Tenda

User Guide

www.tendacn.com

4G600 4G630

3G/4G Wireless N150/N300 Router

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About this Manual

Thank you for choosing Tenda! Before you start, please read this User Guide, which instructs you to install and configure your device. This User Guide is applicable to 4G600 and 4G630. Unless otherwise specified, the 4G630 is used as an example throughout this User Guide.

Convention

This user guide uses the following formats to highlight special messages:

Icon	Description
Note	This format is used to highlight information of importance or special interest. Ignoring this type of note may result in ineffective configurations, loss of data or damage to device.
Tip	This format is used to highlight a procedure that will save time or resources.
Knowledge Center	Description of fields on the device GUI.

Technical Support

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- Email: *support02@tenda.com.cn*
- Skype: tendasz
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I Product Overview

1 Package Contents

Unpack the package. Your box should contain the following items:

- 3G/4G Wireless Router
- Ethernet Cable
- Power Adapter
- Install Guide
- Resource CD

If any of the parts are incorrect, missing, or damaged, contact your Tenda dealer. Keep the carton, including the original packing materials, in case you need to return the product for repair.

2 Getting to Know Your Device

2.1 What It Looks like

4G630 **4G600**

2.2 LED

LED	Status	Description
PWR	Solid	The device is receiving electric power.
SYS	Blinking	System is starting up properly.
WPS	Blinking	The device is functioning properly.

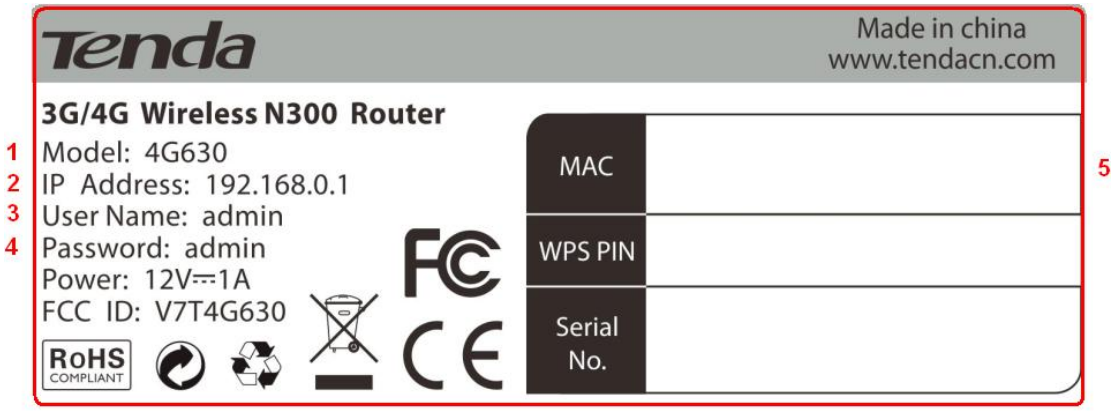
WAN/LAN/WiFi	Blinking	The WAN/LAN /WLAN interface is transmitting data.
	Solid	The WAN/LAN interface is connected correctly. The WiFi radio is on.
USB	Solid	The USB port is connected correctly.
	/	This icon indicates no actual meaning. It is only for decoration.

2.3 Button & Interface

Button/Interface	Description
USB	USB port for attaching a 3G/4G USB Modem
WPS/Reset	Pressing this button for over 6 seconds resets the device to factory default settings or 1-3 seconds to enable WPS quick encryption.
WAN	Internet port for cabling the device to the Internet side
LAN1/2/3	Local (LAN) Ethernet ports for cabling the device to

	local computers, switches, etc.
POWER	Power port for connecting the device to a power outlet

2.4 Label



1→Product Model

2→Default Login IP address

This IP address is to be used to access the device's settings through a Web browser.

3/4→Default login user name/password

This information is to be used for web access authentication.

5→Device's physical address

II Quick Setup

1 Hardware Install

You can either connect to the device wirelessly or using Ethernet cables. Select an install method according to your network environment.

A. If you access the Internet via a 3G/4G USB modem, see ***3G/4G Router Mode***.

B. If you access the Internet by connecting the device to the Ethernet cable from the incoming Internet side, see ***Wireless Router Mode***.

C. If you acquire Internet access from a remote AP on an existing network, see ***Universal Repeater Mode***.

Note

① DO NOT expose the device to heat sources.

② Disconnect the device from power supply in thunderstorm weather.

③ Keep the device away from electrical appliances (such as electromagnetic cooker and cordless phone, etc.) to avoid electromagnetic interference.

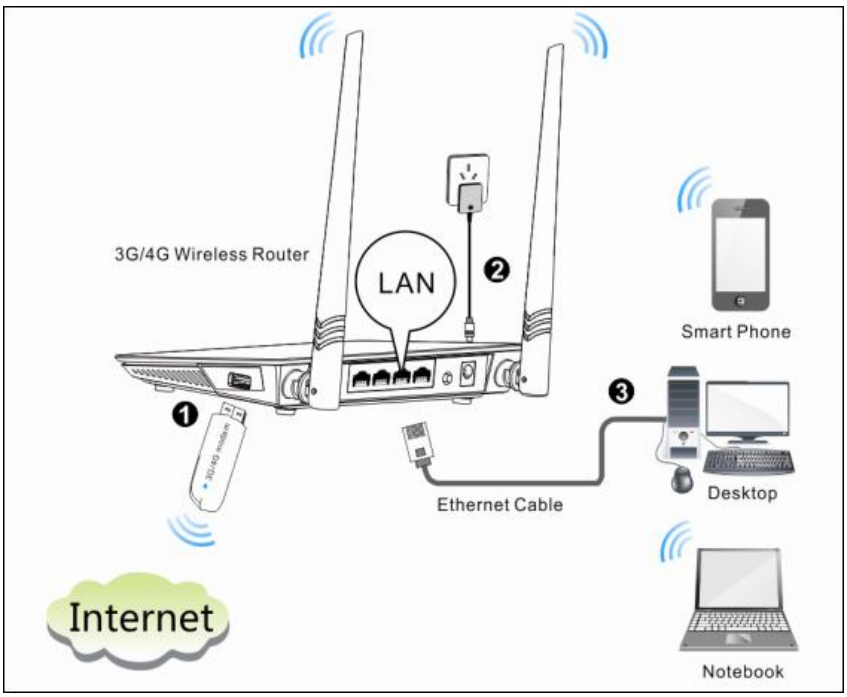
3G/4G Router Mode

By connecting an activated 3G/4G USB modem to your device and it gives you the freedom to roam while staying connected to the Internet.

① Insert a 3G/4G USB modem to the device.

② Connect the device to a power outlet.

③ Connect your desktop, notebook and smart phone, etc. to the device.



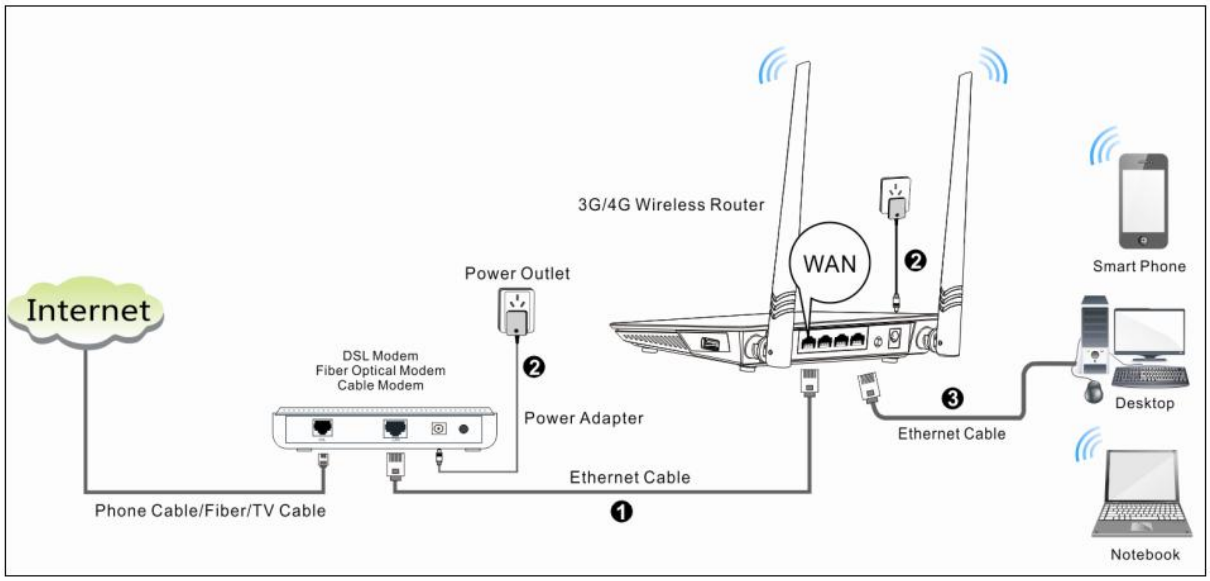
Wireless Router Mode

In this mode, your device functions as a common wireless router. Simply connect it to an Internet-enabled DSL/fiber optical/cable modem.

① Connect the WAN port of the device to an Internet-enabled DSL/fiber optical/cable modem.

② Connect the modem and the device to a power outlet.

③ Connect your desktop, notebook and smart phone to the device.

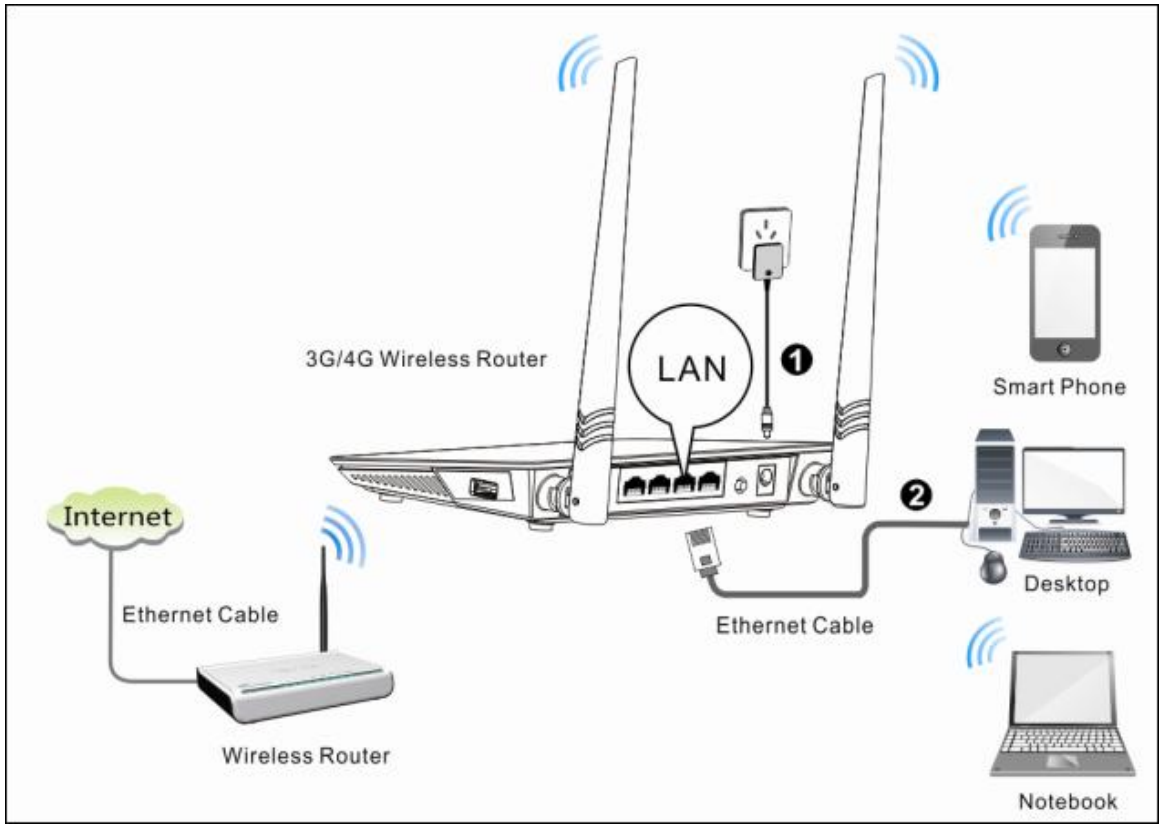


Universal Repeater Mode

The universal repeater feature can be used to extend your existing wireless network coverage.

① Connect the device to a power outlet.

② Connect your desktop, notebook and smart phone to the device.



Tip

① To scan and connect to a remote wireless device see Universal Repeater Mode in **4 Quick Internet Setup & Wireless Security Setup**.

② To connect the device wirelessly, see 2 Join Your Wireless Network.

2 Configure Your PC

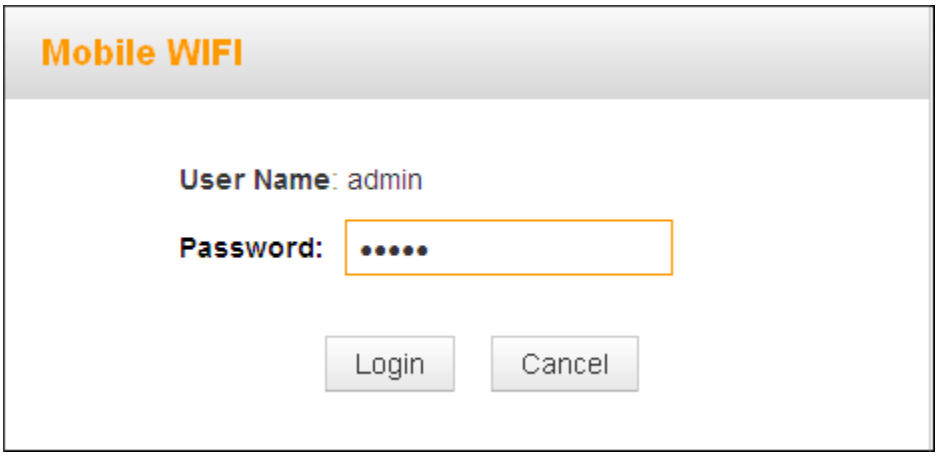
If your computer is set to a static or fixed IP address (This is uncommon), change it to "Obtain an IP address automatically" and "Obtain DNS server address automatically" from the device. See ***1 Configure Your PC***.

