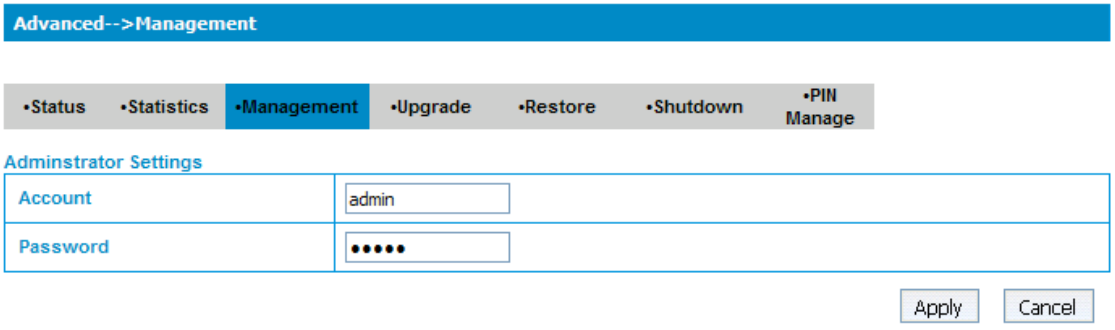
Statistics

Select **Advanced > Statistics**, the system statistics information is shown in the following figure:



Management

Select **Advanced > Management**, the administrator settings information is shown in the following figure:



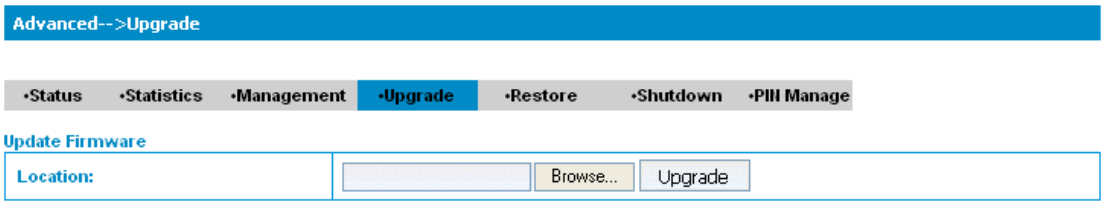
To set new account, type new account and password, and then click Apply to confirm your configuration.

Notes:

If you change the Account or Password, please make sure that you can remember the new Account or Password.

Upgrade

Select **Advanced > Upgrade**to upgrade the software version of the router.



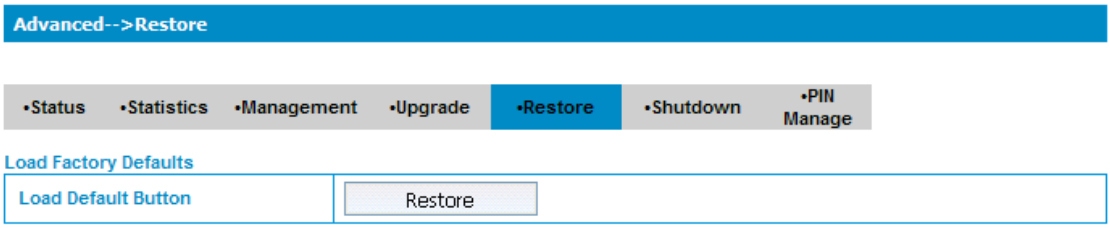
Click **Browse...** locate the latest software version, and then click **Upgrade**.

Notes:

- **Please do not cut off the power supply, and do not to do any other operations when upgrading.**
- **After upgrading, the router will turn off automatically. You should turn the router on by manually.**

Restore

Select **Advanced > Restore**, click Restore to set all the settings to their factory default values, and the device will be turned off.

