Tenda

User Guide

Shenzhen Tenda Technology Co.,Ltd.

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Shortcut of Common Functions

Contents

I Get to Know Your Router

Before you connect to your Router, take a moment to become familiar with the package contents, product label, and the front and back panels. Pay particular attention to the LEDs on the front panel.

This section contains the following:

1 Package Contents

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

- Wireless Router * 1
- Power Adapter * 1
- Ethernet Cable * 1
- Install Guide * 1

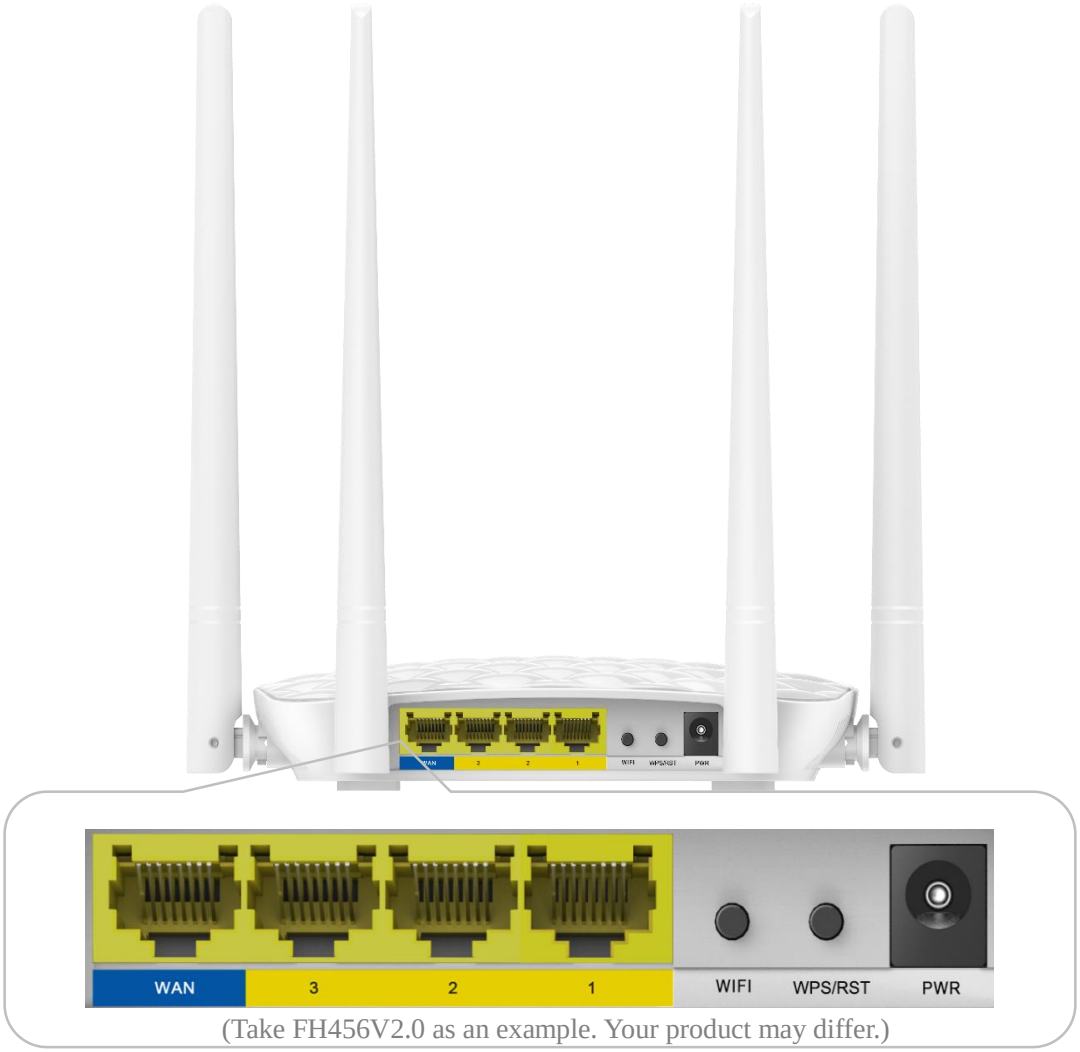
* If any item is incorrect, missing or damaged, please keep the original package and contact the vendor for replacement immediately.

2 LED Indicators

(Take FH456V2.0 as an example. Your product may differ.)

LED Indicator	Status	Description
SYS	Blinking	The system is working fine.
	Off	There is no power supply, or the router malfunctions.
WiFi	Solid	WiFi is enabled.
	Blinking	The Router is transmitting WiFi data.
	Off	WiFi is disabled.
1/2/3	Solid	The LAN port is well connected.
	Blinking	The LAN port is transmitting data.
	Off	No link is detected on the LAN port.
WAN	Solid	The WAN port is well-connected.
	Blinking	The WAN port is transmitting data.
	Off	No Ethernet cable is connected to the WAN port.
WPS	Solid	WPS is enabled, or a WPS connection is established.
	Blinking	The Router is performing WPS negotiation to a client device, or transmitting data.
	Off	WPS is disabled.

3 Buttons & Interfaces



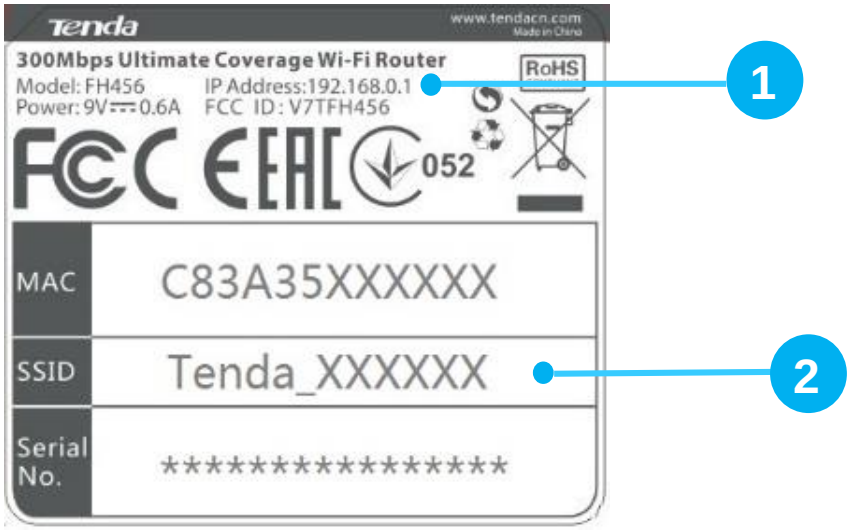
(Take FH456V2.0 as an example. Your product may differ.)

- **WAN** port: Connect an Ethernet cable from the Internet side to this port for Internet access.
- **1/2/3**: LAN port. Connect a network device (computer, XBOX, etc.) to this port.
- **WiFi**: Press and hold it for about 1~3 seconds, and then release it to enable/disable WiFi feature. You can observe the WiFi LED indicator to identify the WiFi status.
- **WPS/RST:**

  WPS: Press and hold it for1~3 seconds and then release it to enable the WPS feature. Within 2 minutes, enable the wireless device's WPS feature to establish WPS connection.

  RST: Press and hold it for about 8 seconds until all the LEDs light up once and then release it to reset the Router to factory default settings.
- **PWR:** Power Connector. Insert the included power adapter into this connector.

4 Product Label



*This label can be found on the bottom panel of the Router.

1. Default Access: 192.168.0.1 or www.tendawifi.com

The **default login IP address** is **192.168.0.1**, you can type 192.168.0.1 in the address bar of a web browser to log in to the Router's User Interface.

The **default login domain name** is **www.tendawifi.com**. You can also type the domain name in the address bar of a web browser to log in to the Router's User Interface.

2. SSID

SSID is the WiFi name of the router. You can connect the WiFi name using your smart device to configure the Router. There is no WiFi password by default. So no password is required when you join the wireless network. But you can customize one to secure your wireless network when you configure the router.

II Access the Internet

This Chapter will instruct you to position, connect and configure your Router.

1 Position Your Router

The Router lets you access the Internet anywhere within the operating range of your wireless network. However, the operating range of your wireless connection can vary significantly depending on the physical placement of your Router.

And pay attention to the followings:

- ➢ Place it around the central area which your laptops, smart phones and other devices usually surround, and preferably within line of sight to your wireless devices.

- Put it on an elevated spot such as a high shelf, keeping the number of walls and ceilings to a minimum between the Router and other clients such as computers and smart phones.

- Keep it away from electrical devices that are potential sources of interference, such as ceiling fans, home security systems or microwaves.

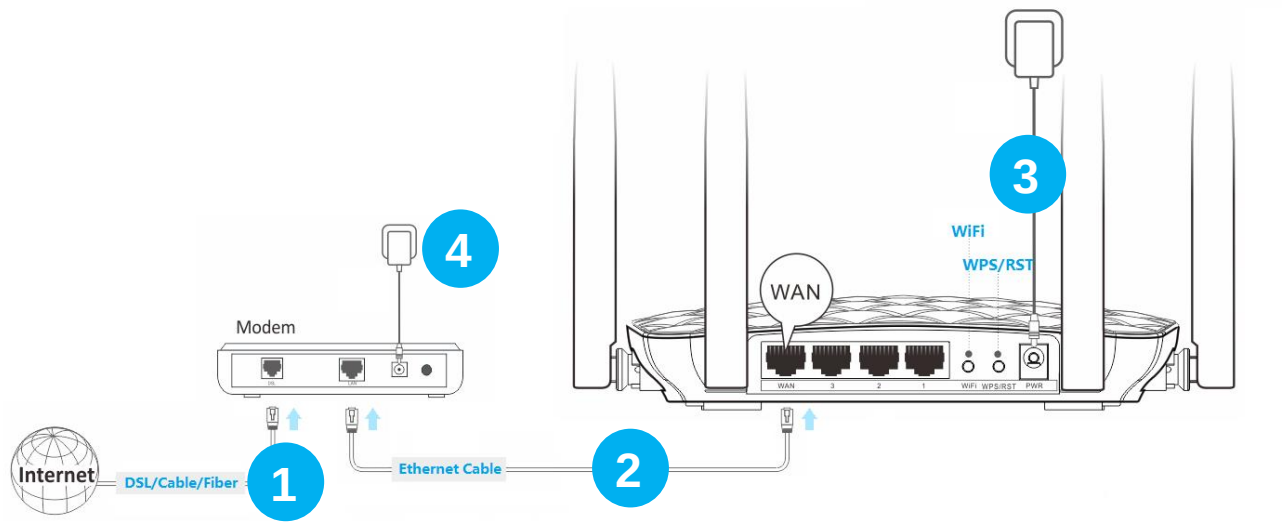
- Keep it away from any large metal surfaces, such as a solid metal door or aluminum studs.
- Keep it away from other materials such as glass, insulated walls, fish tanks, mirrors, brick, and concrete that may also affect your wireless signal.

2 Connect Your Router

Connect your Router to the Internet

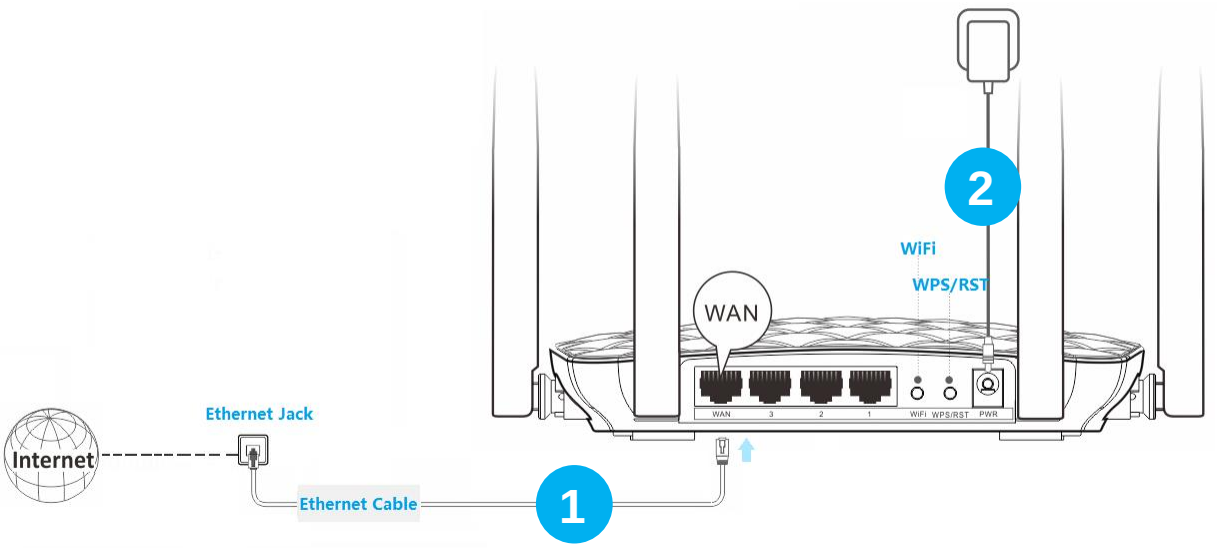
Select type 1 if a modem is required for your Internet access, and select type 2 if you access the Internet without a modem.