3 Web Login

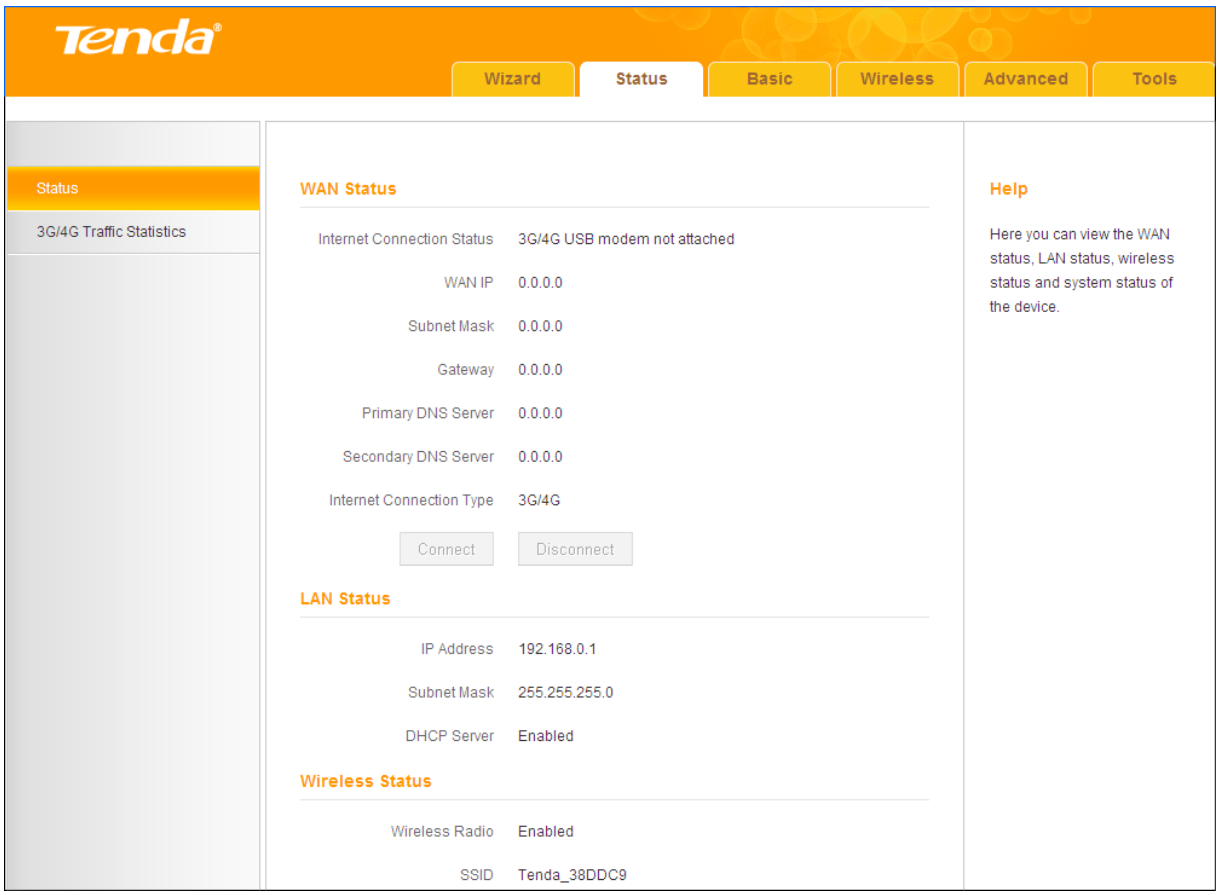
① Launch a Web browser, say, **IE**.

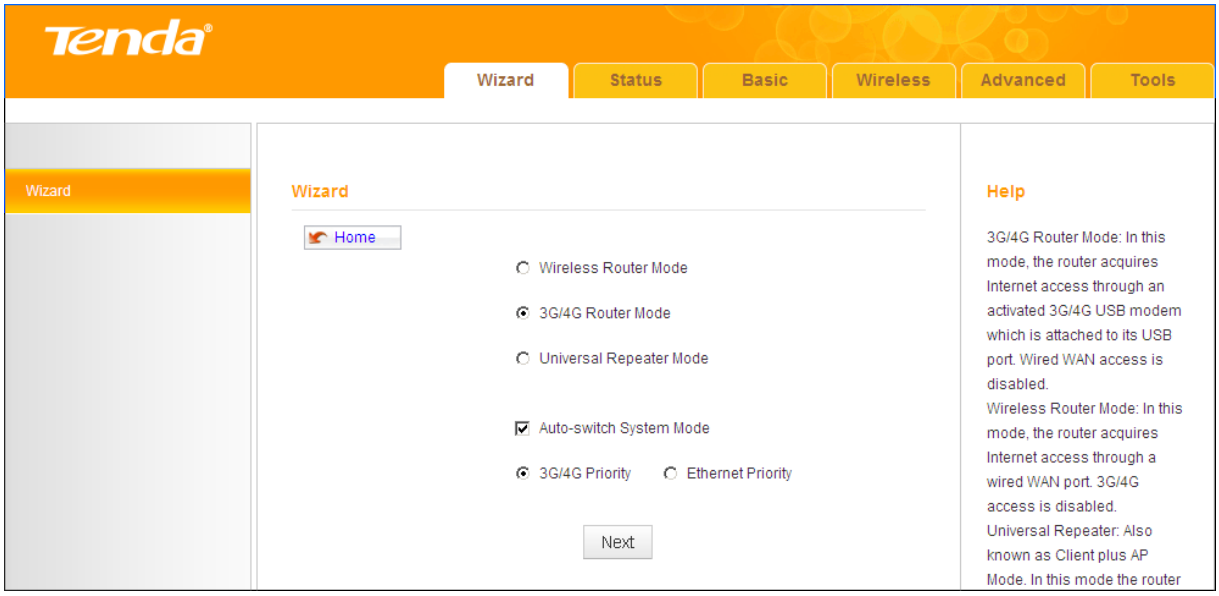
② In the address bar, input the device's LAN IP address (**192.168.0.1** by default), and press **Enter**.

③ Enter the login password (**admin** by default) and click **Login**.



④ The **Status** screen appears. Click **Wizard** to enter the setup wizard interface.





4 Quick Internet Setup & Wireless Security Setup

Read the following and determine your Internet connection type. Then follow the right setup wizard.

A. If you access the Internet via a 3G/4G USB modem, see ***3G/4G Router***

Mode.

B. If your ISP provides you with a cable from the incoming Internet side but no ISP login account or IP information, your ISP uses a DHCP connection. See ***Wireless Router Mode – DHCP***.

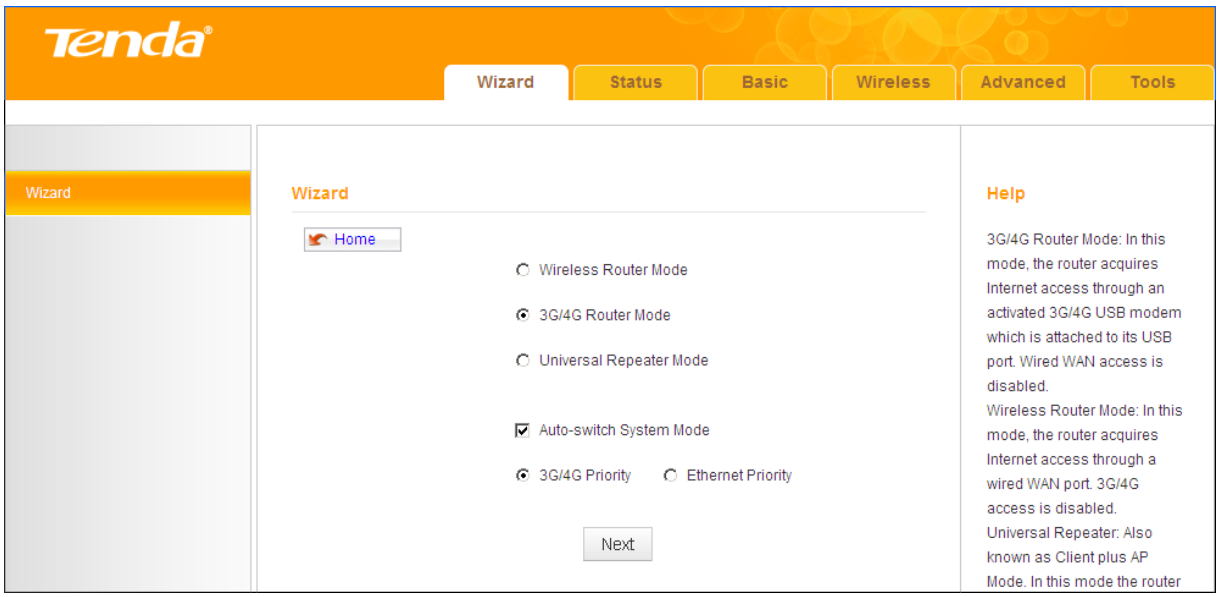
C. If your ISP provides you with a cable from the incoming Internet side and a PPPoE login account, your ISP uses a PPPoE connection. See ***Wireless Router Mode – PPPoE***.

D. If you acquire Internet access from a remote AP on an existing network, see ***Universal Repeater Mode***.

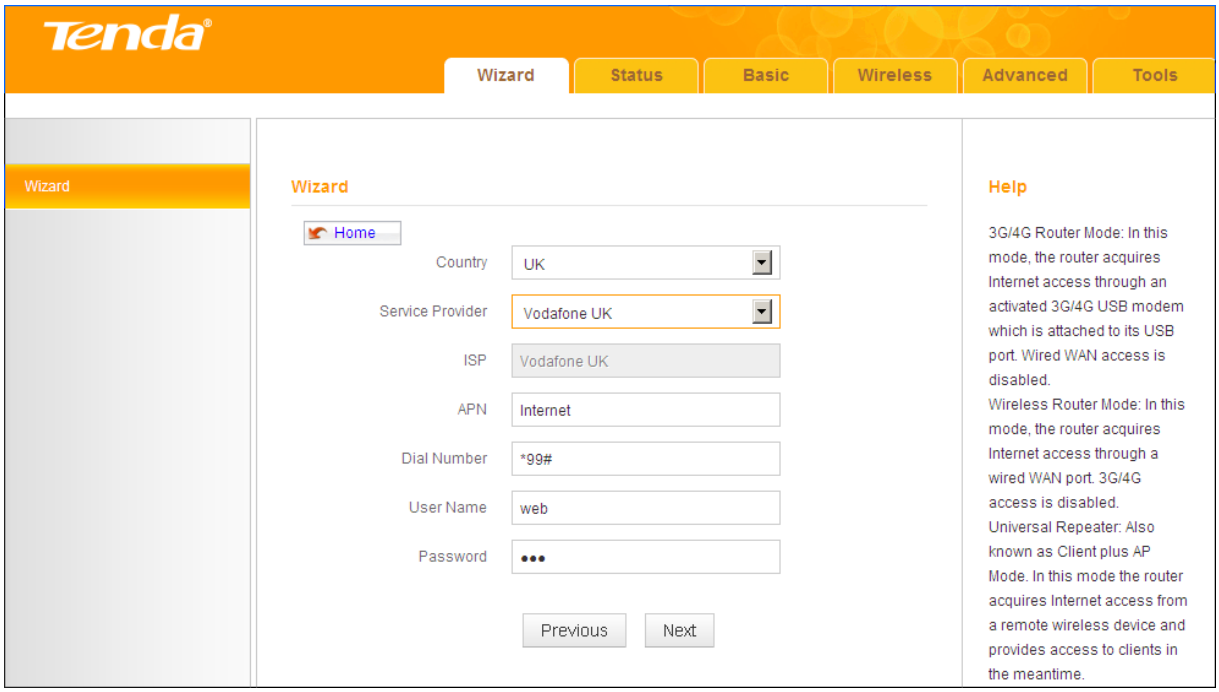
E. To learn about the **Auto-switch System Mode**, **3G/4G Priority** and/or **Ethernet Priority**, see ***Auto-switch System Mode & Priority***.

3G/4G Router Mode

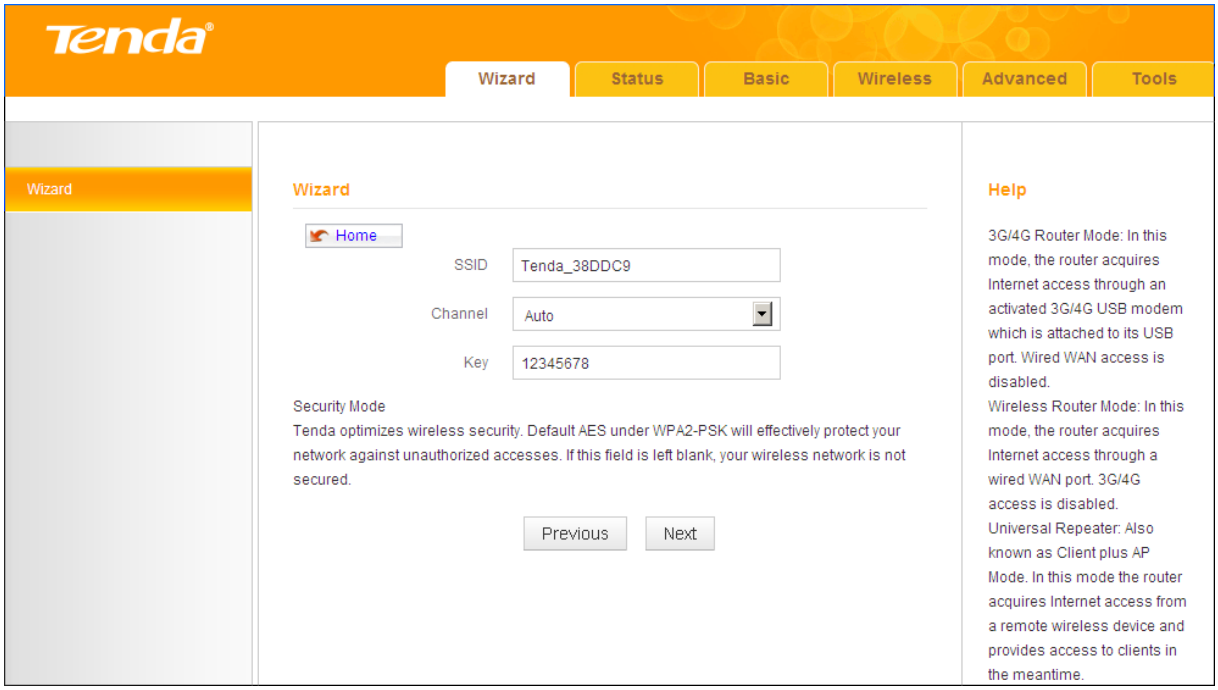
① Select **3G/4G Router Mode** and click **Next**.



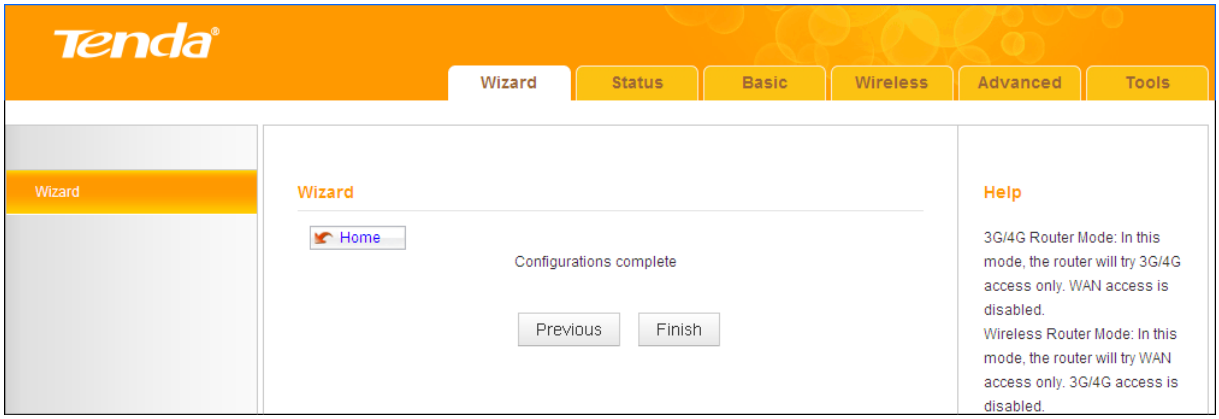
② Configure 3G/ 4G Internet connection settings and then click **Next**. If you are not sure of which service provider to use, select **Auto**.



③ Configure your wireless network: **SSID**, **Channel**, **Key** and then click **Next**.