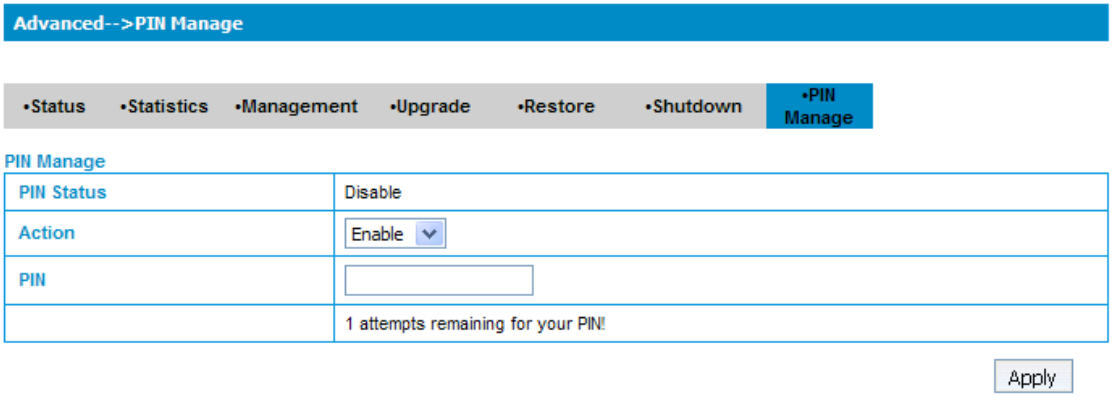


Shutdown

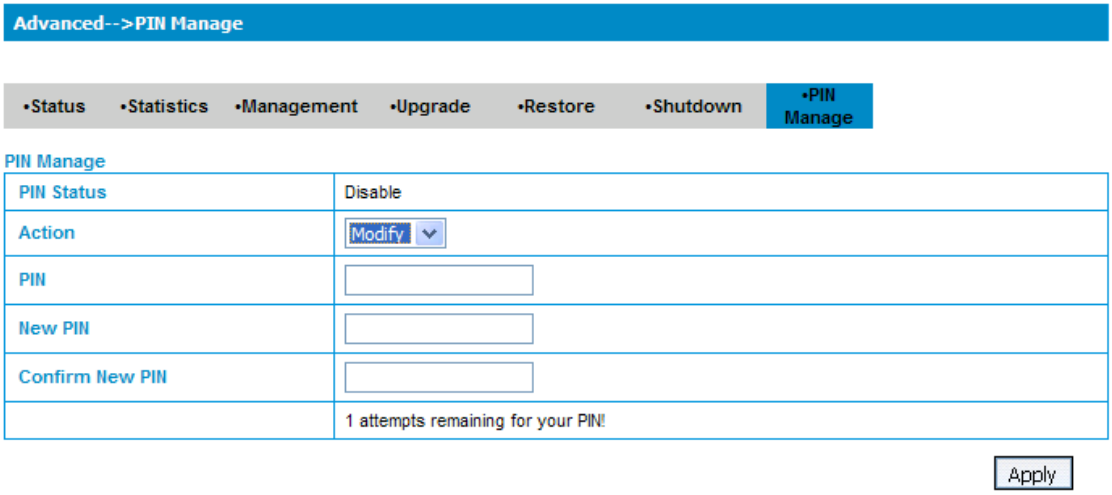
Select **Advanced > Shutdown**, click Shutdown to turn the router off.

PIN Manage

Select **Advanced > PIN Manage**, the PIN manage is shown in the following figure:



If you select **Modify**, the modification parameters are shown in the following figure:



Type the old PIN code, and then type two times the new PIN code. Click **Apply** to confirm your configuration.

Notes:

Three time consecutive wrong PIN code entries will lock the (U)SIM card.