Type 1: Telephone Line/FTTH (Fiber To The Home)/Cable Access



1. Connect the cable (prepared by yourself) from the Internet side to your modem.
2. Connect the modem to the WAN port of the Router.
3. Insert the power adapter to your Router's Power port, and plug the other end to a power outlet.
4. Insert your modem's power adapter to the power interface, and plug the other end to a power outlet.

Type 2: Ethernet Cable Access



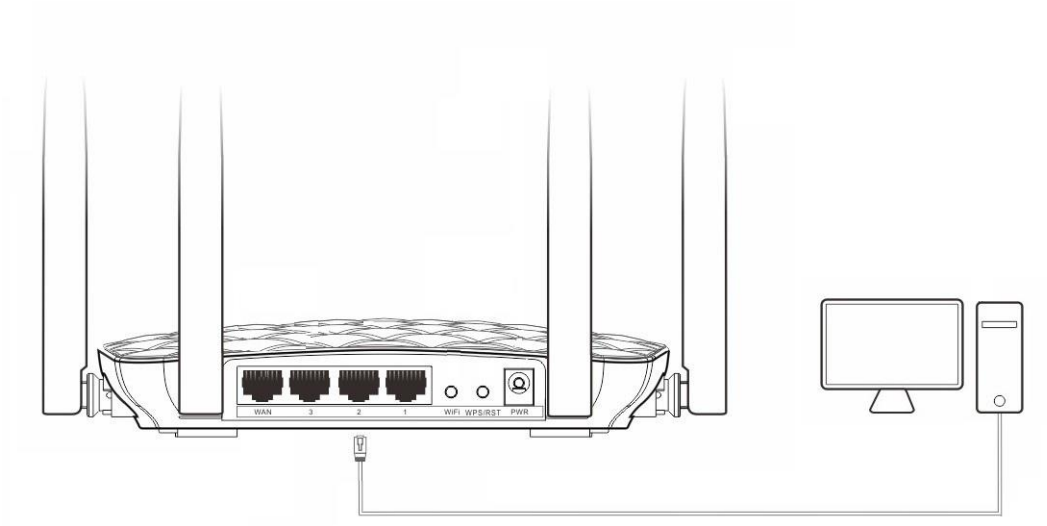
1 Insert the Ethernet cable from the Internet side into the WAN port of the Router.

2 Insert the power adapter to your Router's Power port, and plug the other end to a power outlet.

Connect a computer to the Router

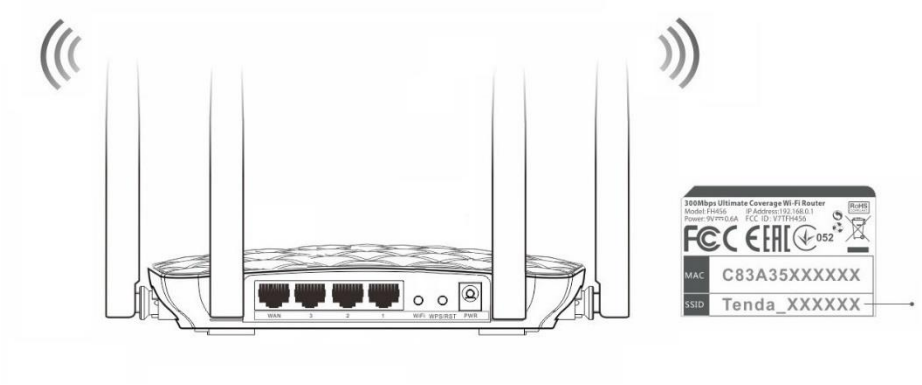
Select **wired** or **wireless** connection as you like to connect your computer to the Router.

Wired Connection



Connect an Ethernet cable (included in the packet) to the Ethernet port of your computer, and insert the other end of the Ethernet cable into 1/2/3 port of the Router.

Wireless Connection



The default WiFi name is on the label of router's bottom panel. No WiFi password set by default.

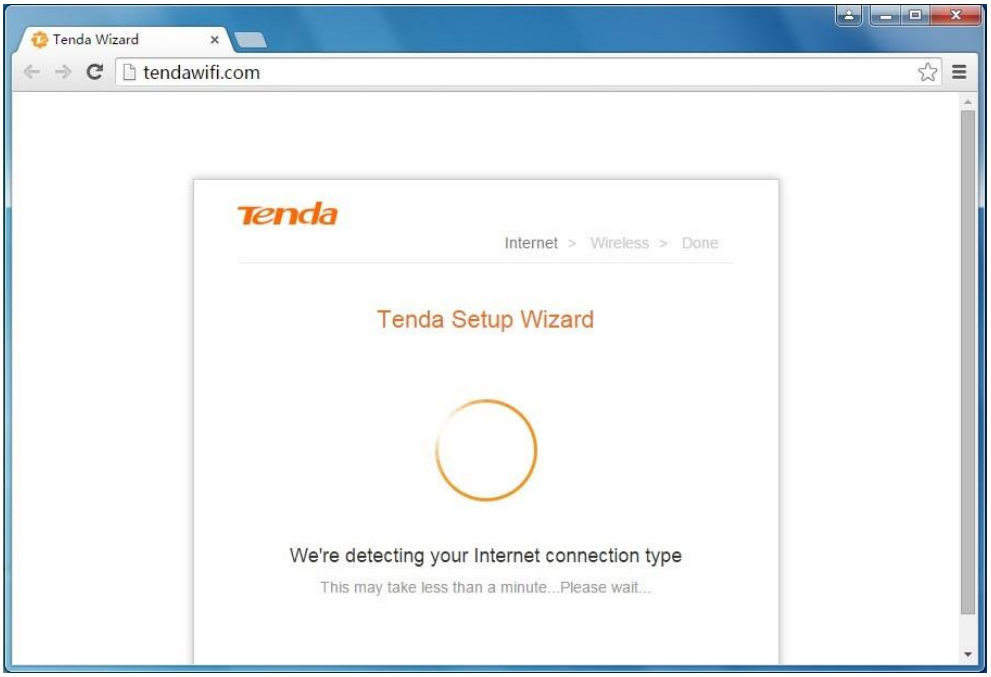
Procedure: On your computer with wireless adapter or other wireless devices, find and select the Router's WiFi name, and join it.

Tips

1. If you don't know how to join your WiFi, please refer to **5 Join Your WiFi**.
2. Either WiFi (SSID) or WiFi password is changed, devices are required to reconnect with WiFi manually once again.
3. The devices can only access the Internet after you finish Internet configuration.

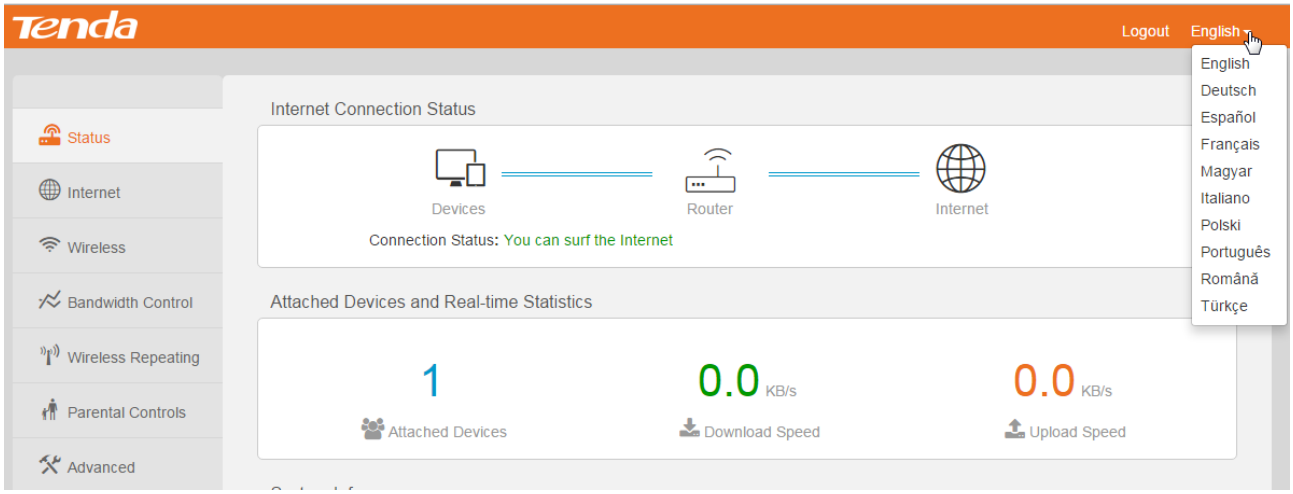
3 Log in to the Router's User Interface

Launch a web browser on your connected computer, type tendawifi.com or 192.168.0.1 in the address bar, and tap Enter on the keyboard.



There are 10 languages (English, Deutsch, Español, Français, Italiano, Polski, Română, Magyar, Português, Türkçe) of the User Interface. And it will match with the browser's language

automatically. You can also select a language manually.

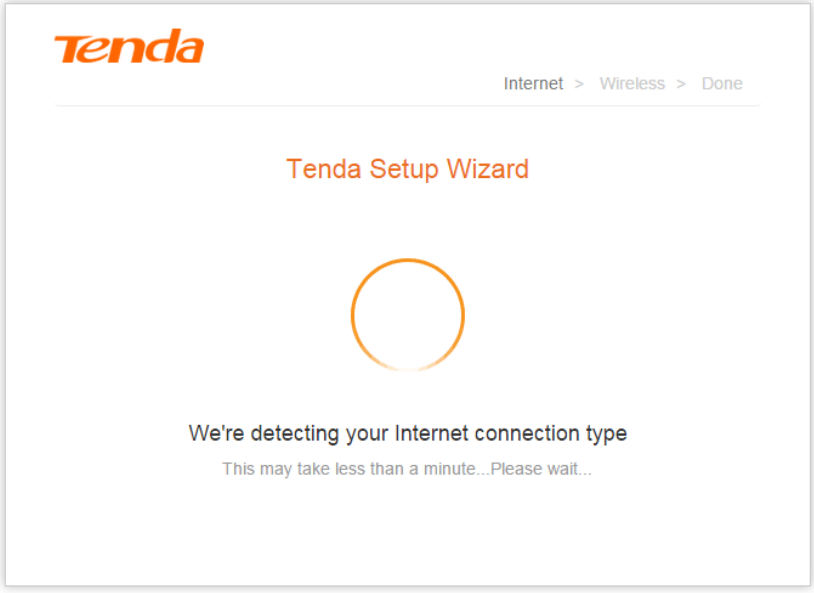


Tips

If the Router's **Quick Setup Wizard** page doesn't appear after the operation above when you access the Router at the first time, please refer to the solutions in **FAQ** > **Q1**.

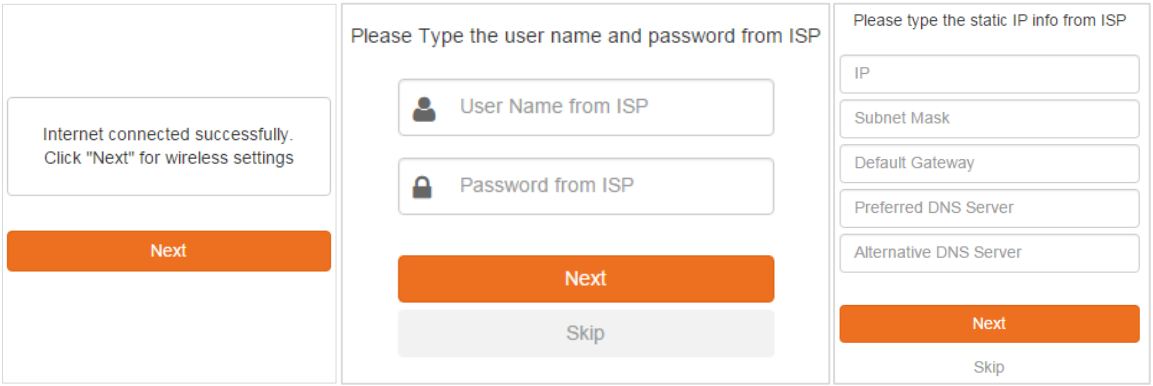
4 Specify the Internet Settings

After the steps above, you will log in to the Router's Quick Setup Wizard if you access the Router at the first time or restore your Router to factory default. The Router will detect your connection type automatically.