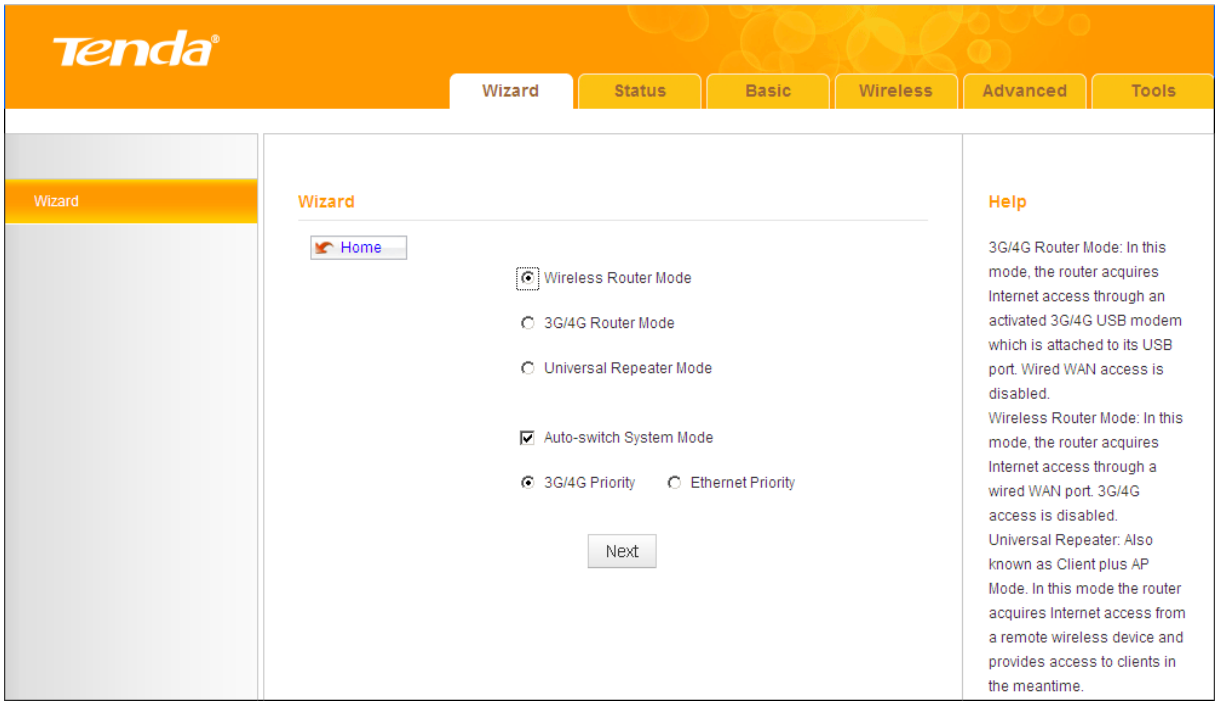


④ Click **Finish** and wait for the device to restart.

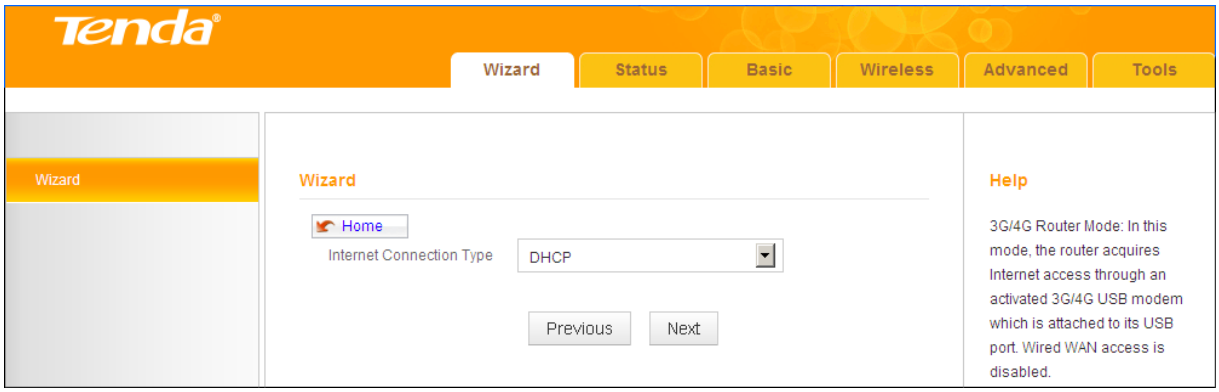


Wireless Router Mode – DHCP

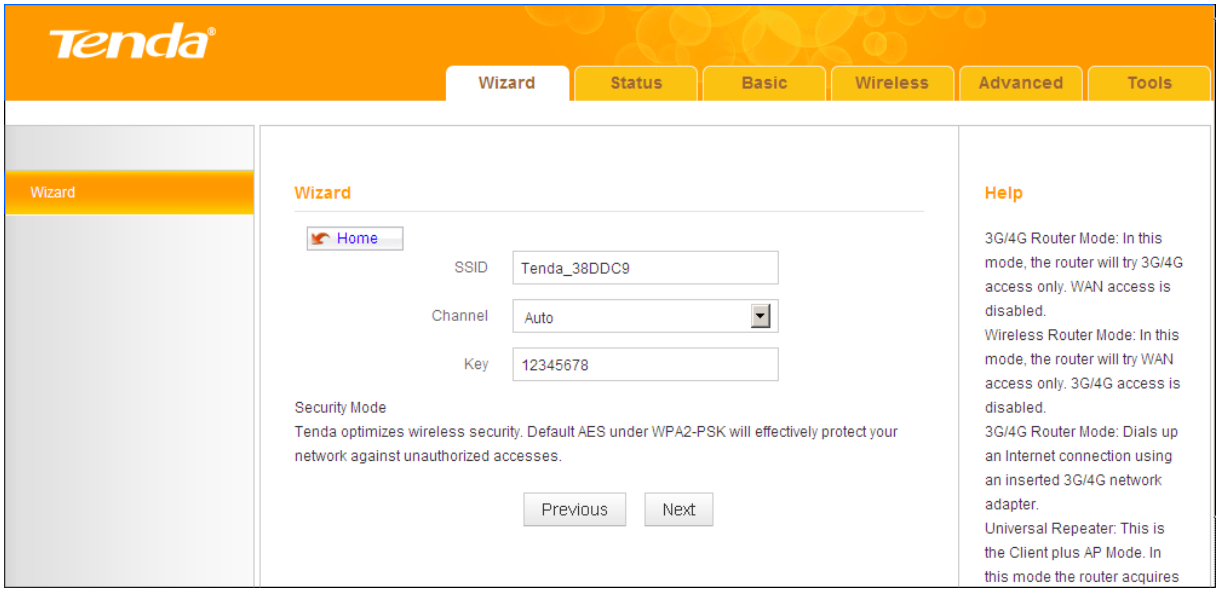
① Select **Wireless Router Mode** and click **Next**.



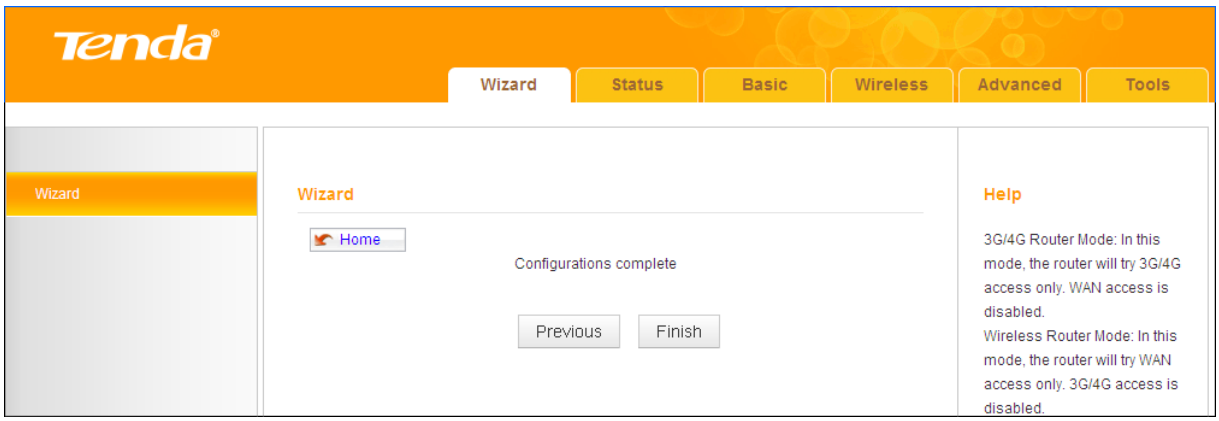
② Select **DHCP** and click **Next**.



③ Configure your wireless network: **SSID**, **Channel**, **Key** and then click **Next**.

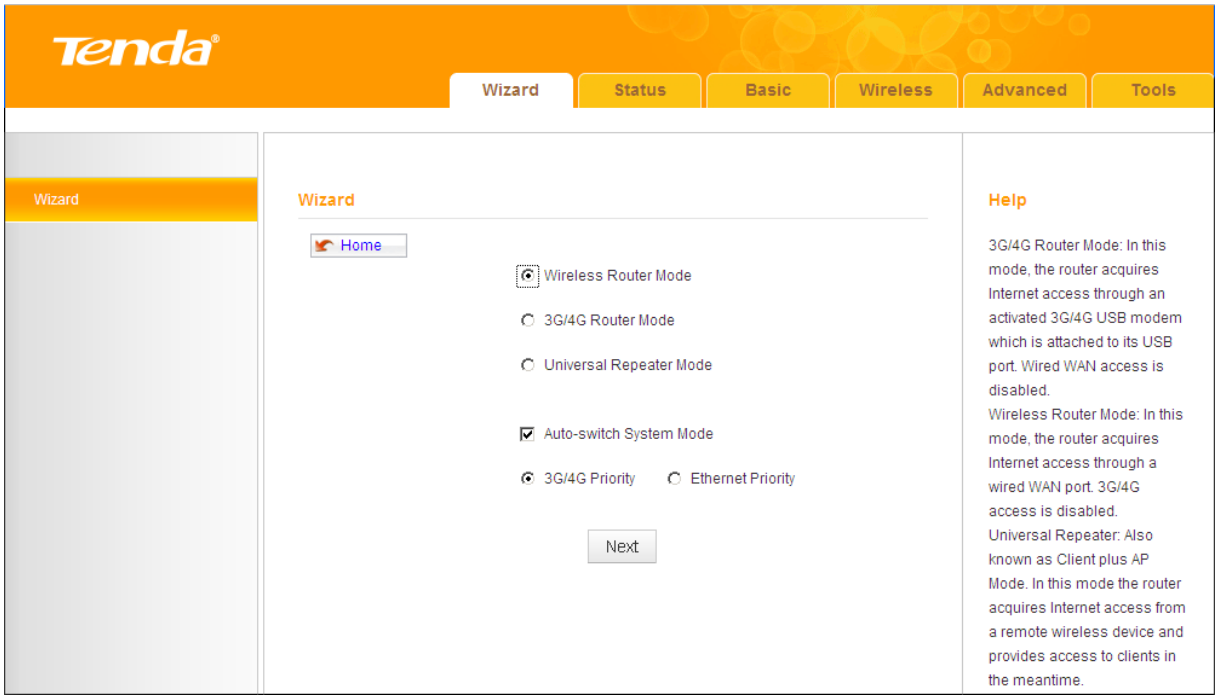


④ Click **Finish** and wait for the device to restart.

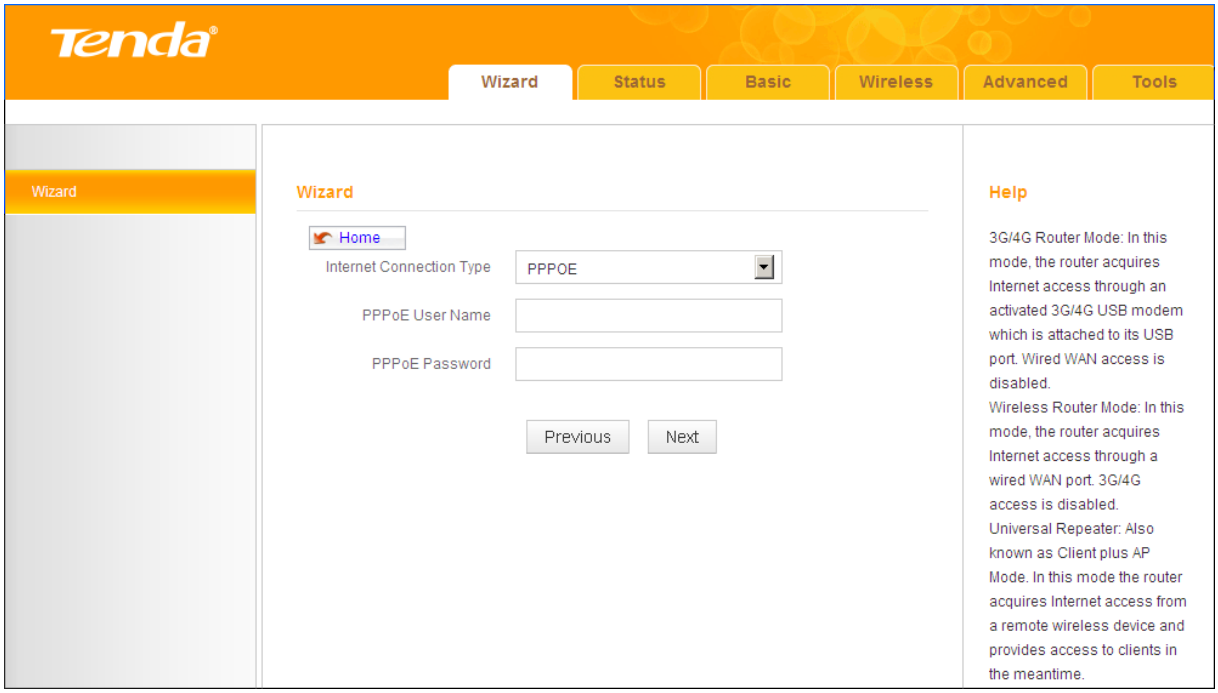


Wireless Router Mode – PPPoE

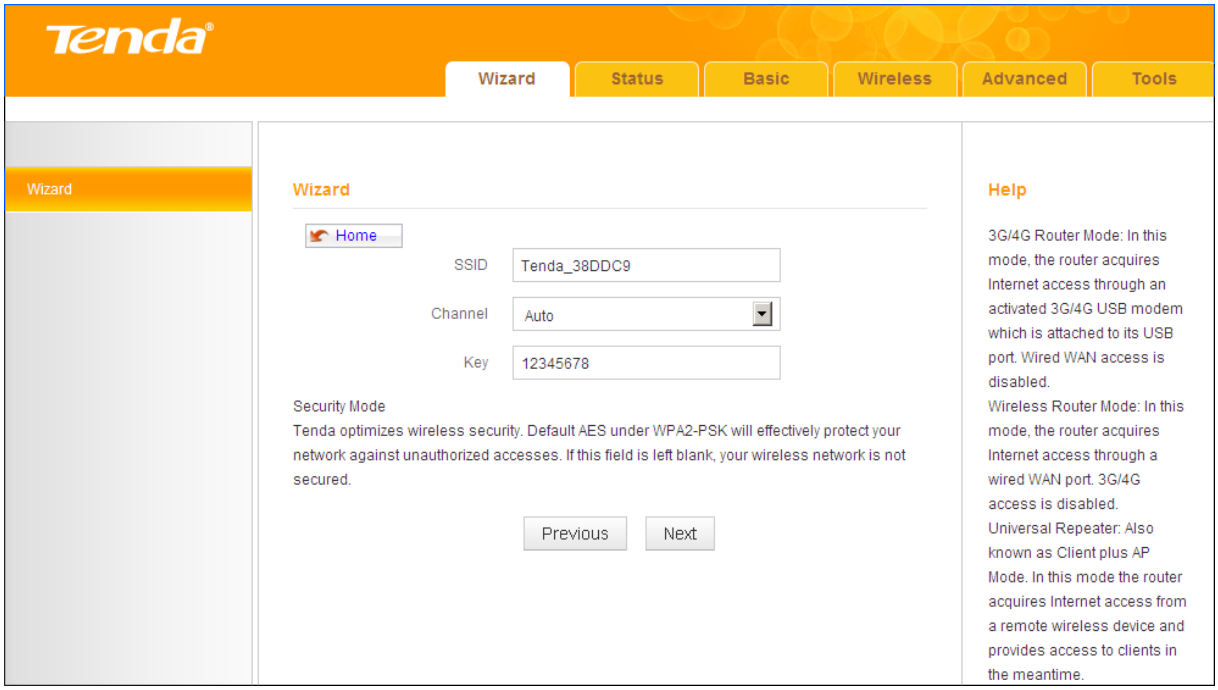
① Select **Wireless Router Mode** and click **Next**.