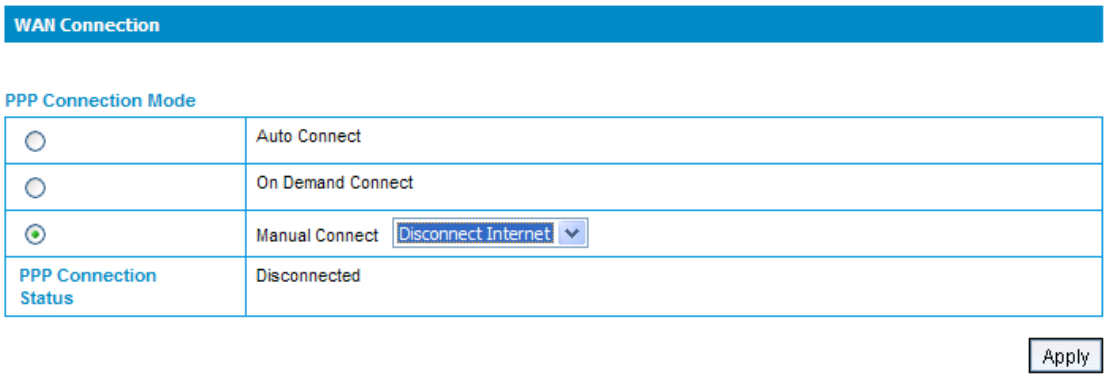
Logout

1. Select **Logout**, a pop-up windows will appear as shown in the following figure :

2. Click **OK** to log out .

Disconnecting from the Internet

1. Select **Disconnect Internet** from **WAN Connection** page, if you want to terminate your Internet connection.



2. click **Apply** to confirm.

Tips:

Turn off the router can also terminate Internet connection.

Chapter 5

Troubleshooting

1. Make sure that the router is turned on and all the cables are connected correctly.

2. Check the RSSI, PPP, WiFi and PWR LED's are all in normal state.

Voice Related Problems

Symptoms	Possible Problems/ Solutions
No Dial Tone.	Please wait for 1~2 minutes after the router is turned on. If RSSI is blinking, you have no good RF reception. Change the location of the router.
There is a prompt/ phone alert/ announcement as soon as I lift the phone off the hook.	Make sure your (U)SIM card is inserted correctly and the PIN number has been entered. If the PIN number has been entered incorrectly then you will need to enter the PUK code when prompted.
The line is noisy/ distorted when I lift the phone off the hook.	Remove any electrical appliance which is too close to the phone or router. The cable or phone set might be faulty.
I hear a rapid engaged tone as soon as I lift the phone off the hook.	Put the phone on hook and try again. If you are connected to the internet using the 2G (GSM) network, please disconnect this first.
After dialing the last digit I hear nothing /silence.	When you have finished dialing you can press the # key or wait 4-8 seconds to connect the call.
I can't make or receive a call when I am surfing on the net.	If you are connected using the 2G (GSM) network then you cannot surf the net and make a phone call simultaneously. Please disconnect the internet and wait 30 seconds to 1 minute before making a call.

Internet Related Problems

Symptoms	Possible Problems/ Solutions
I cannot access the internet at all.	Please check your configuration settings. Please wait 1~ 2 minutes for the router to initialize. Check your service indicator LED's.
The download or upload speeds are very slow.	The speed is dependent on signal strength. Check your signal strength and network type.

Others

Symptoms	Possible Problems/ Solutions
The RSSI signal indicator is always blinking or does not light.	This indicates poor reception. Try moving the router to another location near the window.

Appendix A

Technical Parameters

MF613 Fixed Wireless Adapter

- LED Display:
  - i. Power Indicator
  - ii. Wi-Fi Indicator
  - iii. PPP Indicator
  - iv. Radio Signal Strength Indicator
- External Interface:
  - i. External Power Socket
  - ii. Phone Interface (PHONE)
  - iii. Data Interface (LAN)
  - iv. Test Interface (Mini-USB)
- Power Adapter:
  - Input: 100V~240V (AC), 50~60Hz
  - Output: +12V (DC), 1.2A
- Dimensions (W×H×D): 163mm×114mm×29mm

ZTE USB Modem (Inner modem)

- Network:
  - HSUPA/HSDPA/UMTS/EDGE/GPRS/GSM
- Data Service:
  - HSUPA 2Mbps UL
  - HSDPA 7.2Mbps DL
- MicroSD Slot: up to 4GB
- Dimensions (H×W×D): 69mm×26mm×12mm