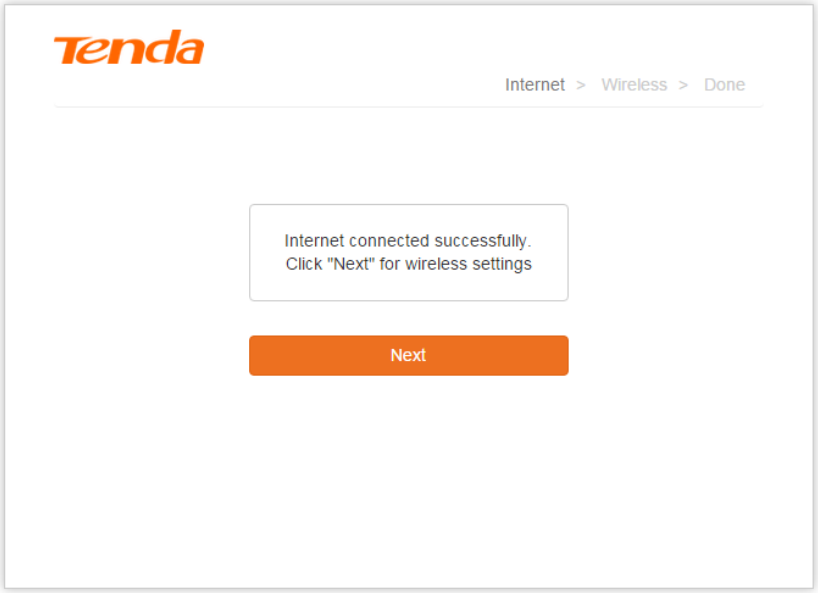
Follow the corresponding steps to complete the Internet settings according to your Router's detection result.

Dynamic IP PPPoE Static IP

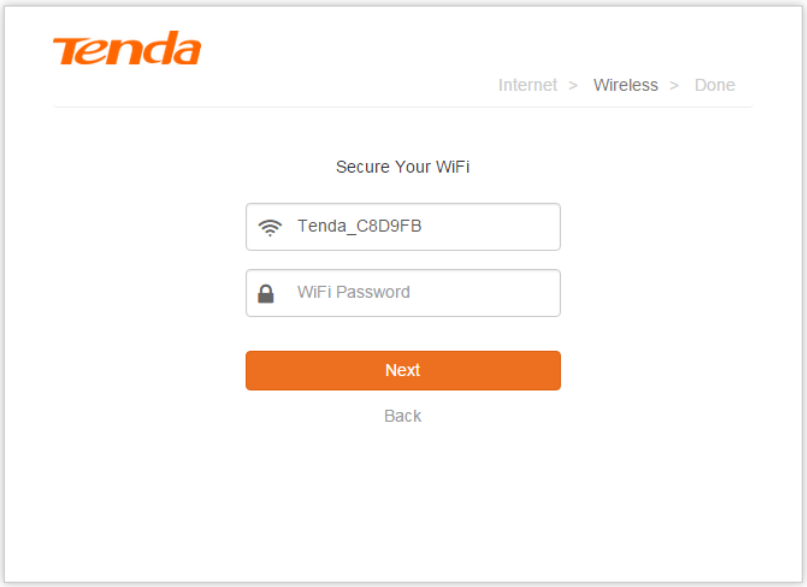


Dynamic IP

❶ If the following page appears, it indicates that your connection type is **Dynamic IP**. No parameter is required, just click **Next** to continue.



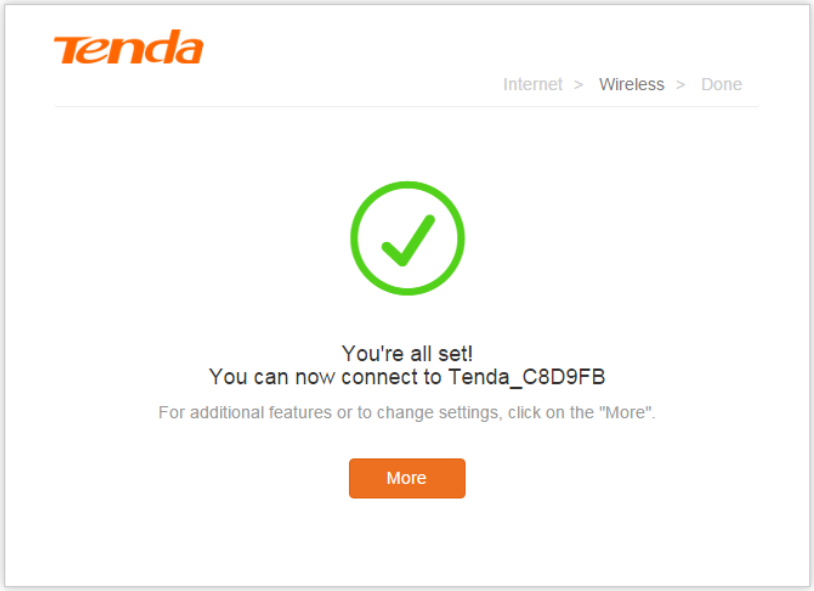
❷ Customize your WiFi name, and password, then click **Next** to continue.



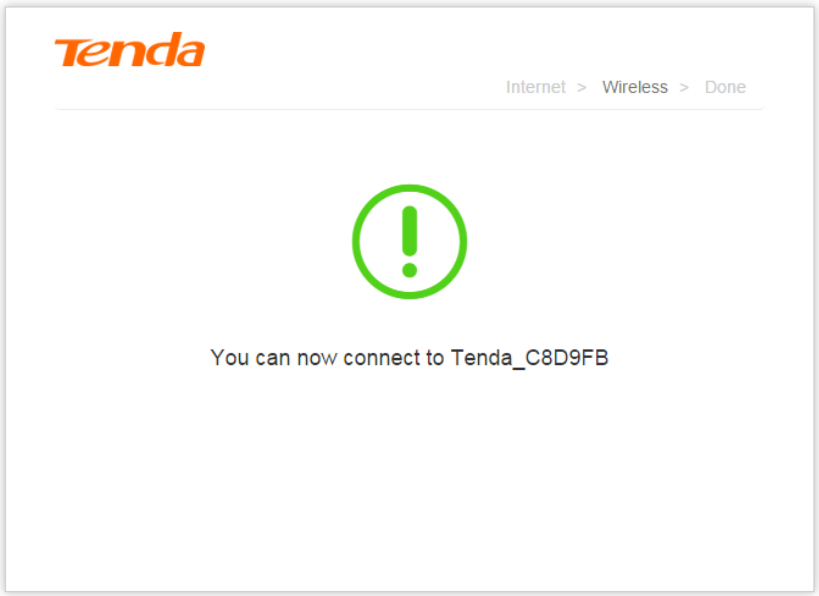
Wired Connection

If you connect to the Router via an Ethernet cable, refer to the following info:

When the following page appears, it indicates that you can access the Internet now. If you want to experience more features, click **More** to log in to the Router's user Interface.



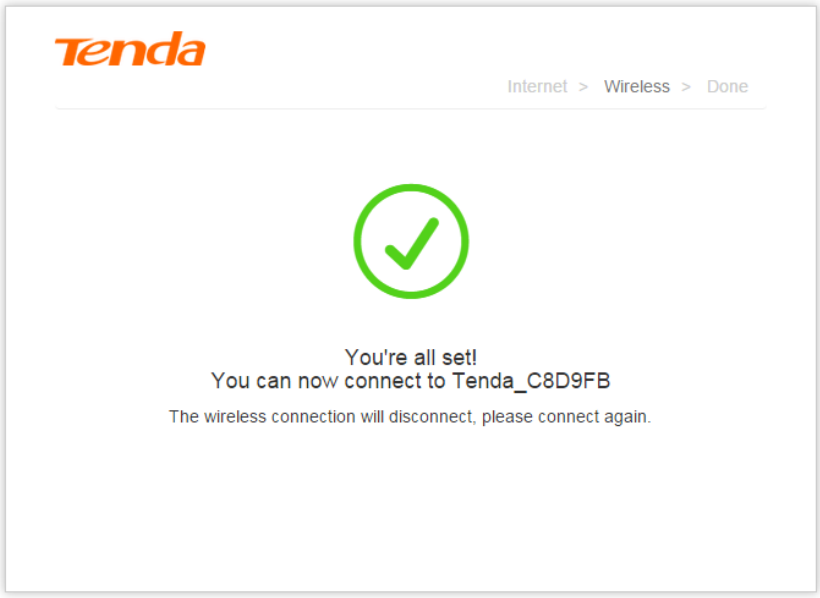
When the following page appears, it indicates that you cannot access the Internet. After a few seconds, the **Status** page will appear. Check the **Connection Status** on the **Status** page, and try solving the problem according to the onscreen instructions. Please refer to Internet Connection Status for details.



Wireless Connection

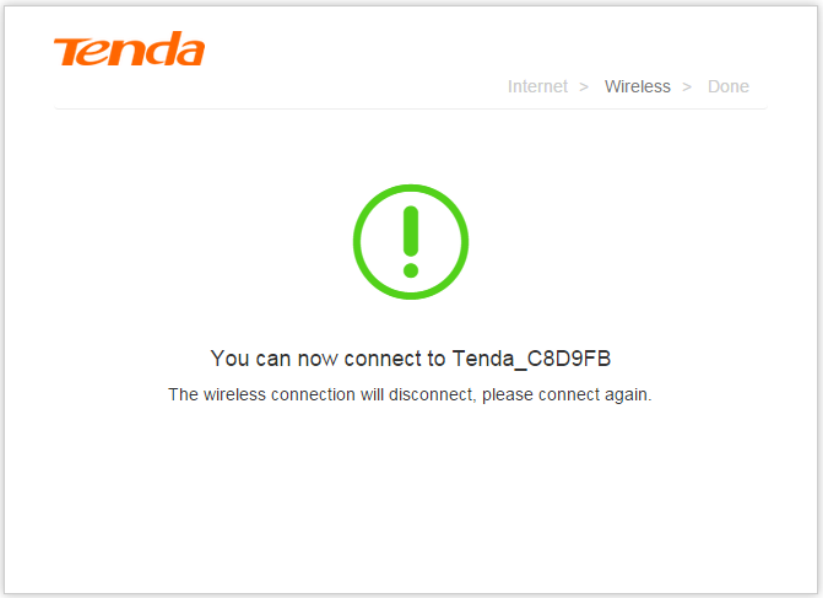
If you connect to the Router wirelessly, refer to the following info:

When the following page appears, it indicates that you can access the Internet now. The wireless connection will disconnect. You need to use the new WiFi name and password you set in Quick Setup Wizard to connect to the Router again.