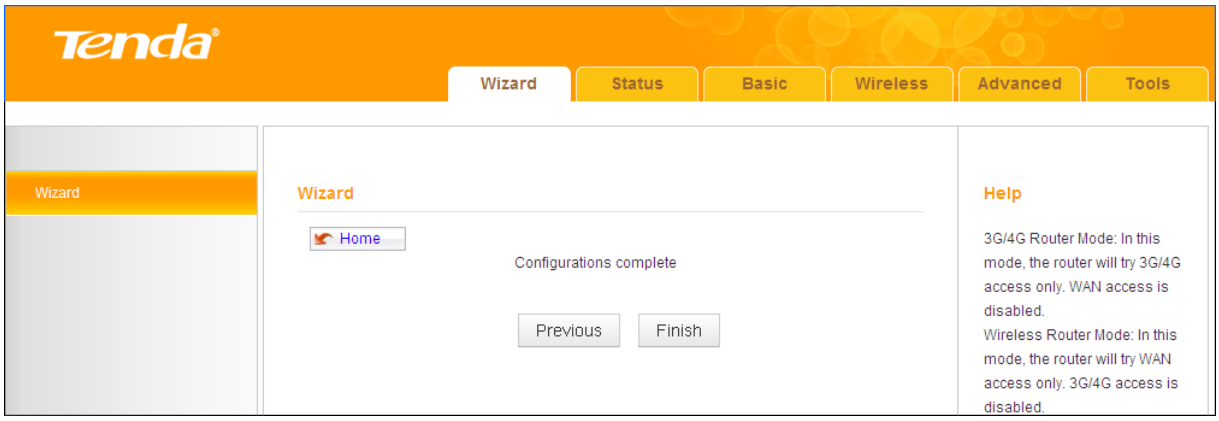
② Select **PPPoE**, enter the **PPPoE User Name/Password** and click **Next**.



③ Configure your wireless network: **SSID**, **Channel**, **Key** and then click **Next**.



④ Click **Finish** and wait for the device to restart.

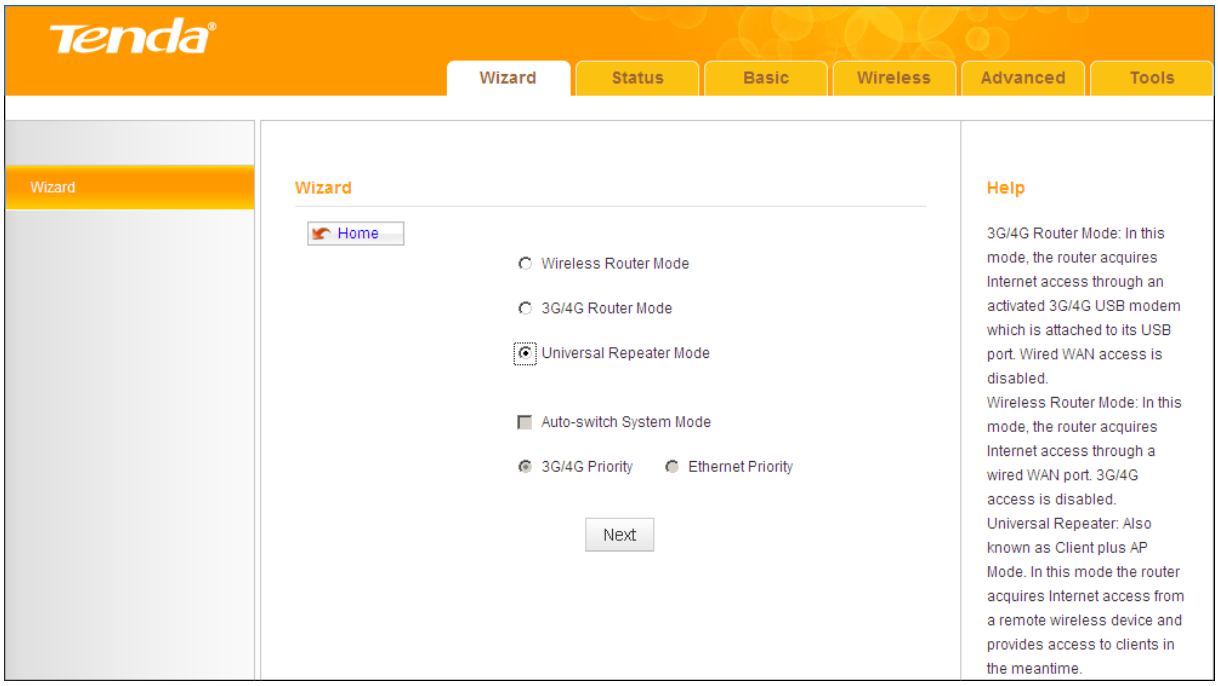


Tip

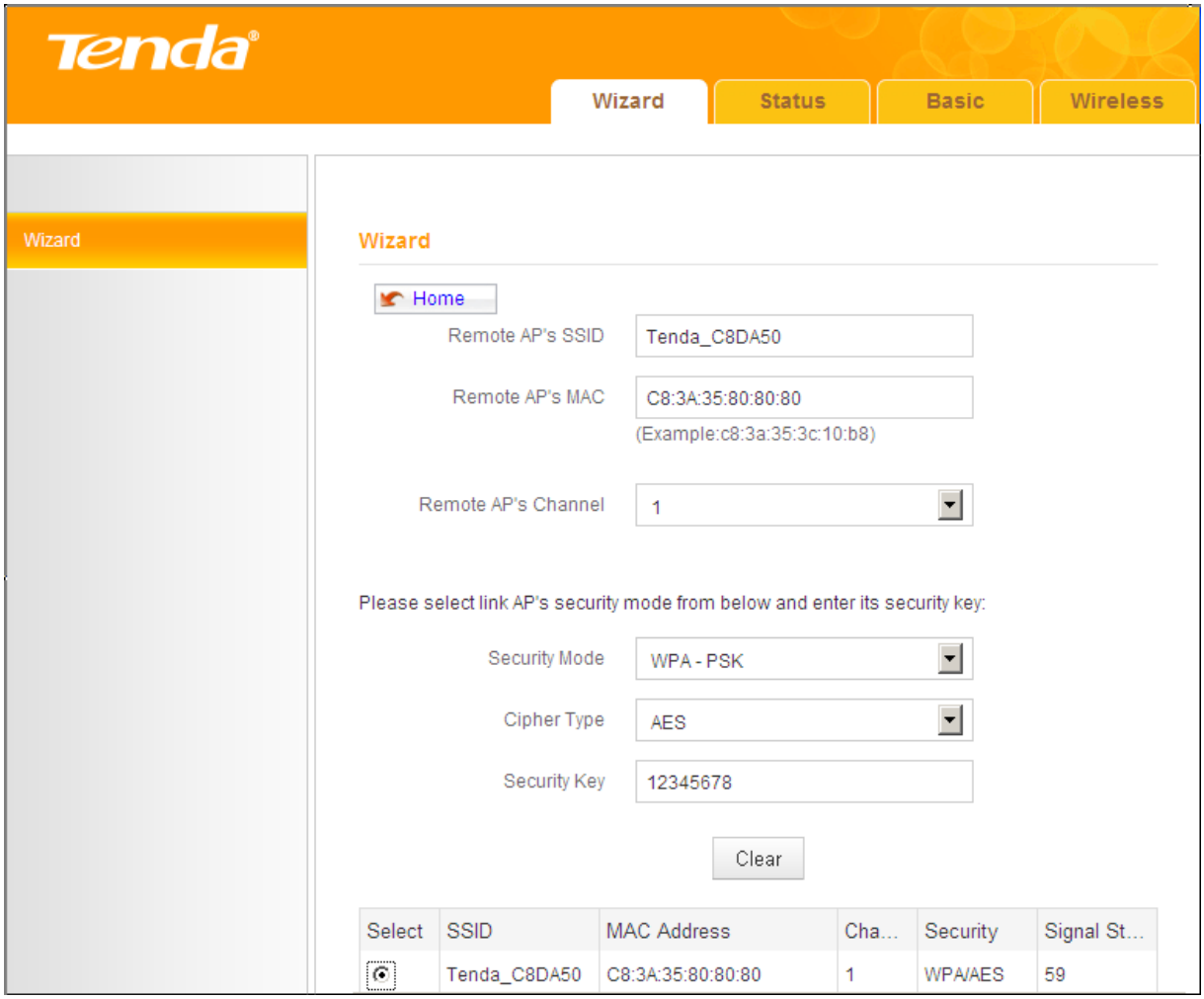
Five Internet connection types are supported for the wired WAN connection (Ethernet): DHCP, PPPOE, PPTP, L2TP and Static IP. For PPTP, L2TP and Static IP, see ***2.2 WAN Settings***.

Universal Repeater Mode

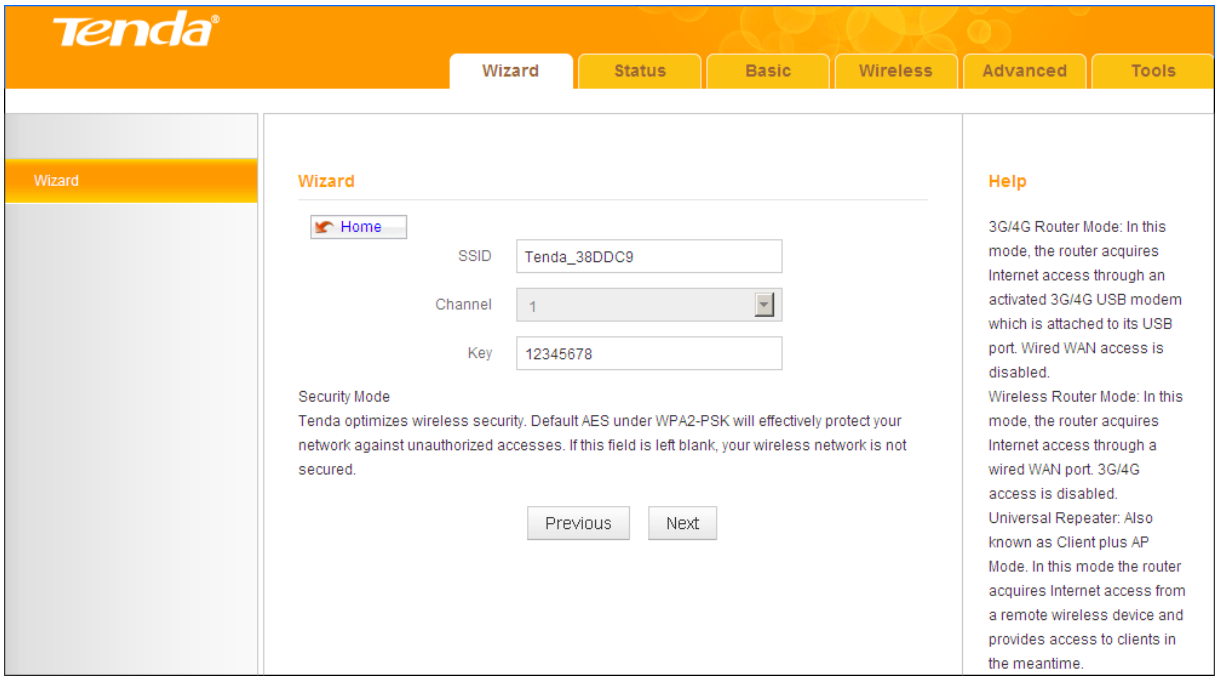
① Select **Universal Repeater Mode** and click **Next**.



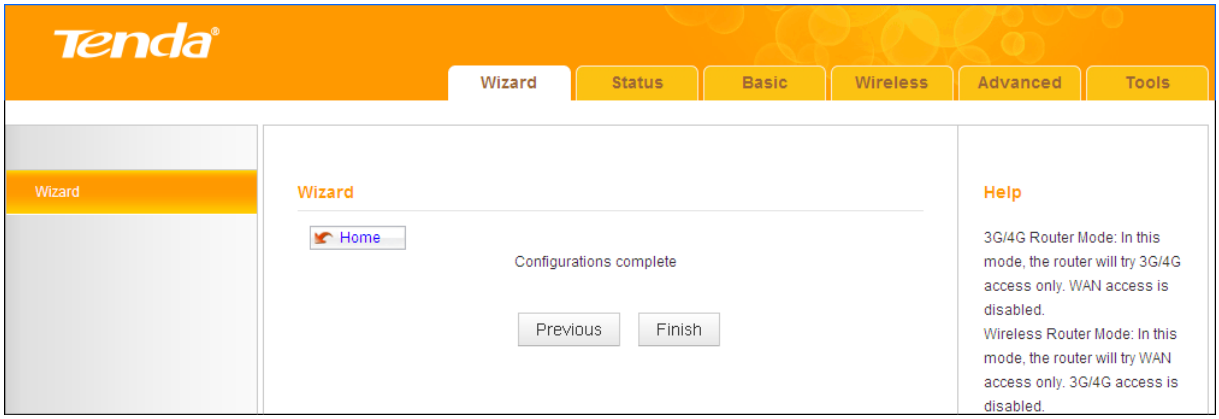
② Enter or select the **SSID**, **MAC**, **Channel** and security settings exactly the same as the remote AP and then click **Next**.



③ Configure your wireless network: **SSID** and **Key** and then click **Next**.



④ Click **Finish** and wait for the device to restart.



Tip

In **Universal Repeater Mode**, your wireless network must operate on the same channel as the remote AP.

Auto-switch System Mode & Priority

Auto-switch System Mode: If unchecked, system will not switch between the **3G/4G Router Mode** and **Wireless Router Mode**.

If the Auto-switch System Mode and 3G/4G Priority are selected, system will:

- prioritize the **3G/4G Router Mode** when detecting the coexistence of an

Ethernet cable and a 3G/4G USB modem.

- operate in the **3G/4G Router Mode** when only detecting a 3G/4G USB modem.
- toggle to the **Wireless Router Mode** when only detecting an Ethernet cable.

If the Auto-switch System Mode and Ethernet Priority are selected, system will:

- prioritize the **Wireless Router Mode** when detecting the coexistence of an Ethernet cable and a 3G/4G USB modem.
- toggle to the **3G/4G Router Mode** when only detecting a 3G/4G USB modem.
- operate in the **Wireless Router Mode** when only detecting an Ethernet cable.

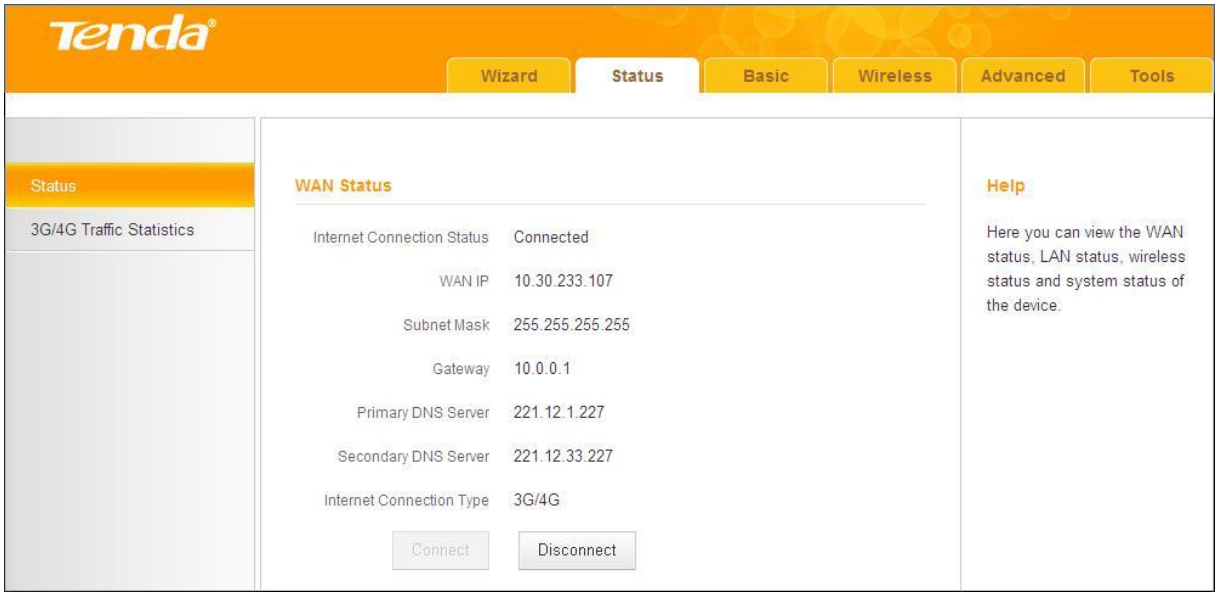
III Features & Configurations

1 Status

Click **Status** to enter the **Status** screen.

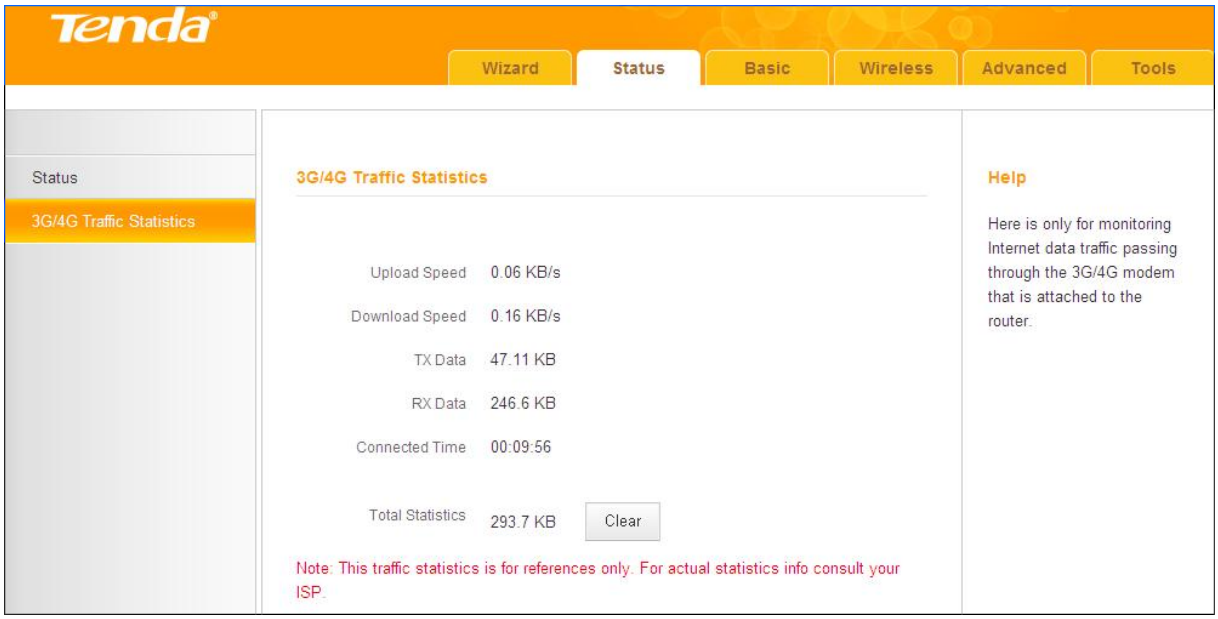
WAN Status

WAN Status in 3G/4G Router Mode:

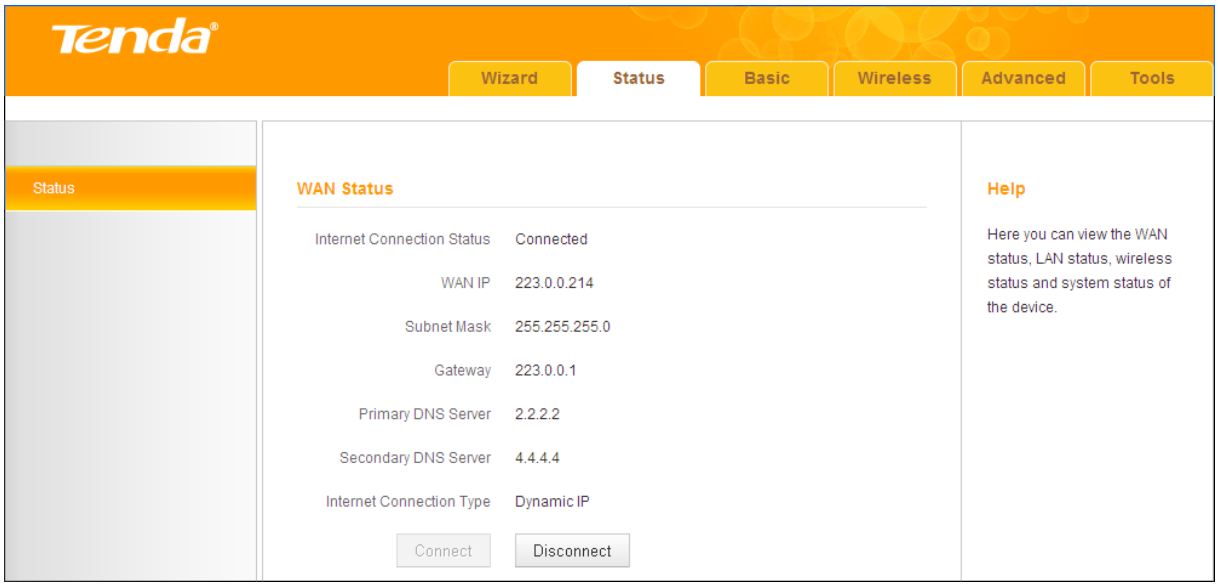


3G/4G Traffic Statistics

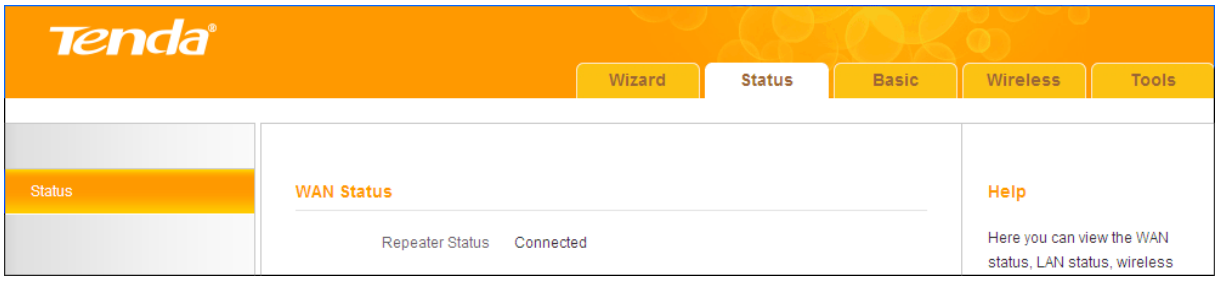
To view the 3G/4G traffic statistics, click **Status** -> **3G/4G Traffic Statistics**. This screen is available only in the **3G/4G Router Mode**.



WAN Status in Wireless Router Mode



WAN Status in Universal Repeater Mode

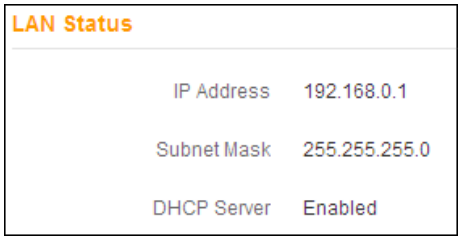


Tip

① **WAN IP/Subnet Mask/Gateway/Primary DNS Server/Secondary DNS Server:** This type of information appears only if the router successfully connects to the Internet via a PPPoE or a DHCP (dynamic IP) connection. However if you connect the router to the Internet with static IP settings provided by your ISP, these fields will display the settings you entered whether the router successfully connects to the Internet or not.

② If there is no available secondary DNS server, nothing appears in the secondary DNS server field.

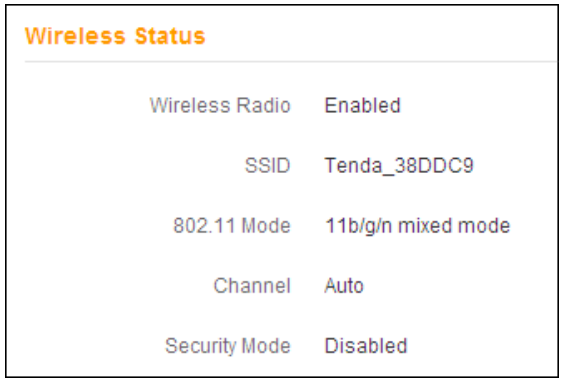
LAN Status



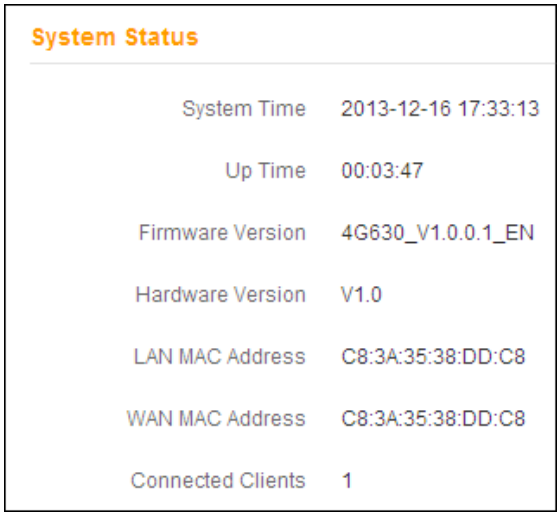
Note

The **DHCP Server** is disabled in **Universal Repeater Mode**.

Wireless Status



System Status



Knowledge Center

WAN MAC Address: The device's current WAN MAC address.

System Time: Current system time on this device. The device automatically synchronizes the system time with Internet time servers.

Up Time: Displays the time duration indicating how long the router has been up since startup. Up time is recounted and renewed upon power-off.

Connected Clients: Displays the number of DHCP clients.

2 Basic Settings

- To change the device's login IP address, see **2.1 LAN Settings**.
- To set up the Internet, see ***2.2 WAN Settings***.
- To set up speed and duplex mode for the WAN port, see ***2.3 WAN Speed (Available only in Wireless Router Mode)***.
- To configure DNS server, see ***2.4 DNS Settings***.
- To clone MAC address, see ***2.5 MAC Clone (Available only in Wireless Router Mode)***.
- To configure DHCP server, see ***2.6 DHCP Server***.
- To assign static IP addresses and view LAN device information, see ***2.7 DHCP Client List***.

Note

In the **Universal Repeater Mode**, only the **LAN Settings** screen is available.

2.1 LAN Settings

Here you can configure the LAN IP address and subnet mask. This IP address is to be used to access the device's settings through a Web browser. Be sure to make a note of any changes you apply to this page.

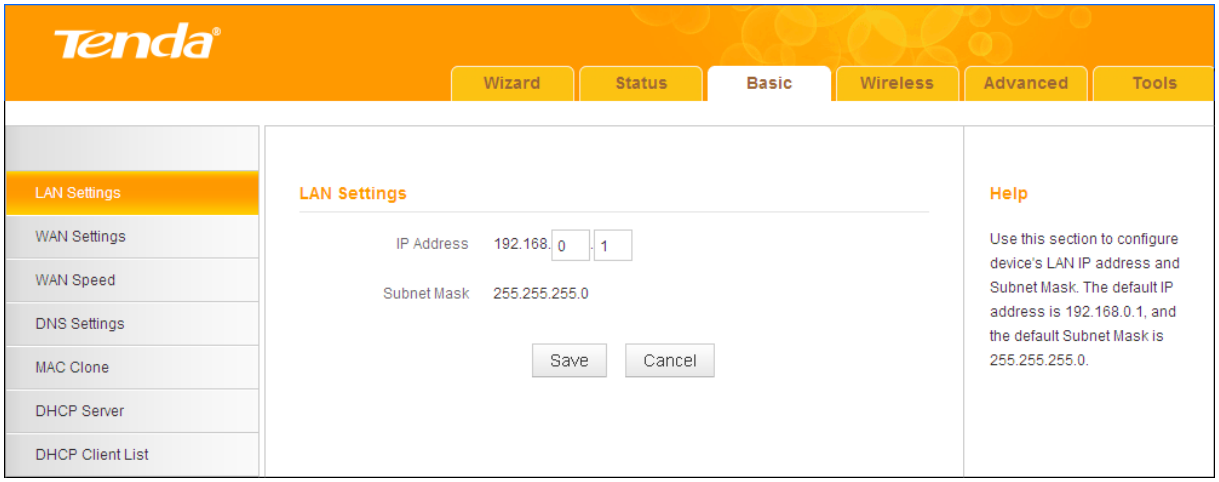
Tip

① Default IP address and subnet mask are respectively 192.168.0.1 and 255.255.255.0.

② If you change the LAN IP address of the device, you have to open a new connection to the new IP address and log in again. Also, you have to set the default gateway addresses of all LAN PCs to this new IP address.

③ The device's LAN IP address and WAN IP address must be on different IP

segments. If not, it will not be able to access the Internet.