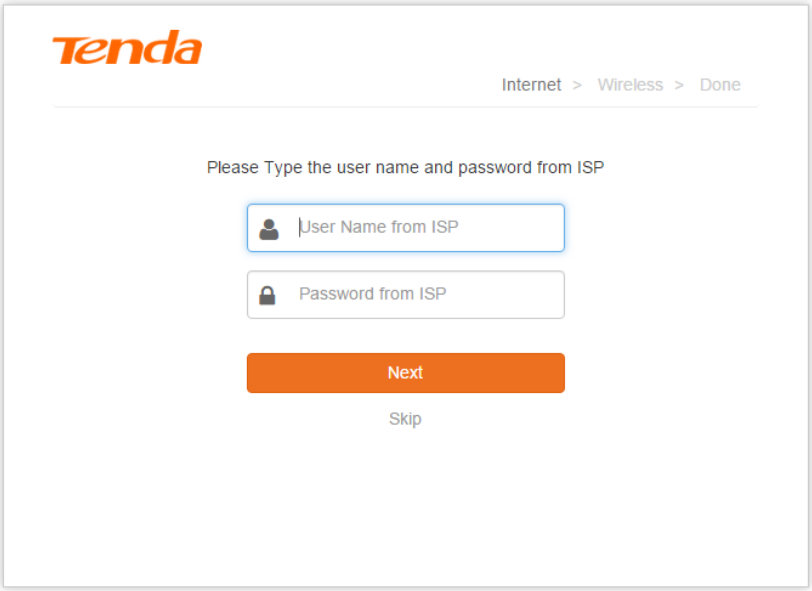
When the following page appears, it indicates that you cannot access the Internet. The wireless connection will disconnect. You need to use the new WiFi name and password you set in Quick Setup Wizard to connect to the Router again. And Log in to the Router's User Interface, check the **Connection Status** on the **Status** page, and try solving the problem according to the onscreen

instructions. Please refer to Internet Connection Status for details.

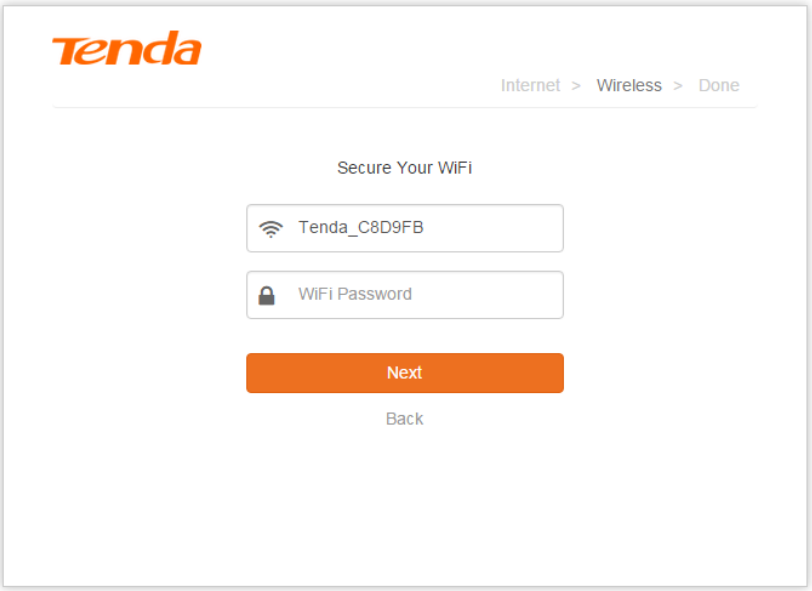


PPPoE

1. If the following page appears, it indicates that your connection type is **PPPoE**. Type the user name and password your Internet Service Provider provided, and click **Next**.



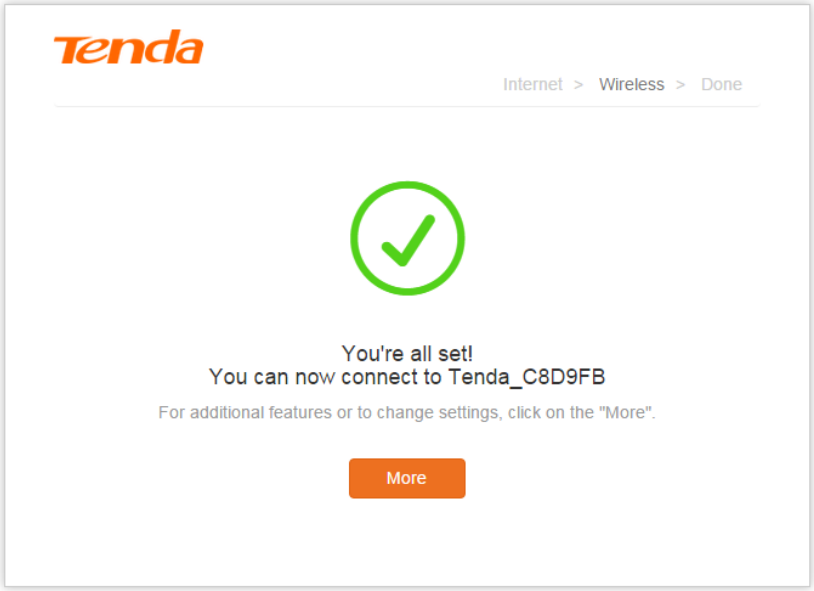
2. Customize your WiFi name, and password, then click **Next** to continue.



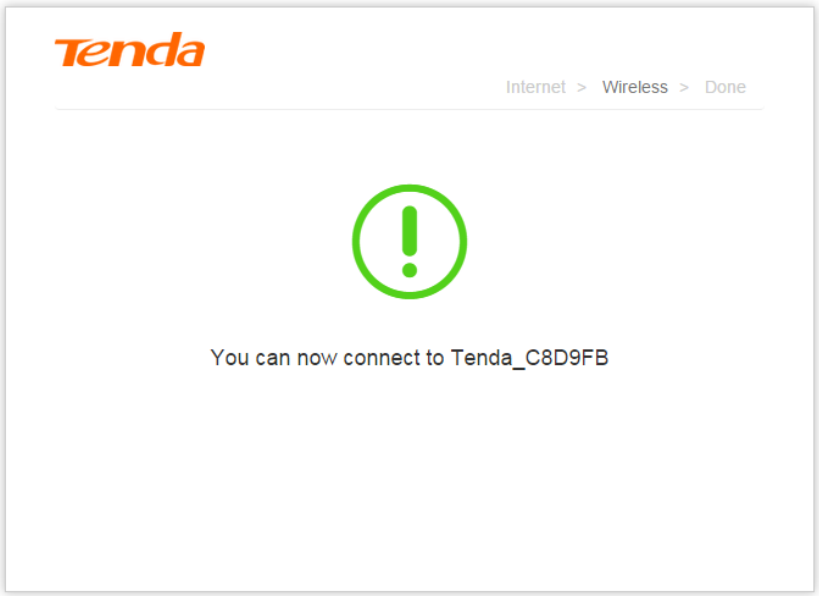
Wired Connection

If you connect to the Router via an Ethernet cable, refer to the following info:

When the following page appears, it indicates that you can access the Internet now. If you want to experience more features, click **More** to log in to the Router's user Interface.



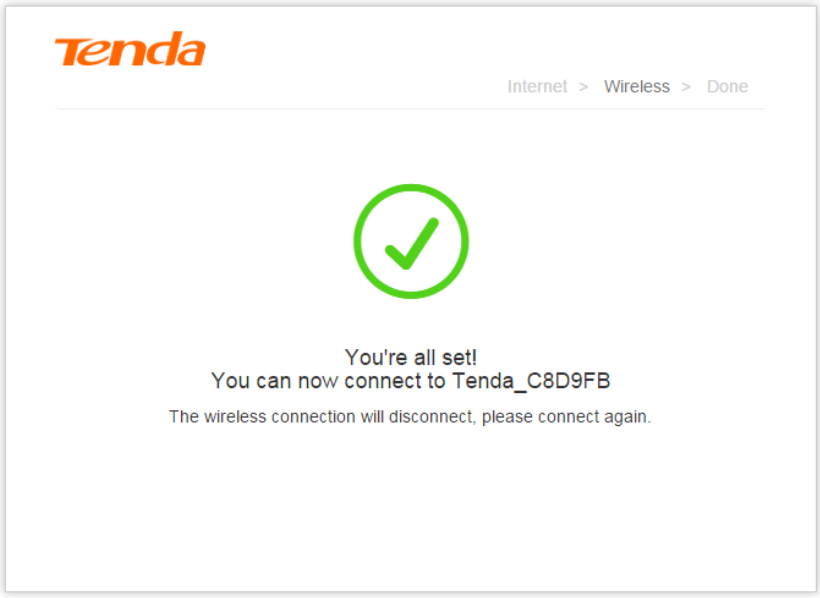
When the following page appears, it indicates that you cannot access the Internet. After a few seconds, the **Status** page will appear. Check the **Connection Status** on the **Status** page, and try solving the problem according to the onscreen instructions. Please refer to Internet Connection Status for details.



Wireless Connection

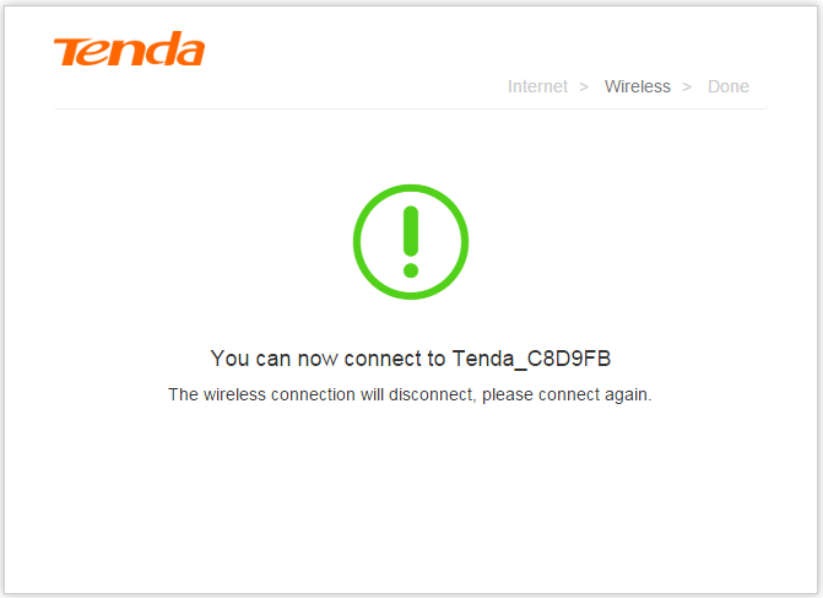
If you connect to the Router wireless, refer to the following info:

When the following page appears, it indicates that you can access the Internet now. The wireless connection will disconnect. You need to use the new WiFi name and password you set in Quick Setup Wizard to connect to the Router again.



When the following page appears, it indicates that you cannot access the Internet. The wireless connection will disconnect. You need to use the new WiFi name and password you set in Quick Setup Wizard to connect to the Router again. And Log in to the Router's User Interface, check the **Connection Status** on the **Status** page, and try solving the problem according to the onscreen

instructions. Please refer to Internet Connection Status for details.

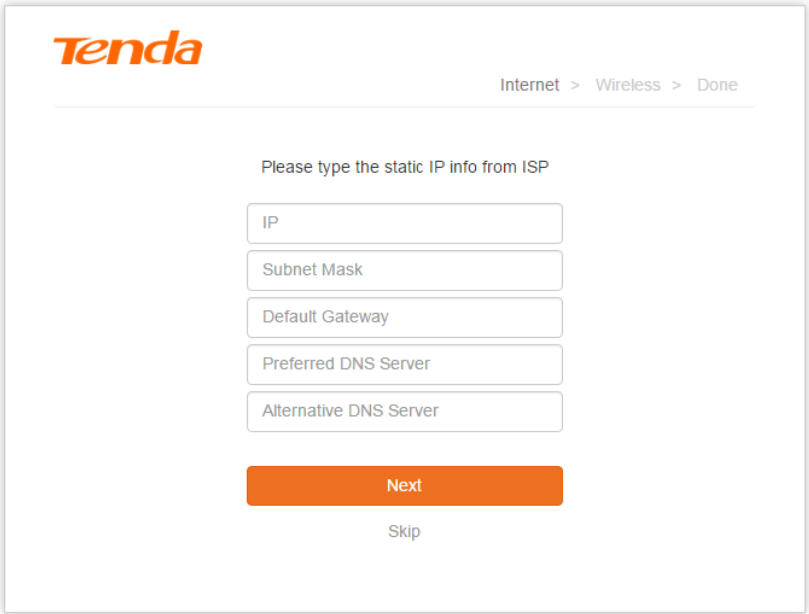


Tips

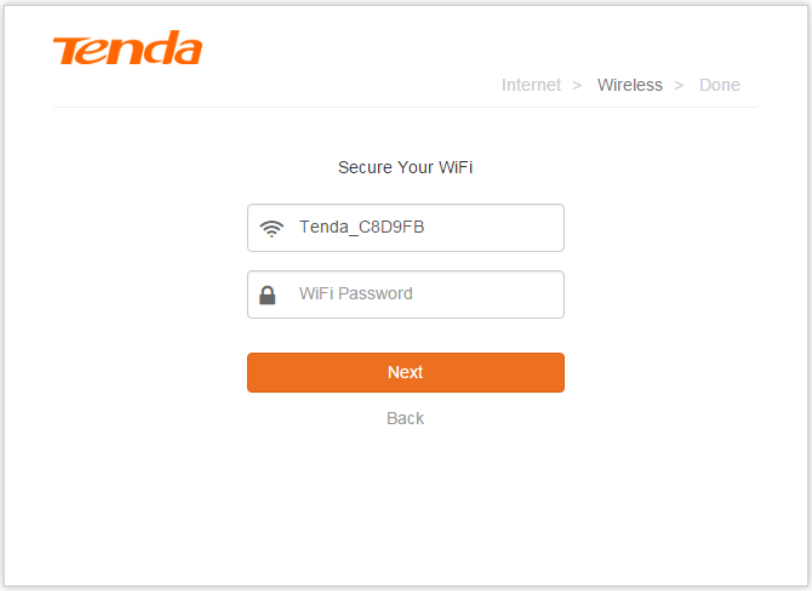
It may take a few seconds to check your PPPoE use name and password. So please wait for a few seconds, and refer to the **Connection Status** on the **Status** page.