Configuration Procedures:

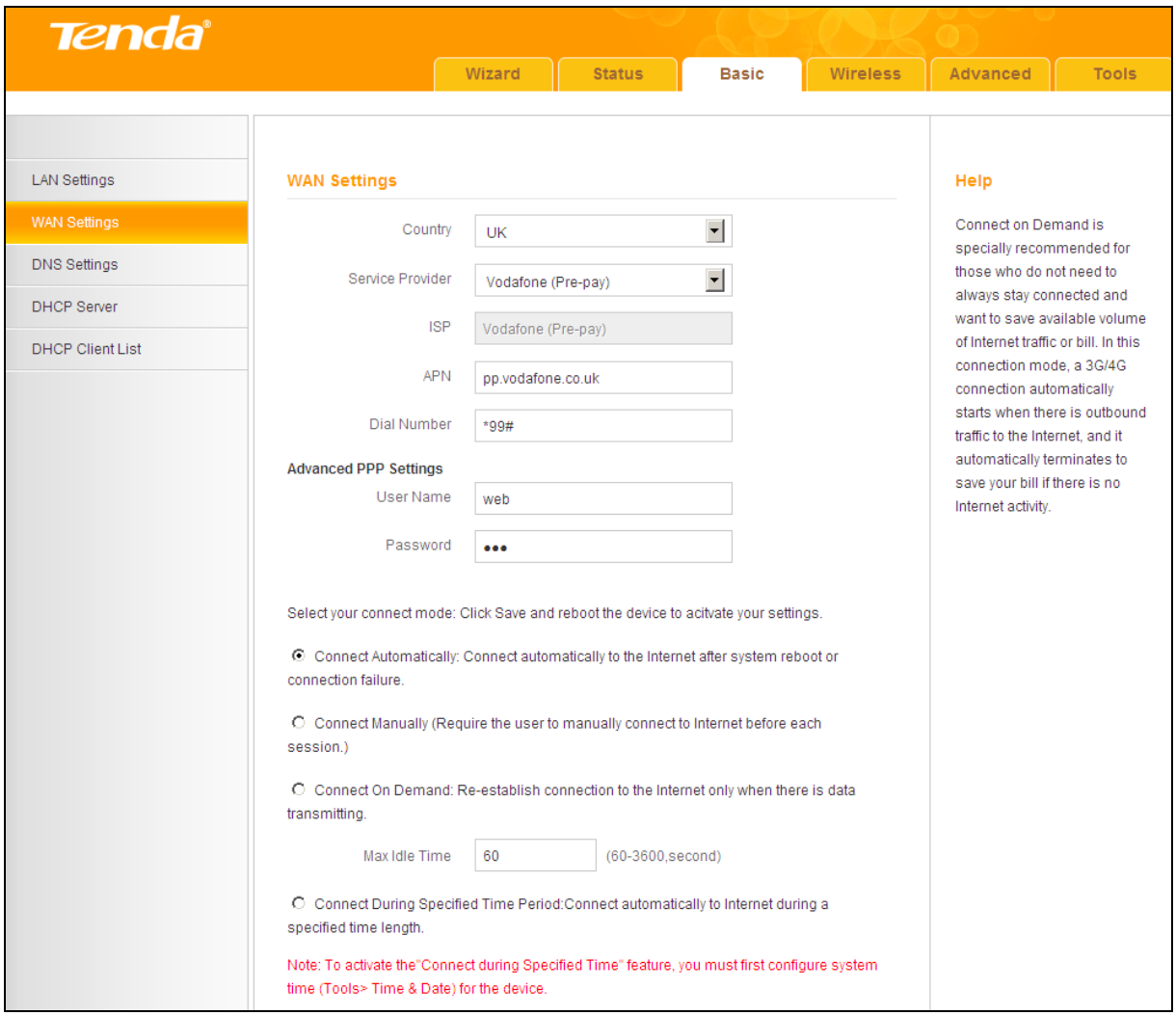
① Change the IP address to the one you wish to use, for example, 192.168.10.1.

② Click **Save** to save your settings.

2.2 WAN Settings

Click **Basic -> WAN Settings** to configure your Internet connection settings.

3G/4G Router Mode



Configuration Procedures:

① **Country:** Select your country.

② **Service Provider/ISP:** Select your 3G/4G service provider and ISP.

③ **APN:** Access point Name. Consult your ISP if you are not clear.

④ **Dial Number:** Common numbers are *99#, #777 and *99***1. Consult your ISP if you are not clear.

⑤ **User Name/Password:** Enter the user name and password for your 3G/4G Internet service.

⑥ Click **Save**.

Knowledge Center

Connect Automatically: Connect automatically to the Internet after rebooting the system or connection failure.

Connect Manually: Require the user to manually connect to the Internet before each session.

Connect On Demand: Re-establish connection to the Internet only when there is data transmitting.

Connect During Specified Time Period: Connect automatically to the Internet during a specified time length.

Wireless Router Mode

The **Wireless Router Mode** includes the following Internet connection types:

- **DHCP**
- **PPPoE**
- **Static IP**
- **L2TP**
- **PPTP**

A. Select PPPoE if your ISP uses a PPPoE connection and gives you a PPPoE user name and a PPPoE password.

B. Select Static IP if your ISP provides you with fixed or static IP address settings (special deployment by ISP; this is rare).

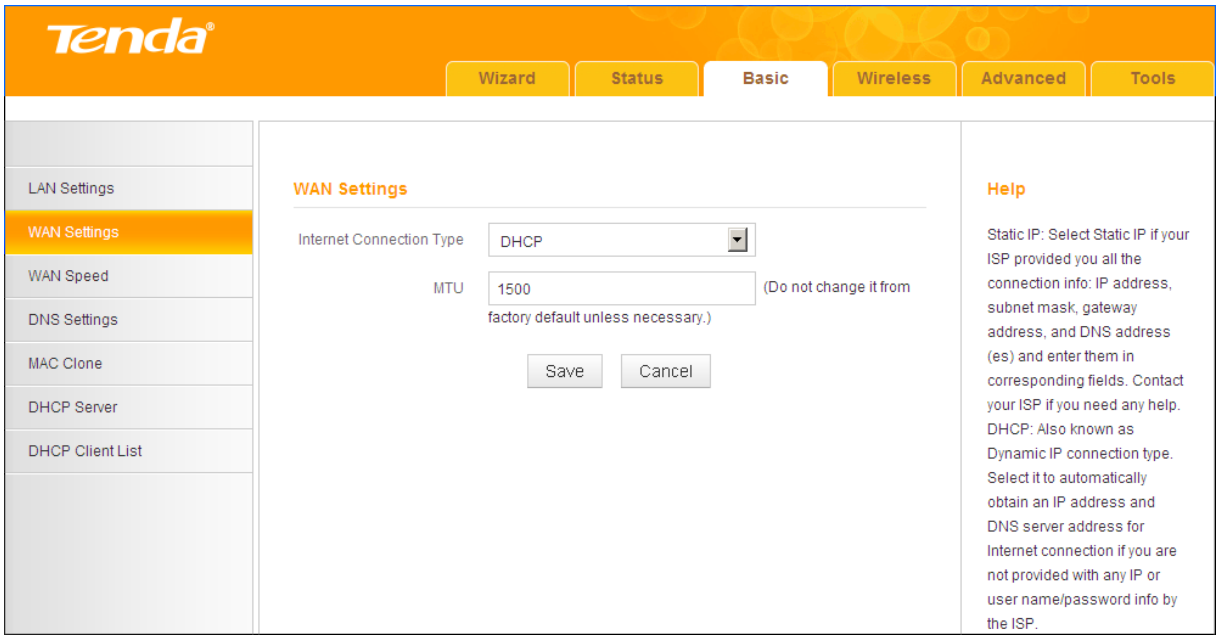
C. Select DHCP (Dynamic IP) if your ISP does not provide you with any ISP login account or IP information.

D. Select L2TP (Layer 2 Tunneling Protocol) if your ISP uses an L2TP connection.

E. Select PPTP (Point-to-Point-Tunneling Protocol) if your ISP uses a PPTP connection.

DHCP

DHCP or Dynamic IP is a connection mode that allows the device to automatically acquire IP information from your ISP or your existing networking equipment.



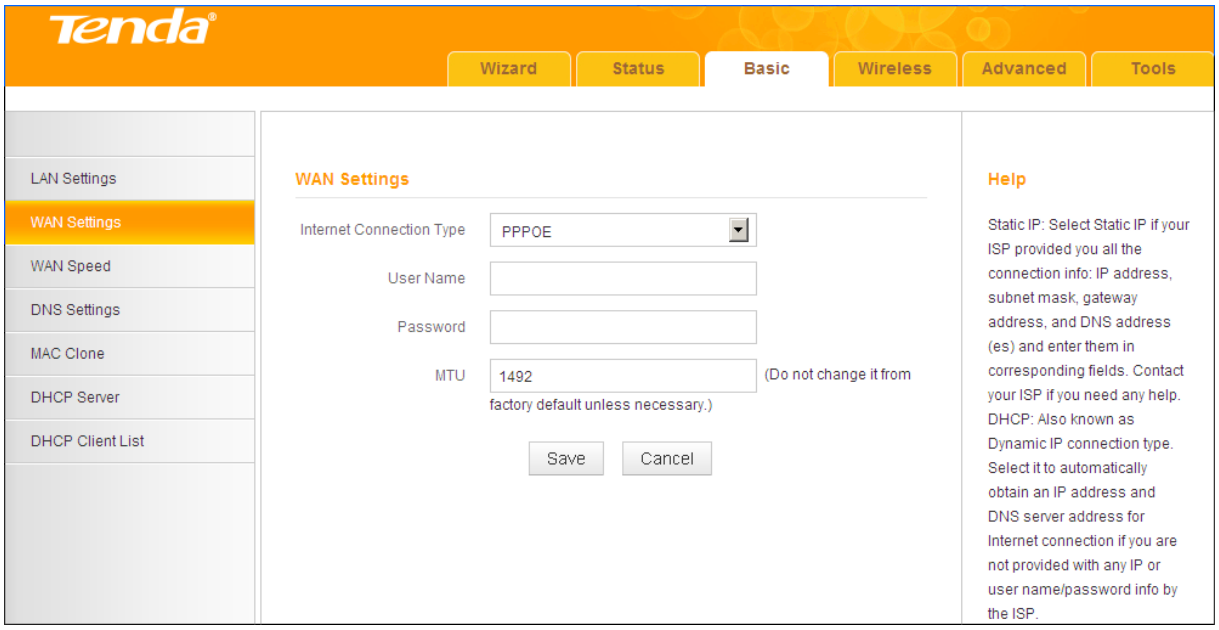
Configuration Procedures:

① **Internet Connection Type:** Select **DHCP**.

② Click **Save** to save your settings.

PPPoE

PPPoE is a connection mode associated with some DSL connections that requires user name and password. Contact your ISP if you need assistance with these login credentials.



Configuration Procedures:

① **Internet Connection Type:** Select **PPPoE**.

② **User Name:** Enter the ISP login name.

③ **Password:** Enter the ISP login password.

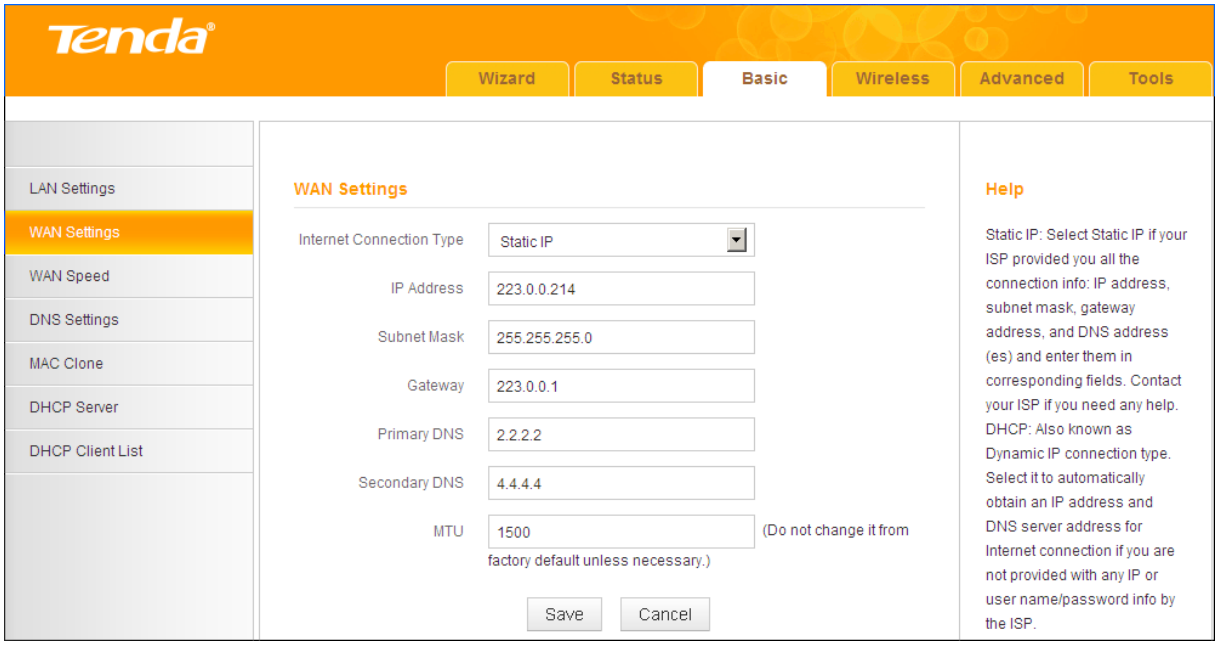
④ Click **Save** to save your settings.

Knowledge Center

MTU: The MTU (maximum transmission unit) is the largest data packet a network device transmits. The normal MTU value for most Ethernet networks is 1500 bytes, or 1492 bytes for PPPoE connections. For some ISPs, you might need to change the MTU. This is rarely required, and should not be done unless you are sure it is necessary for your ISP connection. For more information, see ***WAN MTU Setup***.

Static IP

Static IP is a connection mode that allows you to specify the Static IP information provided by your ISP or that corresponds with your existing networking equipment.



Configuration Procedures:

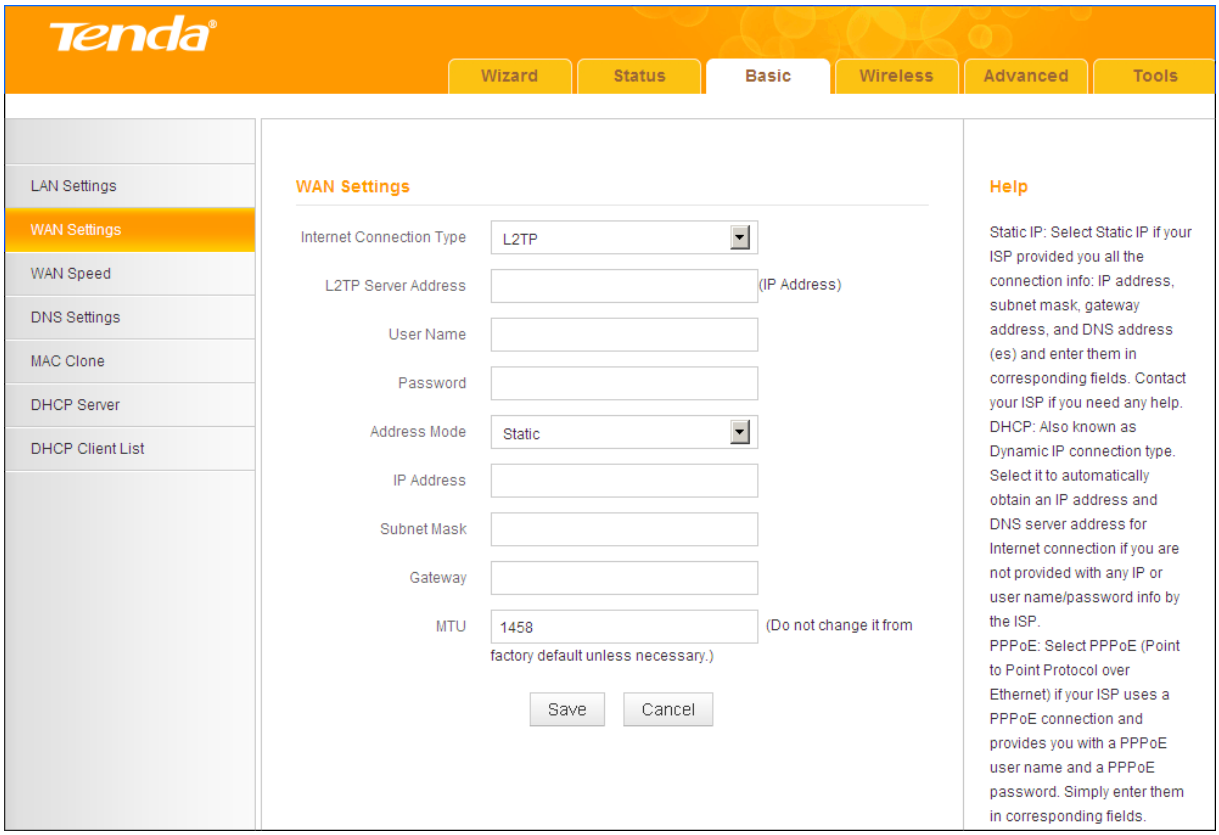
① **Internet Connection Type:** Select **Static IP**.

② **IP Address/Subnet Mask/Gateway/Primary DNS/Secondary DNS:** Enter the information provided by your ISP.

③ Click **Save** to save your settings.

L2TP

L2TP (Layer 2 Tunneling Protocol) is a network protocol that enables the secure transfer of data from a remote client to a private enterprise server by creating a VPN across TCP/IP-based data. Enter your ISP provided information to establish a connection.



Configuration Procedures:

① **Internet Connection Type:** Select **L2TP**.

② **L2TP Server Address:** Enter the L2TP IP address provided by your ISP.

③ **User Name:** Enter your L2TP user name.

④ **Password:** Enter your L2TP Password.

⑤ **Address Mode:** Select **Dynamic** if you don't get any IP information from your ISP, otherwise select **Static**. Consult your ISP if you are

not clear.

⑥ **IP Address:** Enter the IP address provided by your ISP. Consult your local ISP if you are not clear.

⑦ **Subnet Mask:** Enter the subnet mask.

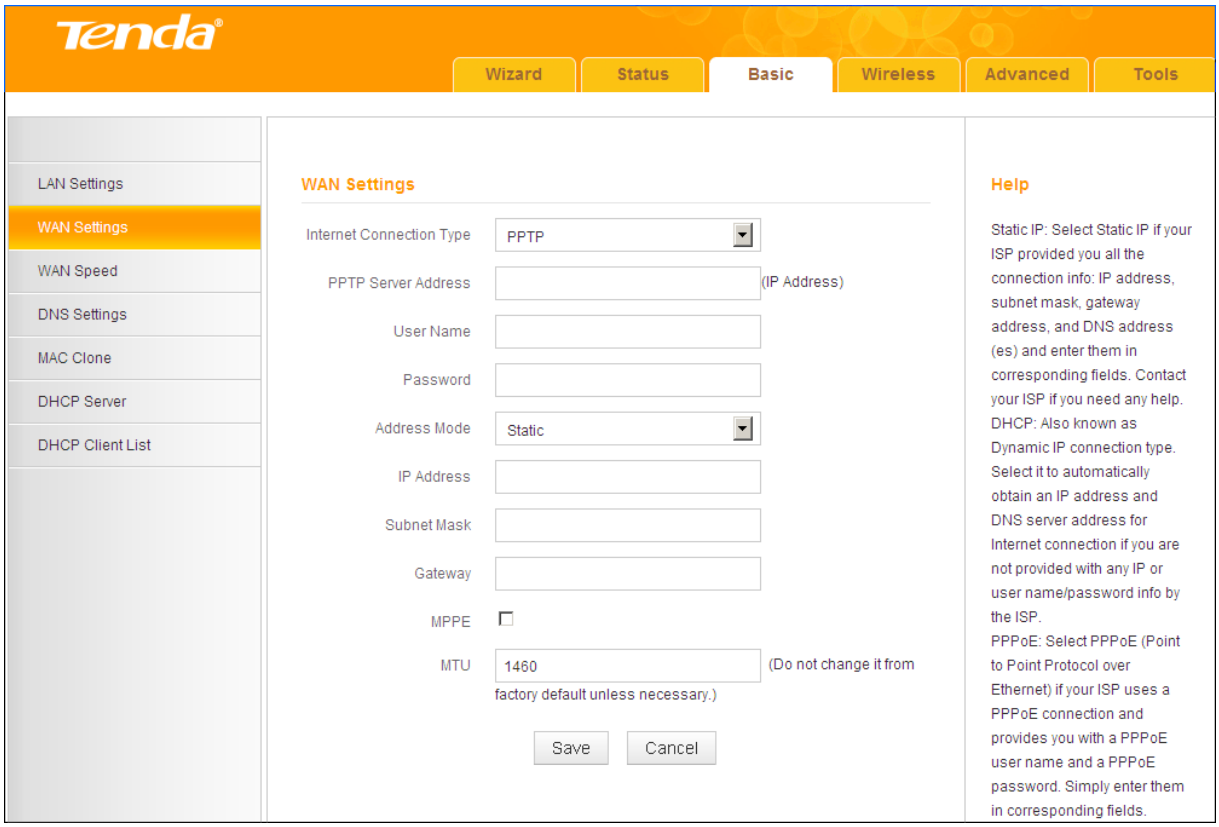
⑧ **Gateway:** Enter the gateway provided by your ISP. Consult your local ISP if you are not clear.

⑨ Click **Save** to save your settings.

PPTP

PPTP (Point-To-Point Tunneling Protocol) is a network protocol that enables the secure transfer of data from a remote client to a private enterprise server by creating a VPN across TCP/IP-based data. Enter your ISP provided information to establish a connection.

MPPE is an encryption technology developed by Microsoft to encrypt point-to-point links.



Configuration Procedures:

① **Internet Connection Type:** Select **PPTP**.

② **PPTP Server Address:** Enter the PPTP IP address provided by your ISP.

③ **User Name:** Enter your PPTP user name.

④ **Password:** Enter your PPTP password.

⑤ **Address Mode:** Select **Dynamic** if you don't get any IP information from your ISP, otherwise select **Static**. Consult your ISP if you are not clear.

⑥ **IP Address:** Enter the IP address provided by your ISP. Consult your local ISP if you are not clear.

⑦ **Subnet Mask:** Enter the subnet mask.

⑧ **Gateway:** Enter the gateway provided by your ISP. Consult your local ISP if you are not clear.

⑨ Click **Save** to save your settings.

WAN MTU Setup

The MTU (maximum transmission unit) is the largest data packet a network device transmits. The normal MTU value for most Ethernet networks is 1500 bytes, or 1492 bytes for PPPoE connections. For some ISPs, you might need to change the MTU. This is rarely required, and should not be done unless you are sure it is necessary for your ISP connection. When one network device communicates across the Internet with another, the data packets travel through many devices along the way. If a device in the data path has a smaller MTU value than the other devices, the data packets have to be "fragmented" to accommodate the device with the smallest MTU value.

The best MTU value is often just the factory default value. In some situations, changing the MTU value fixes one problem but causes another. Leave the MTU unchanged unless one of these situations occurs:

A. You have problems connecting to your ISP or other Internet service, and either your ISP or our technical support suggests changing the MTU value. Below Web-based applications might require an MTU change:

- A secure Website that does not open, or displays only part of a Web

page

- Yahoo email
- MSN portal

B. You use VPN and encounter serious performance problems.

C. You used a program to optimize MTU for performance reasons, and now you have connectivity or performance problems.

If you suspect an MTU problem, try changing the MTU to 1400. If this does not help, gradually reduce the MTU from the maximum value of 1500 until the problem disappears.

The common MTU sizes and applications are listed in the table below.

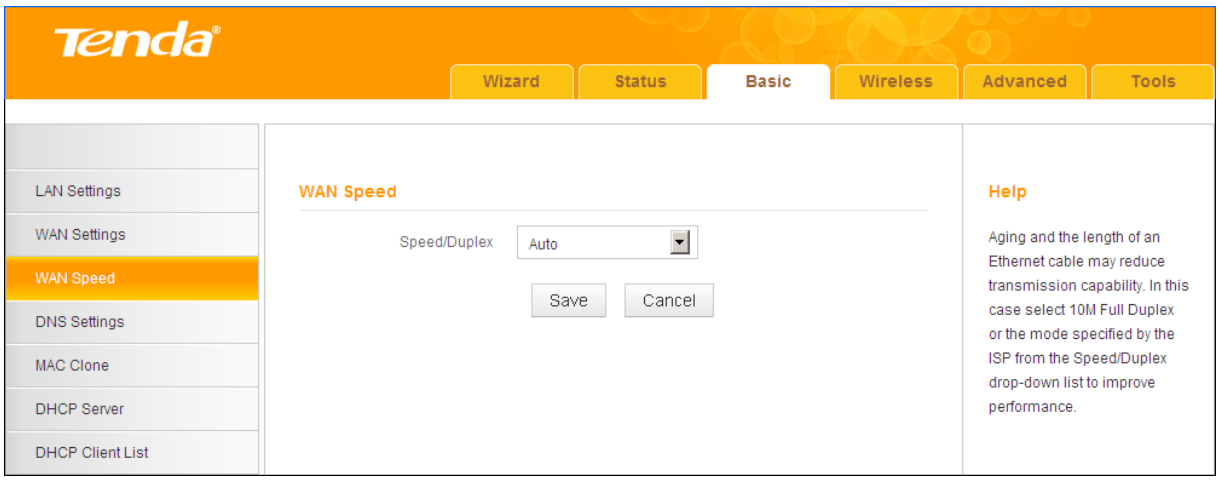
MTU	Application
1500	Typical for connections that do not use PPPoE or VPN.
1492	Used in PPPoE environments.
1472	Maximum size to use for pinging. (Larger packets are fragmented.)
1468	Used in some DHCP environments.
1436	Used in PPTP environments or with VPN.

Note

A wrong/improper MTU value may cause Internet communication problems. For example, you may be unable to access certain Websites, frames within Websites, secure login pages, FTP or POP servers.

2.3 WAN Speed (Available only in Wireless Router Mode)

Click **Basic -> WAN Speed** to enter the configuration interface. Here you can configure the WAN speed and duplex mode.



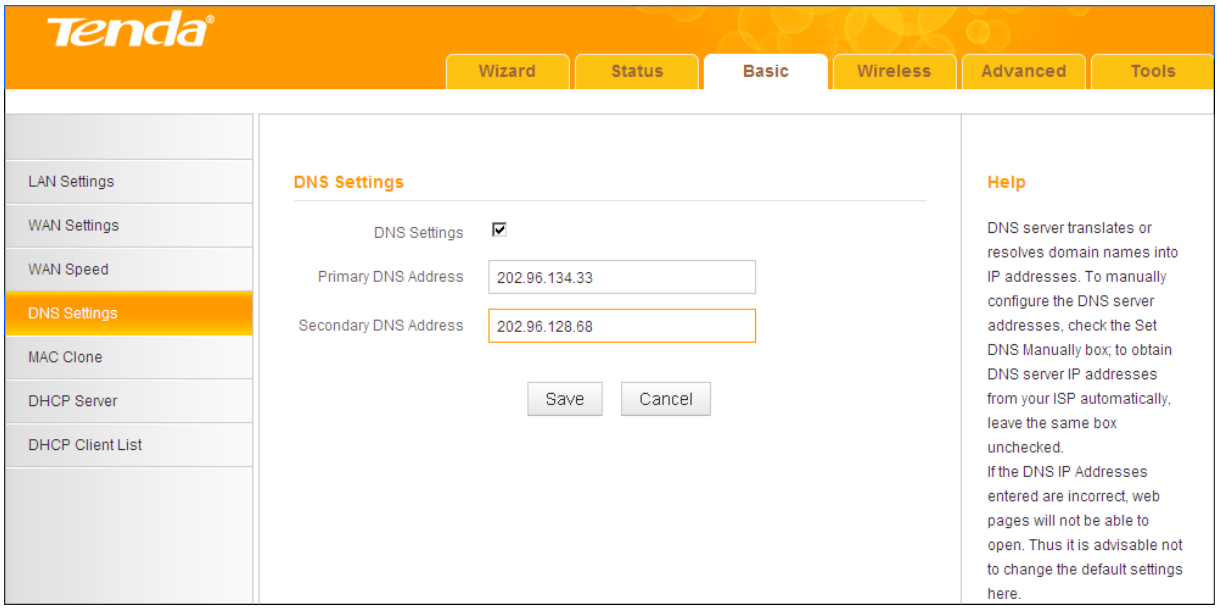
Tip

① The device operates in **Auto** (Auto-negotiation) mode by default. Usually, it works for most cases.

② In some situations, you might need to change the speed/duplex mode. For example, if the cable connected to your device's WAN port is longer than 100m, you may need to use 10M full-duplex or 10M half-duplex for better performance. Ensure that your device's WAN port operates with the same speed and duplex mode as the remote link partner. Otherwise, your device's WAN port may not receive and send data.

2.4 DNS Settings

Click **Basic -> DNS Settings** to enter the configuration interface.



Configuration Procedures:

① **DNS Settings:** Check/uncheck to enable/disable the DNS settings.

② **Primary DNS Address:** Enter the IP address of the primary DNS server provided by your ISP.

③ **Secondary DNS Address:** If a secondary DNS server address is available, enter it here. This field is optional.

④ Click **Save** to save your settings.

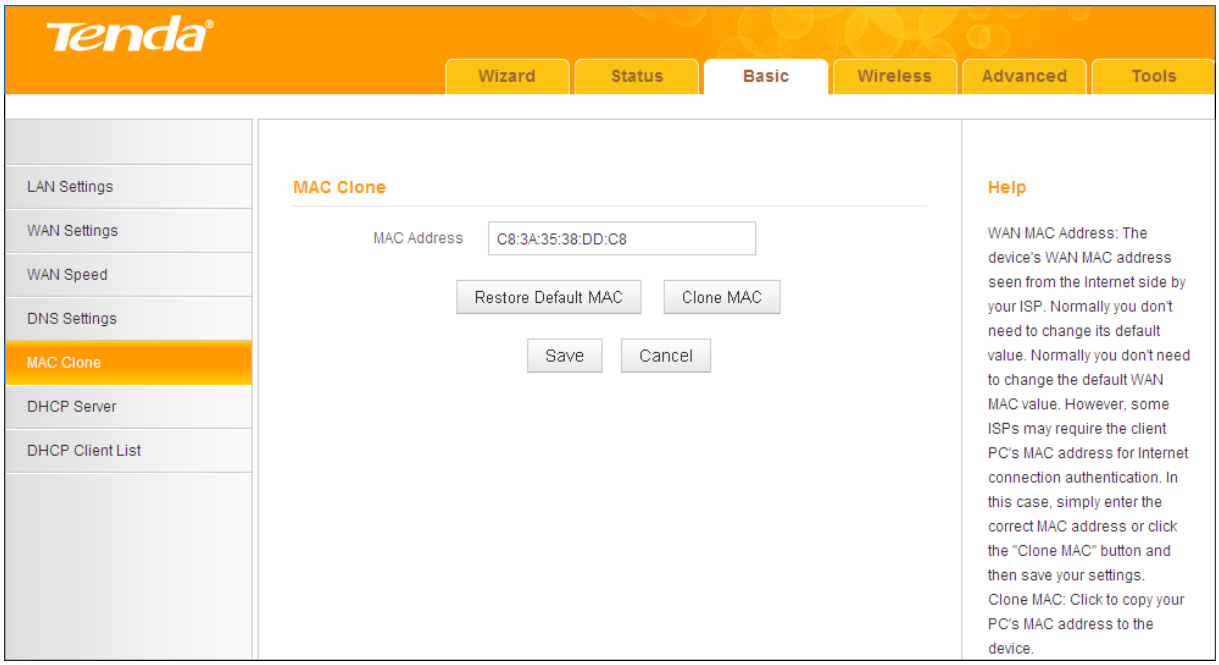
Note

The default DNS settings are recommended. Only change the DNS default settings if you know that your ISP requires specific servers. If incorrect DNS settings are configured, Webpages may not open.