Static IP

❶ If the following page appears, it indicates that your connection type is **Static IP**. Type the static IP, subnet mask, default gateway, and preferred DNS server provided by your Internet Service Provider.



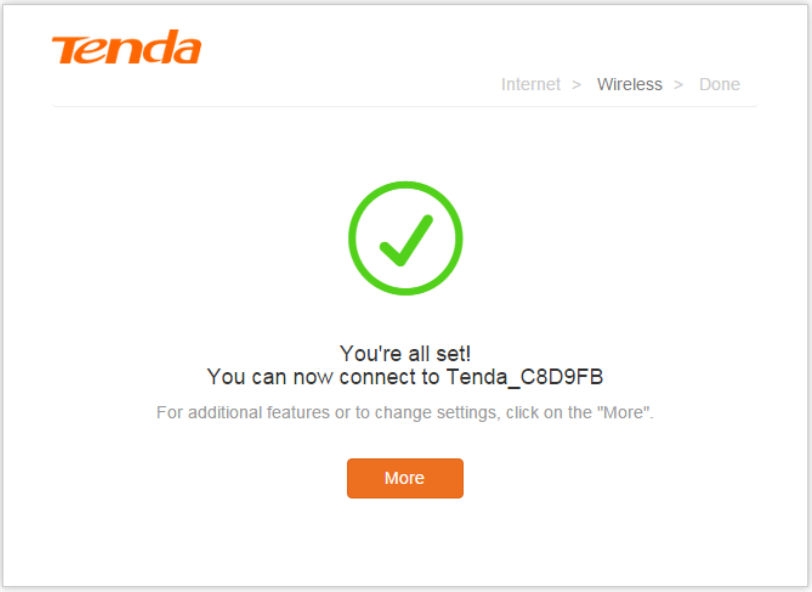
❷ Customize your WiFi name, and password, then click **Next** to continue.



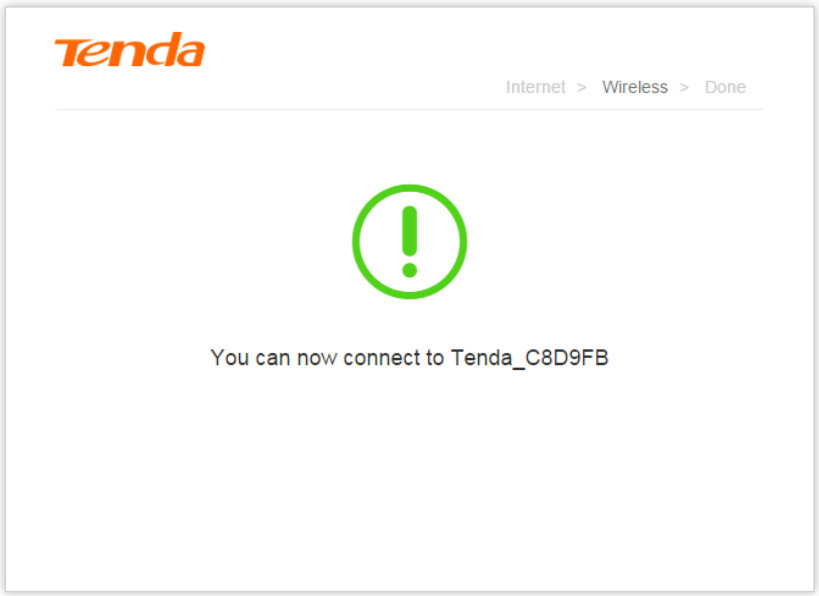
Wired Connection

If you connect to the Router via an Ethernet cable, refer to the following info:

When the following page appears, it indicates that you can access the Internet now. If you want to experience more features, click **More** to log in to the Router's user Interface.



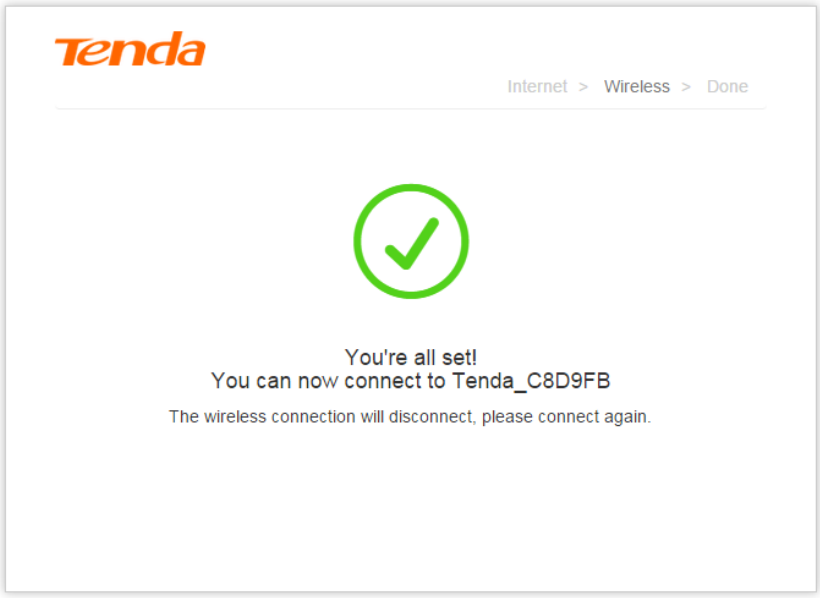
When the following page appears, it indicates that you cannot access the Internet. After a few seconds, the **Status** page will appear. Check the **Connection Status** on the **Status** page, and try solving the problem according to the onscreen instructions. Please refer to Internet Connection Status for details.



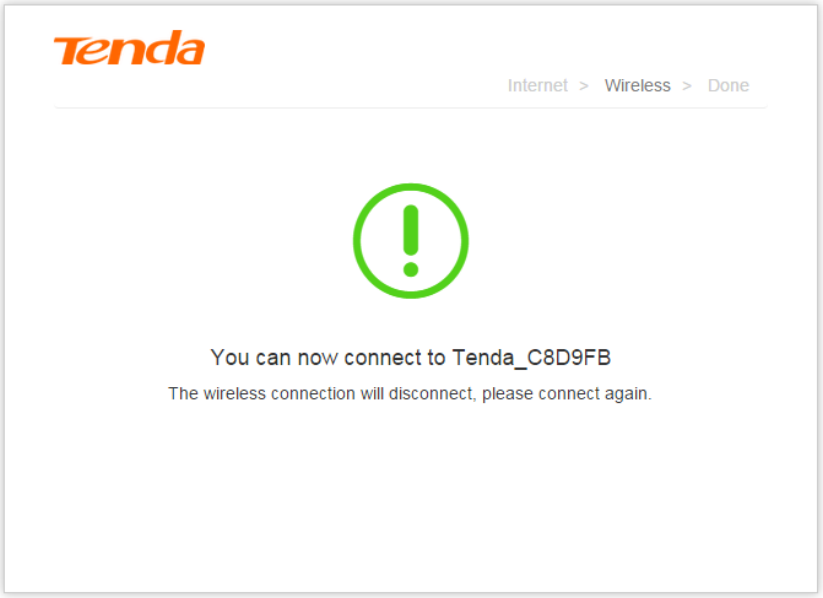
Wireless Connection

If you connect to the Router wireless, refer to the following info:

When the following page appears, it indicates that you can access the Internet now. The wireless connection will disconnect. You need to use the new WiFi name and password you set in Quick Setup Wizard to connect to the Router again.



When the following page appears, it indicates that you cannot access the Internet. The wireless connection will disconnect. You need to use the new WiFi name and password you set in Quick Setup Wizard to connect to the Router again. And Log in to the Router's User Interface, check the **Connection Status** on the **Status** page, and try solving the problem according to the onscreen instructions. Please refer to Internet Connection Status for details.



Tips

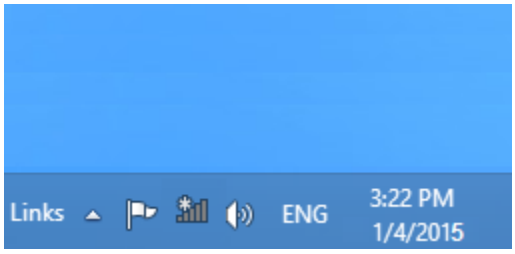
It may take a few seconds to check your static IP info. So please wait for a few seconds, and refer to the **Connection Status** on the **Status** page.

5 Join Your WiFi

This part instructs you how to connect to your wireless network via your notebook or other wireless devices. We take Windows 8, Windows 7, iPad/iPhone, and Android as examples here. Choose the corresponding configuration steps according to your needs.

Windows 8

1. Click the icon on the bottom right corner of your desktop.



Tips

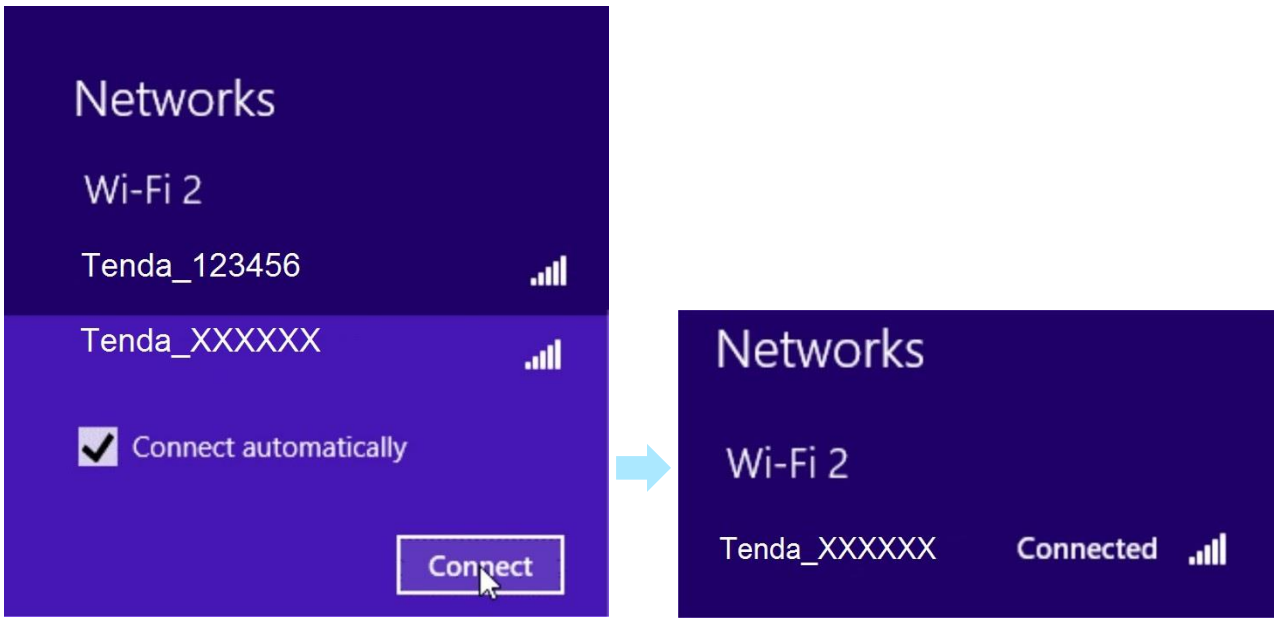
1. If you cannot find the icon, please move your cursor to the top right corner of your desktop, select **Settings** > **Control Panel** > **Network and Internet** > **Network and Sharing Center** > **Change adapter settings**, right click **Wi-Fi** and select **Connect/Disconnect**.