2.5 MAC Clone (Available only in Wireless Router Mode)

Some ISPs (Internet Service Providers) require end-user's MAC address to access their network. This feature copies your current PC's MAC address to the device.

Click **Basic -> MAC Clone** to enter the configuration screen.



Knowledge Center

Restore Default MAC: Reset the device's WAN MAC address to factory default.

Clone MAC: Clicking this button copies the MAC address of the computer that you are currently using to the router. Note that you have to use the computer whose MAC address is allowed by your ISP. Also, you can manually enter the MAC address that you want to use.

To restore default MAC address:

① Click **Restore Default MAC**.

② Click **Save** to save your settings.

To copy the MAC address of the computer that you are currently using to the device:

① Click **Clone MAC**.

② Click **Save** to save your settings.

To manually enter the MAC address allowed by your ISP:

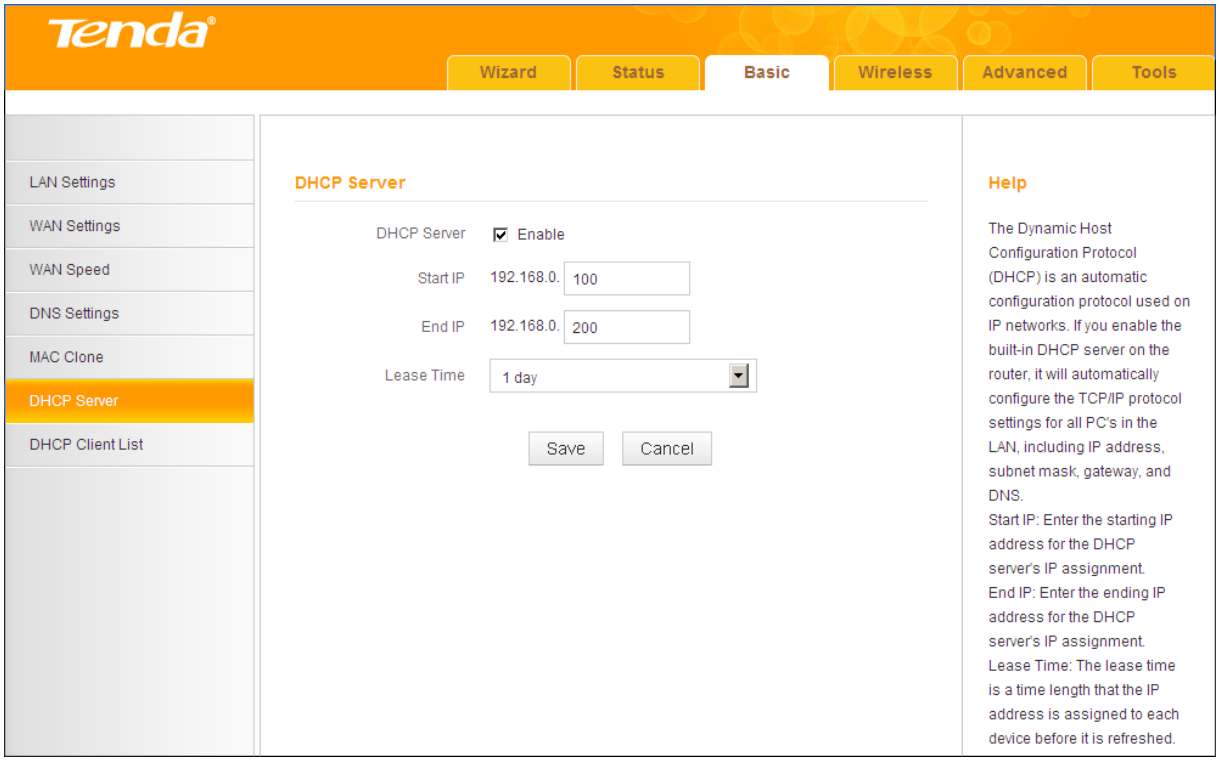
① Enter the MAC address allowed by your ISP.

② Click **Save** to save your settings.

2.6 DHCP Server

DHCP (Dynamic Host Configuration Protocol) assigns an IP address to each device on the LAN/private network. When you enable the DHCP Server, the DHCP Server will automatically allocate an unused IP address from the IP address pool specified in this screen to the requesting device as long as the device is set to "Obtain an IP Address Automatically". If you disable this feature, you have to manually configure the TCP/IP settings for all PCs on your LAN to access the Internet.

Click **Basic -> DHCP Server** to enter the screen below. Here you can change the DHCP IP address pool and lease time.



Configuration Procedures:

① **DHCP Server - Enable:** Check/uncheck the box to enable or disable the DHCP server feature.

② **Start IP/End IP:** You can specify the starting and ending addresses of the IP address pool here. These addresses should be part of the same IP address subnet as the device's LAN IP address.

③ **Lease Time:** The lease time is a time length that the IP address is assigned to each device before it is refreshed.

④ Click **Save** to save your settings.

Tip

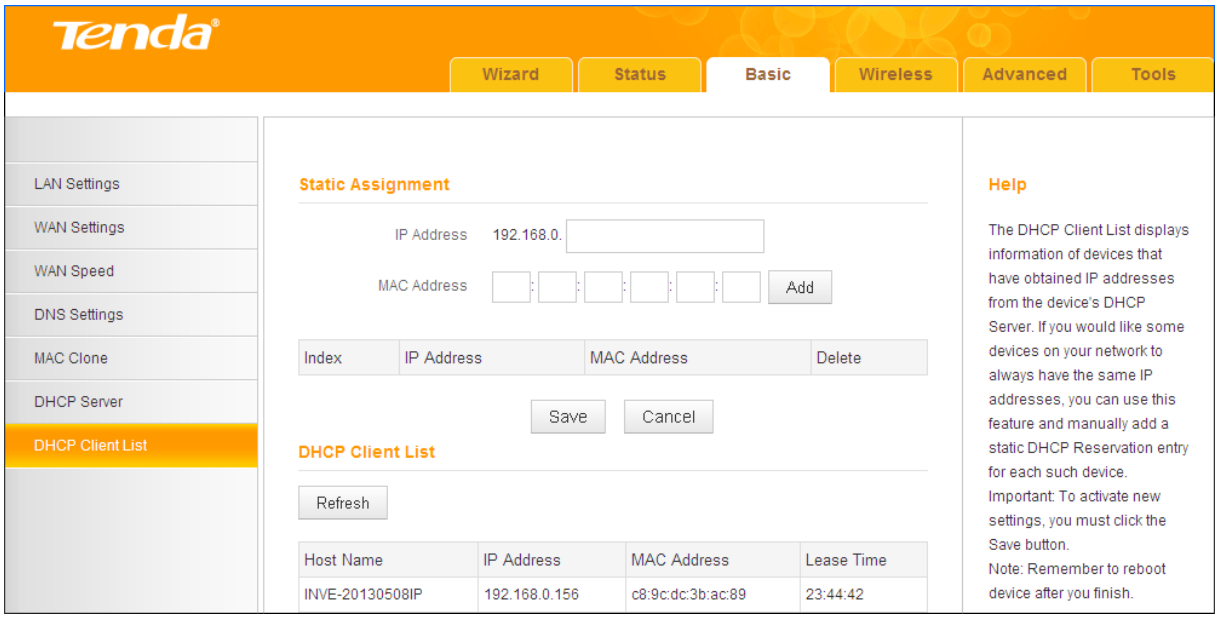
① By default, the device functions as a DHCP server. Do not disable the DHCP server feature unless you want to manually configure the TCP/IP settings for all the PCs on your LAN.

② Lease time will be renewed automatically upon expiry.

③ If you are not an advanced user, the default DHCP server settings are recommended.

2.7 DHCP Client List

Click **Basic -> DHCP Client List**. Here you can see a list of the DHCP dynamic clients (if any). By viewing this list, you can know whether there are unauthorized accesses.

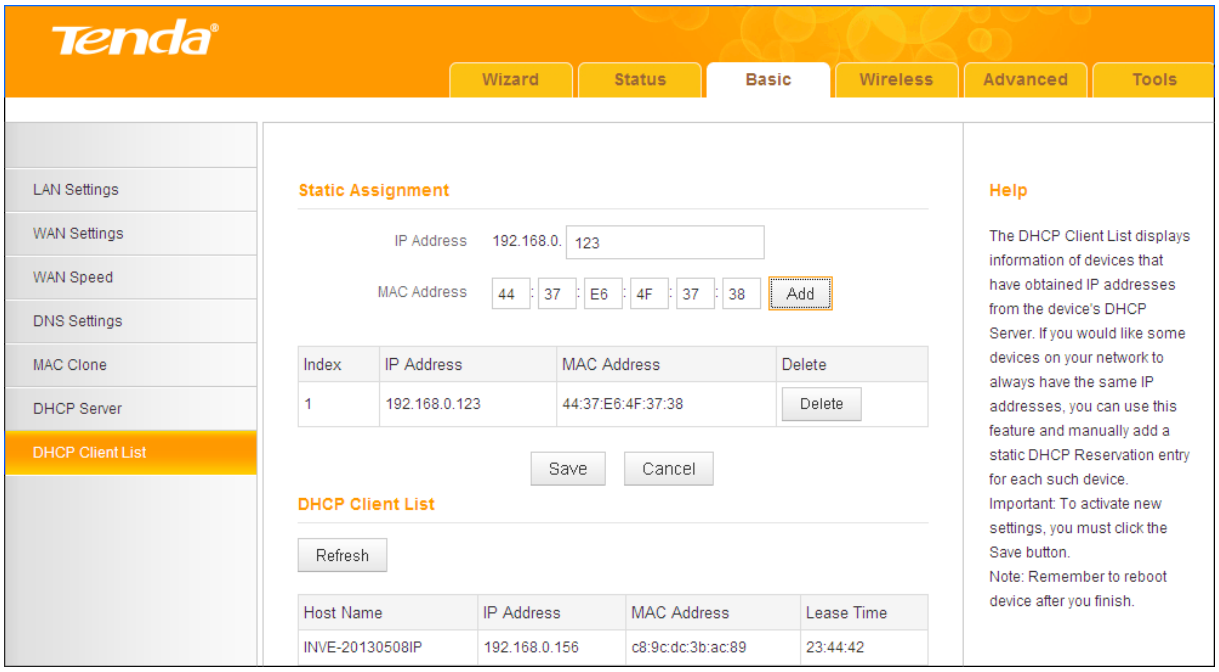


Also, you can specify a reserved IP address for a PC on your LAN. That PC will always receive the same IP address each time when it accesses the DHCP

server. Reserved IP addresses could be assigned to servers that require permanent IP settings.

Static Assignment Application Example:

To have a PC at the MAC address of 44:37:E6:4F:37:38 always receive the same IP address of 192.168.0.123.



Configuration Procedures:

① Enter the last number of the IP address you want to reserve. Here in this example, enter 123.

② Enter the MAC address of 44:37:E6:4F:37:38.

③ Click **Add**.

④ Click **Save** to save your settings.

Tip

① If the IP address you have reserved for your PC is currently used by another client, then you will not be able to obtain a new IP address from the device's DHCP server, instead, you must manually specify a different IP address for your PC to access the Internet.

② For PCs that have already obtained IP addresses, you may need to perform

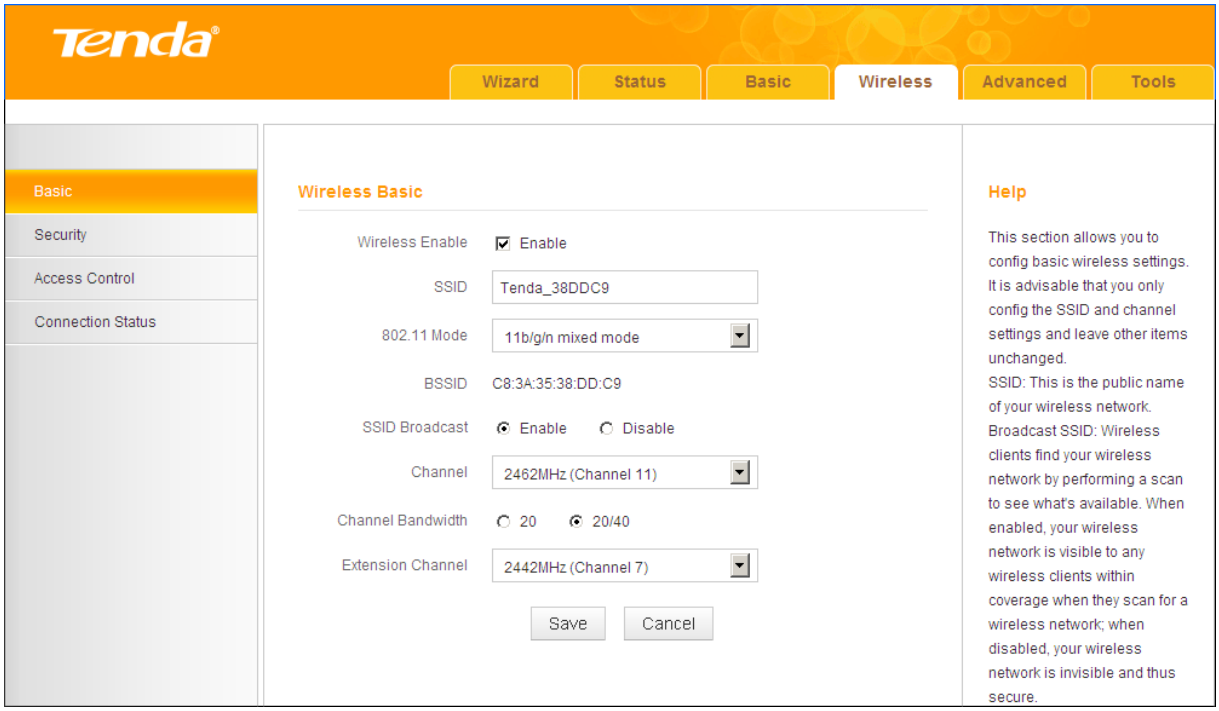
the **Repair** action to activate the configured static IP addresses.

3 Wireless Settings

- To configure wireless network name, channel and other basic wireless settings, see ***3.1 Basic***.
- To secure your wireless network, see ***3.2 Security***.
- To restrict access to your wireless network, see ***3.3 Access Control***.
- To see who are connecting to your wireless network, see ***3.4 Connection Status***.

3.1 Basic

Here you can configure the basic wireless settings of the device.



Configuration Procedures:

① **SSID:** This is the public name of your wireless network.

② **Channel:** Select a channel or select **Auto** to let system automatically select one for your wireless network to operate on if you are unsure of which channel to use. The best selection is a channel that is the least used by neighboring networks.

③ Click **Save** to save your settings.