2. If you cannot find your WiFi from the list, ensure the Airplane Mode is not enabled on your

computer.

❷ Select your WiFi name from the list, click **Connect** and then follow onscreen instructions.

❸ **Connected** successfully.



Windows 7

Click the icon on the bottom right corner of your desktop. Select your WiFi name from the list, click Connect and then follow onscreen instructions.

Tips

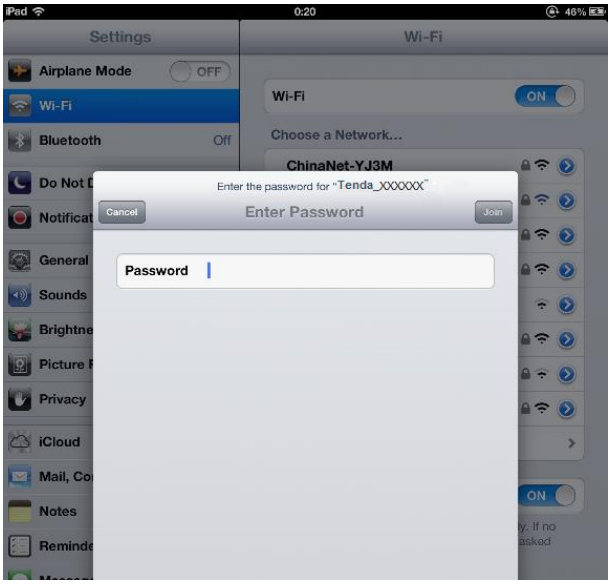
If you cannot find the icon, please move your mouse to the bottom left corner of your desktop,

select **Start > Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings**, right click **Wireless Network Connection** and select **Connect/Disconnect**.

iPad/iPhone

❶ Click on **Settings**.

❷ Click **Wi-Fi**, and choose your SSID. Enter your Wireless password, and click **Join**.

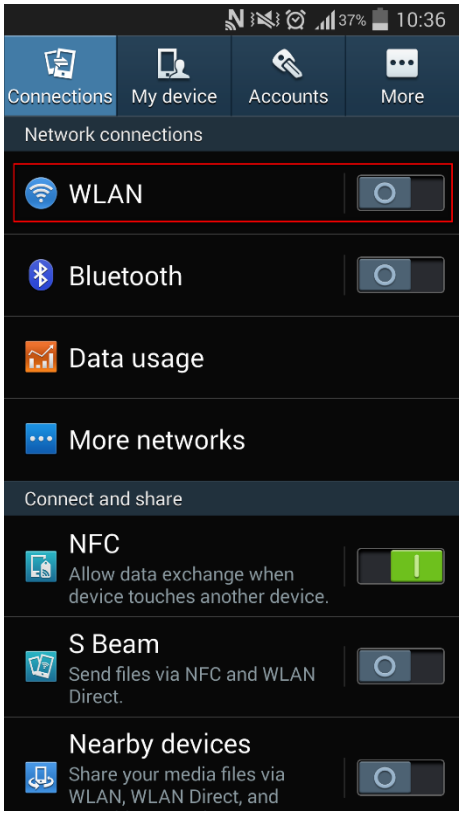


❸ **Connected** successfully.

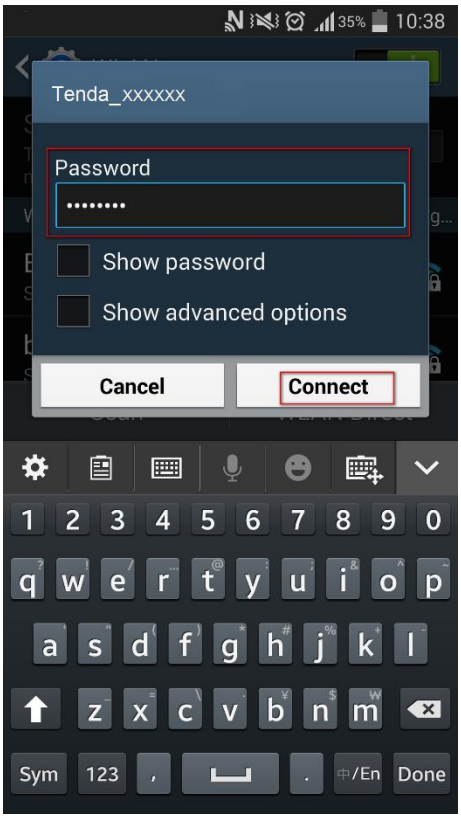
Android

❶ Click on **Settings**.

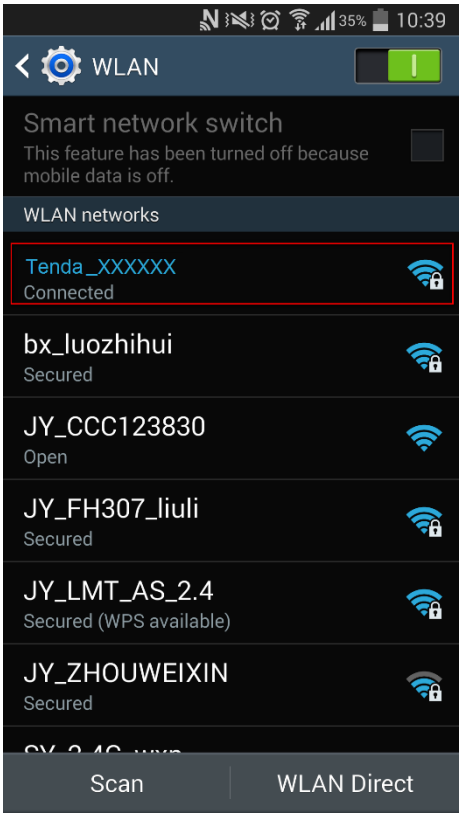
❷ Click **WLAN** to enter your WLAN settings.



❸ Enable your **WLAN**, and select your SSID. ❹ Enter your wireless password, and click **Connect**.



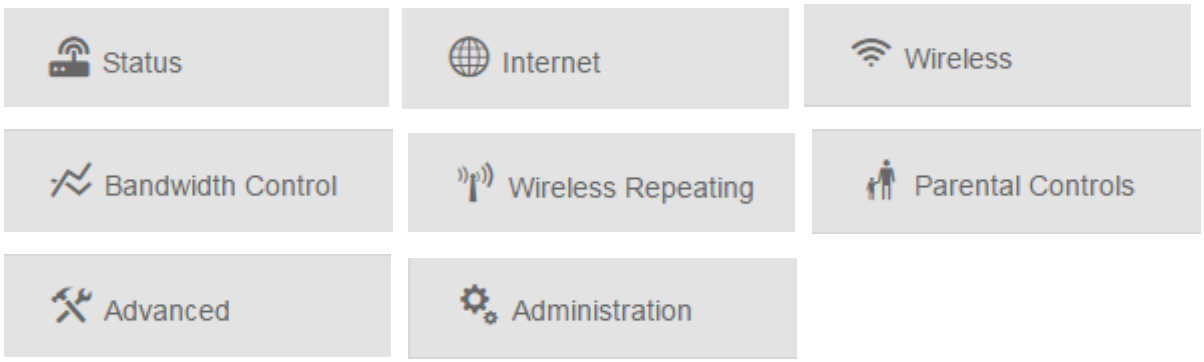
❺ When your WiFi is connected successfully, it will display **Connected**.


10:39
WLAN
Smart network switch
This feature has been turned off because mobile data is off.
WLAN networks
Tenda_XXXXXX
Connected
bx_luozhihui
Secured
JY_CCC123830
Open
JY_FH307_liuli
Secured
JY_LMT_AS_2.4
Secured (WPS available)
JY_ZHOUWEIXIN
Secured
Scan
WLAN Direct

III Specify Additional Settings

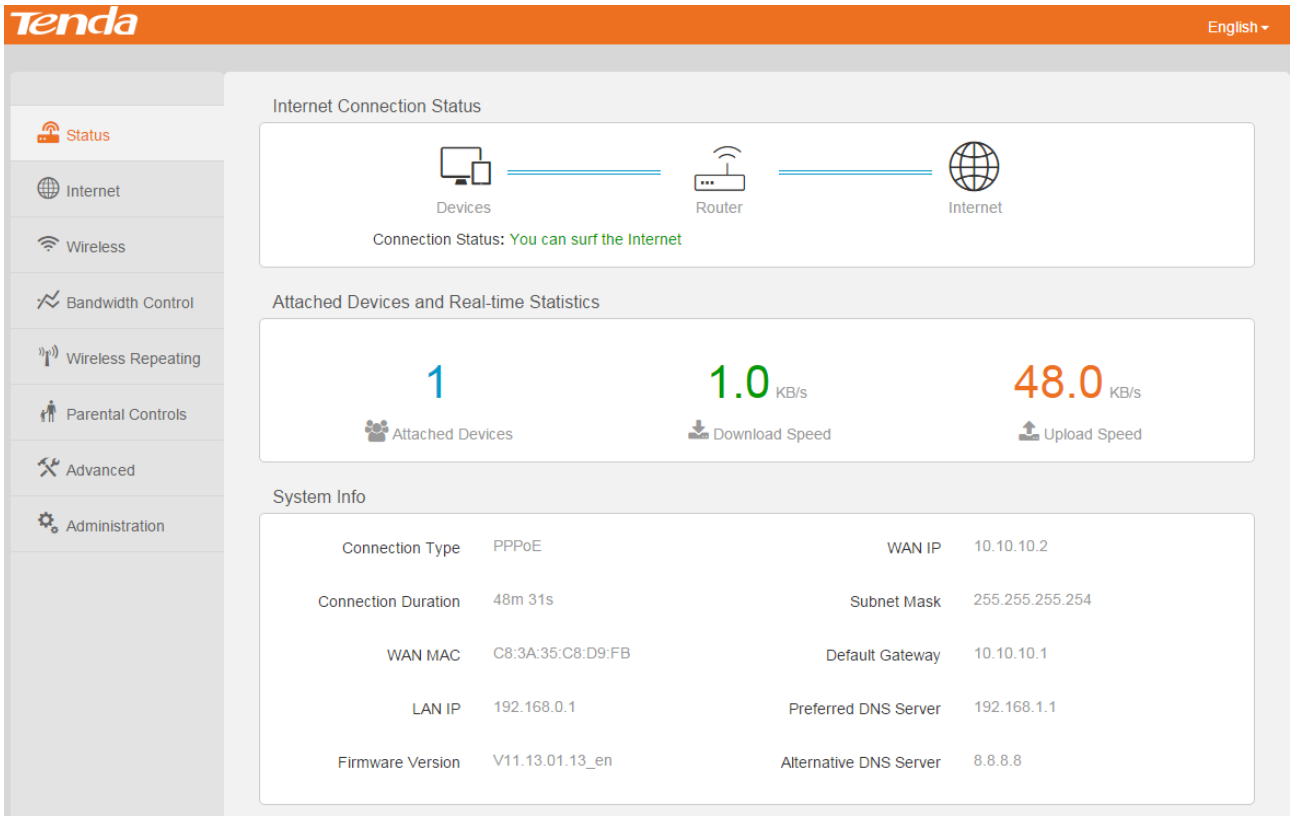
This Chapter describes the additional features of your Router, such as Wireless, Bandwidth Control, Wireless Repeating, Parental Controls, and etc.

Click the following icons (shortcut) to go to the corresponding features.



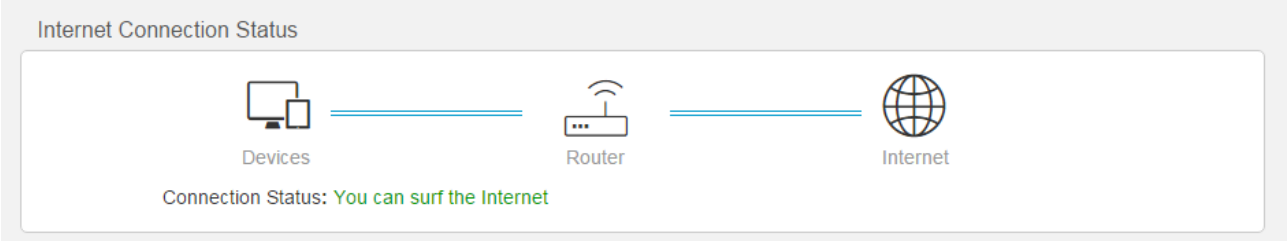
1 Status

In Status page, you can check the Internet connection status, attached Devices' real-time statistics, and system info.

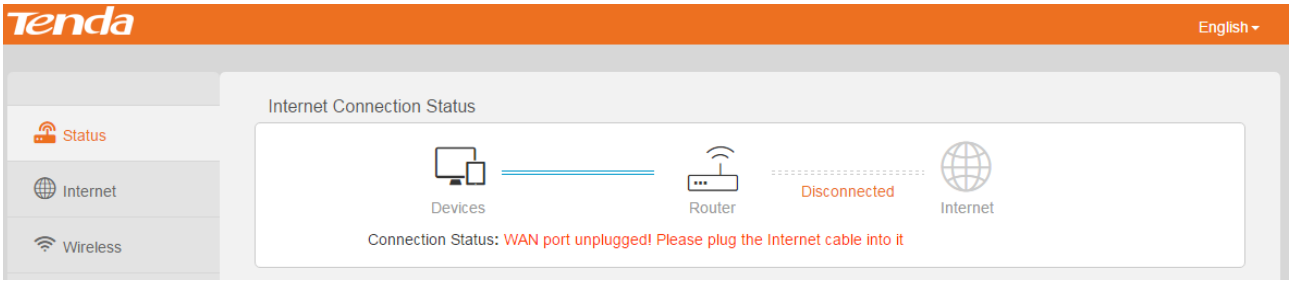


Internet Connection Status

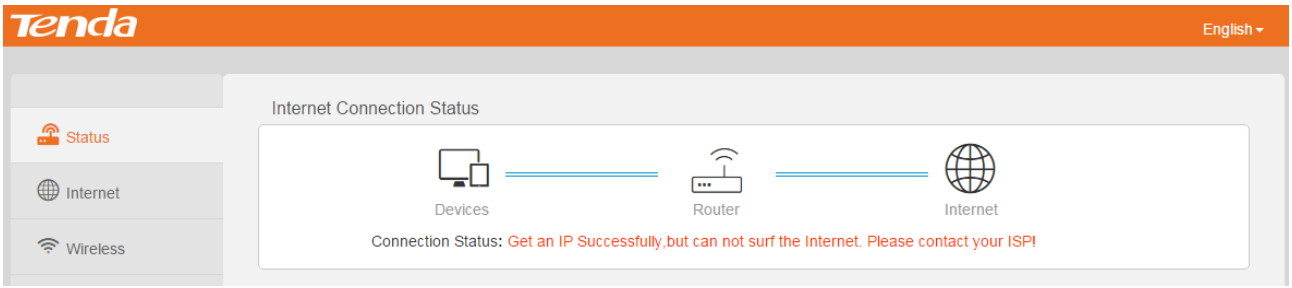
If the Connection Status displays You can surf the Internet, you can access the Internet.



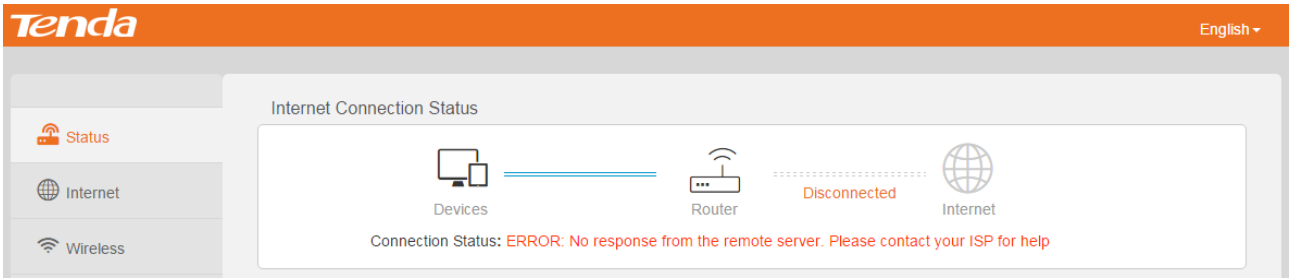
If you cannot access the Internet after complete the Internet settings, you can check the connection status, and follow the onscreen instructions to solve the problem.



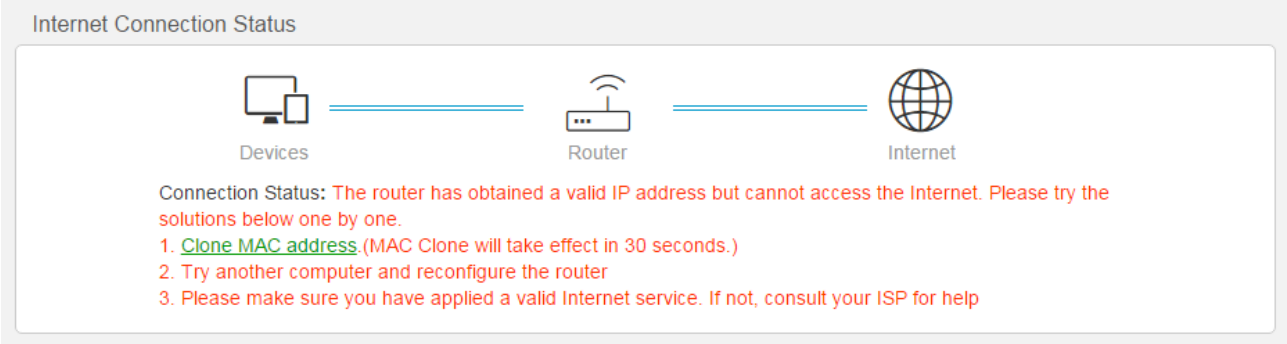
If the Connection Status displays WAN Port unplugged! Please plug the Internet cable into it, check the connection of the WAN port, and verify that the WAN port is well connected. Then refresh the page. If the problem persists, change the Ethernet cable on the WAN port, and try again.



If the Connection Status displays Get an IP Successfully, but cannot surf the Internet. Please contact Your ISP, contact your Internet Server Provider (ISP) for help. If you are using **Wireless Repeating** feature, check if the wireless base station (the router you bridge) enables PPPoE server.



If the Connection Status displays No response from the remote server. Please contact your ISP for help, contact your Internet Server Provider (ISP) for help. If you are using **Wireless Repeating** feature, check if the wireless base station's (the router you bridge) DHCP server is disabled.



If the Connection Status displays The router has obtained a valid IP address but cannot access the Internet. Please try the solutions below one by one, try to solve the problem as follows:

1. Verify that you select the correct connection type. Refer to select your connection type for details.

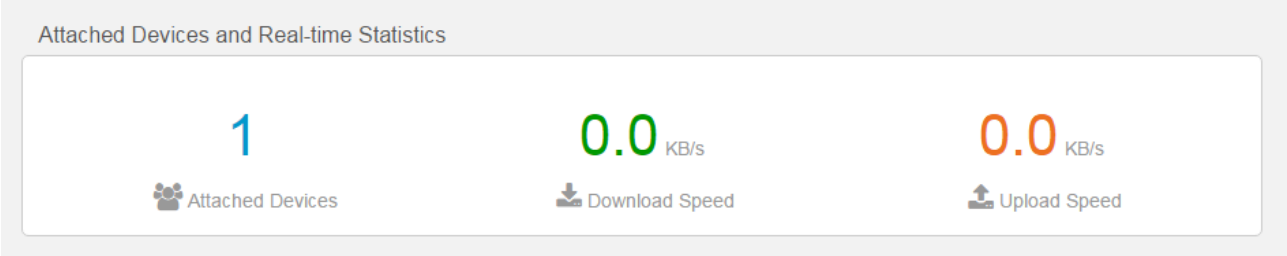
2. Click Clone MAC address, or refer to Clone MAC.

3. Try to log in to the router's user Interface on another computer.

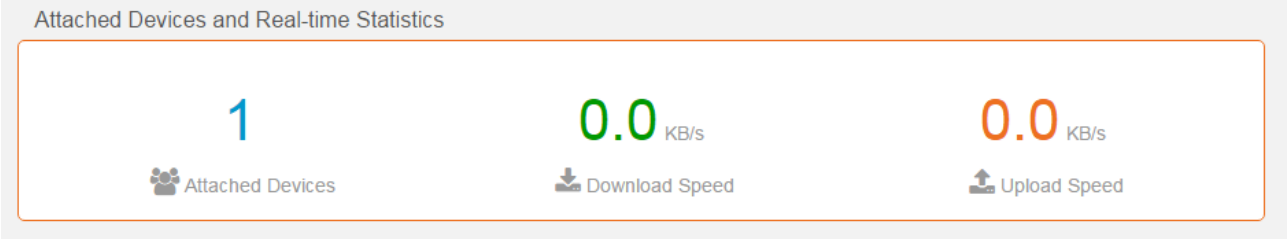
4. Contact your Internet Service Provider (ISP) for help.

Attached Devices and Real-time Statistics

This part allows you to view how many devices are connected to your router, and their real-time statistics.

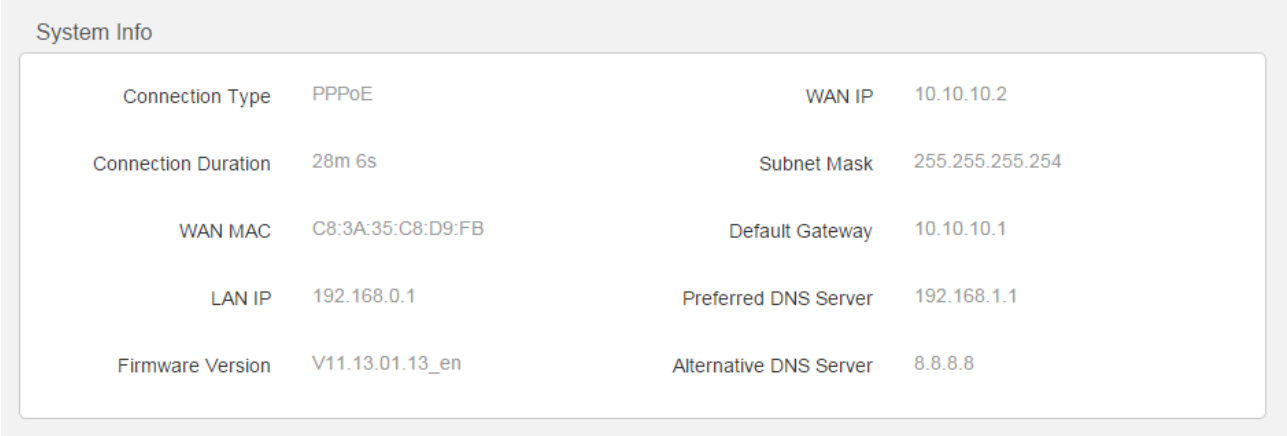


Meanwhile, you can click this area to go to Bandwidth Control part. Bandwidth Control allows you to control the attached devices' download/upload speed. Please refer to Bandwidth Control for details.



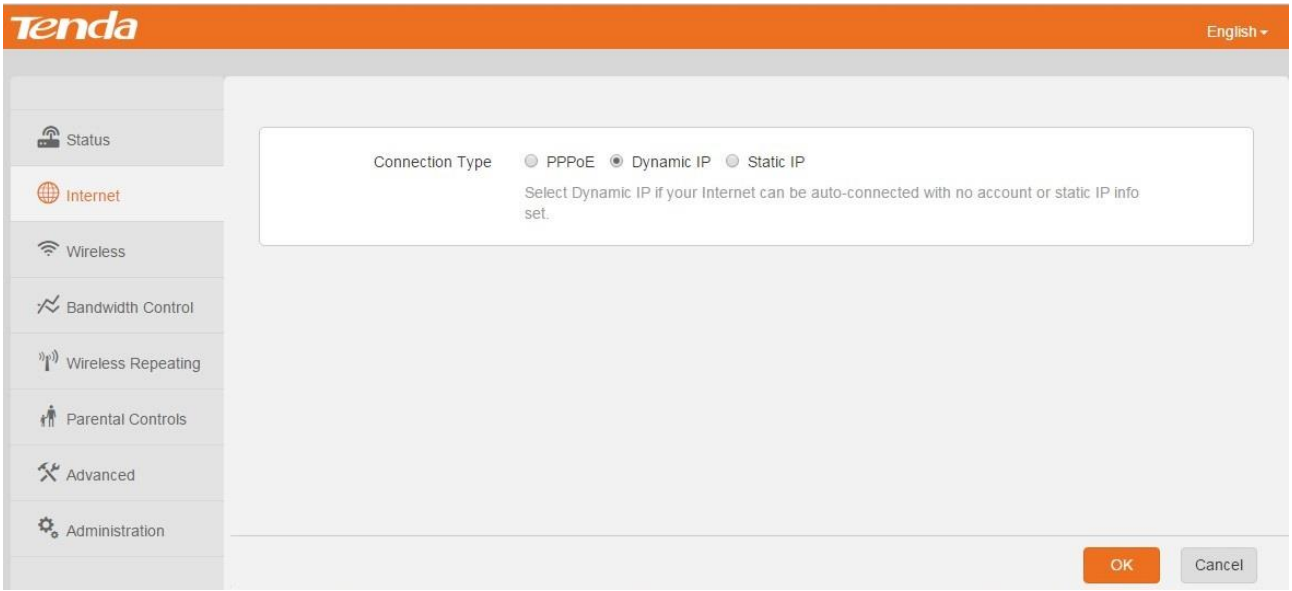
System Info

This part allows you to view this Router's system information, such as: connection type, WAN IP, and etc.



2 Internet

If you don’t set up your Internet connection by following Quick Setup Wizard, or want to change your Internet settings, you can refer to this page.



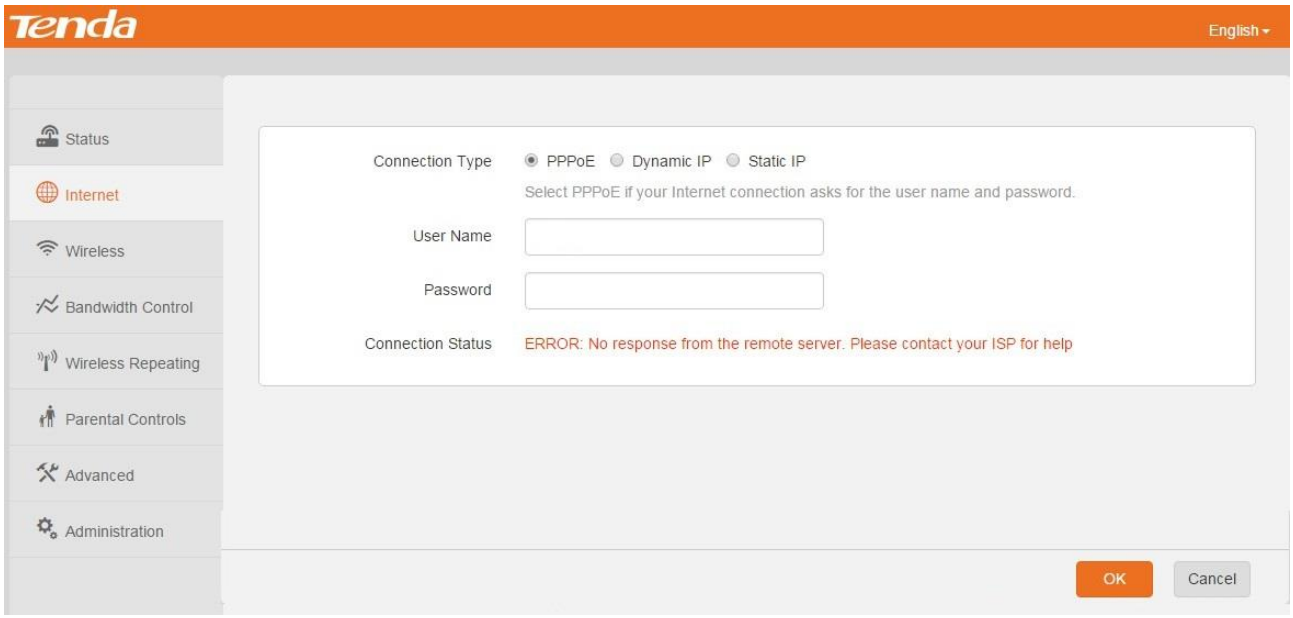
Select your connection type

There are three types of Internet connection on the **Internet Settings** page: PPPoE, Dynamic IP and Static IP. Usually the Quick Setup Wizard will help you to finish Internet settings, and you can also configure them by yourself.

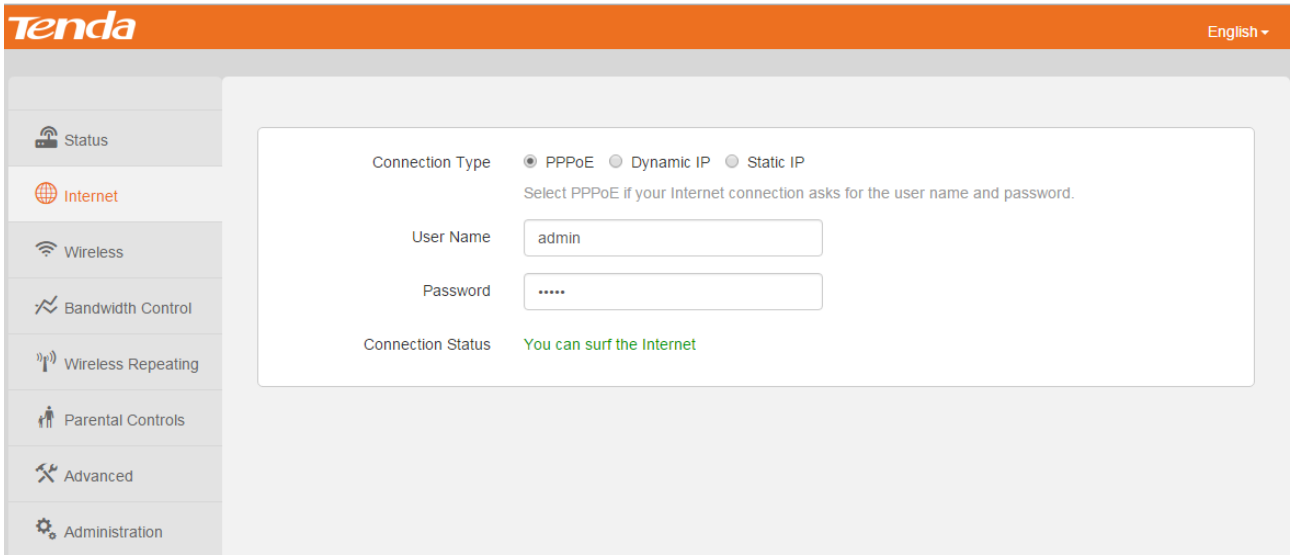
Refer to the instructions in the form below to select your Internet connection type. And follow the corresponding steps to complete your Internet settings.

Connection Type	The parameters your Internet Service Provider provided for Internet access
PPPoE	User name and password.
Dynamic IP	Nothing.
Static IP	Static IP address, subnet mask, gateway, DNS server info.

PPPoE

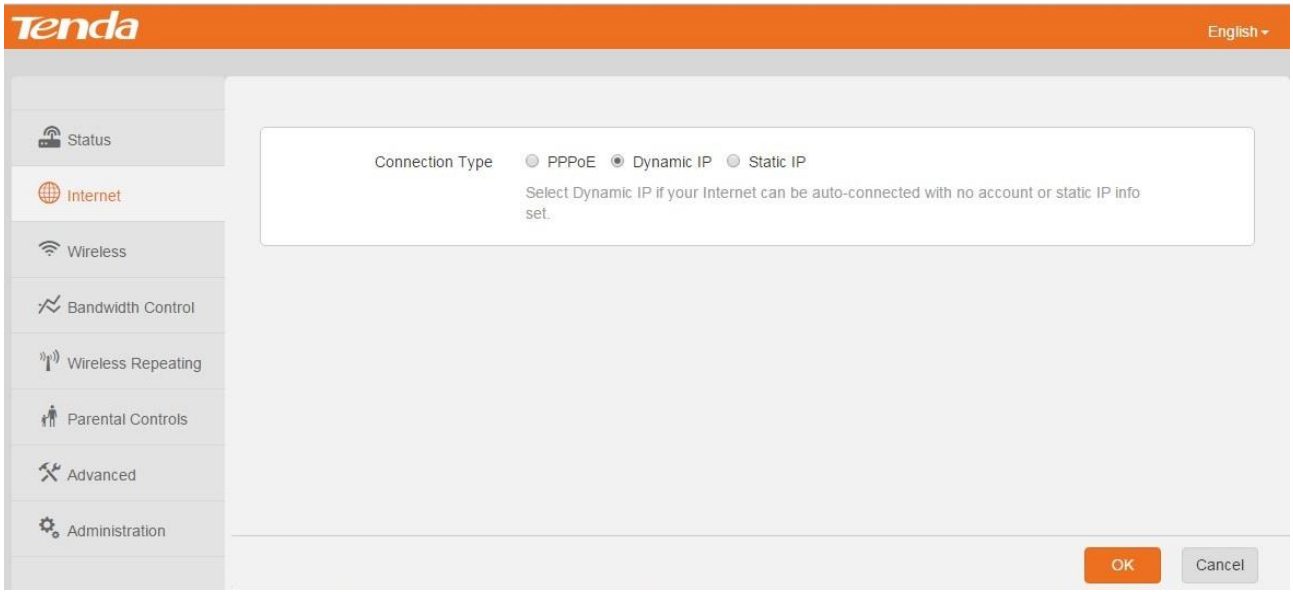


1. Select **PPPoE**.
2. Enter the user name and password provided by your ISP in the **User Name** and **Password** field.
3. Click **OK**.
4. Check the **Connection Status**. If it displays You can surf the Internet, it indicates you can access the Internet now. (Parameters below in the picture are for an example only.)

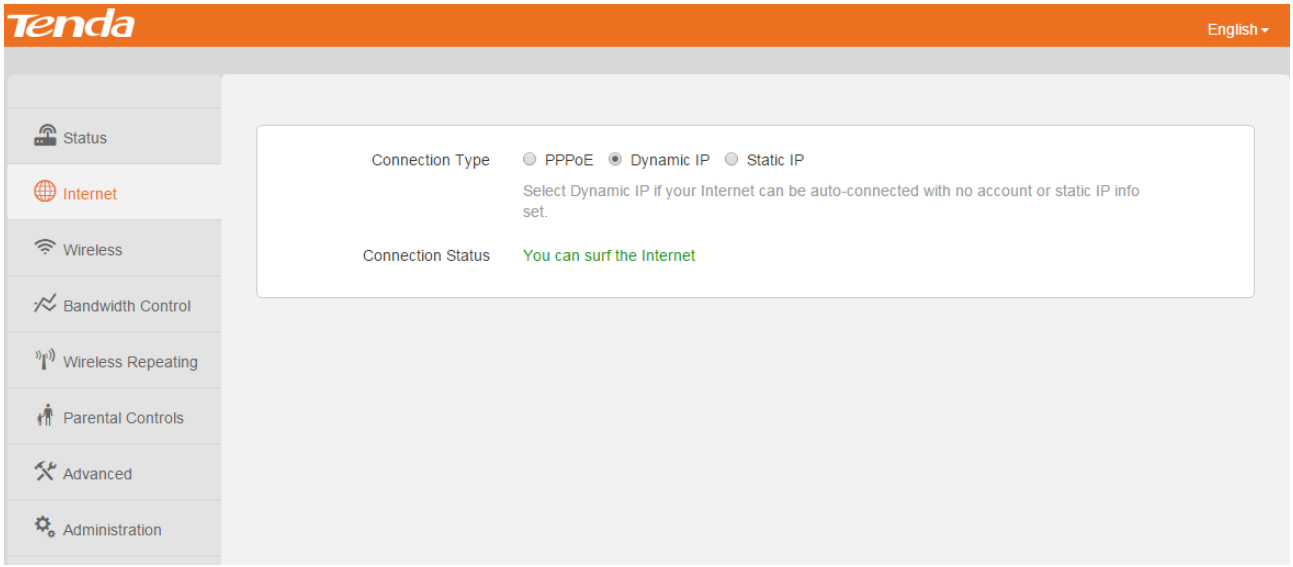


Dynamic IP

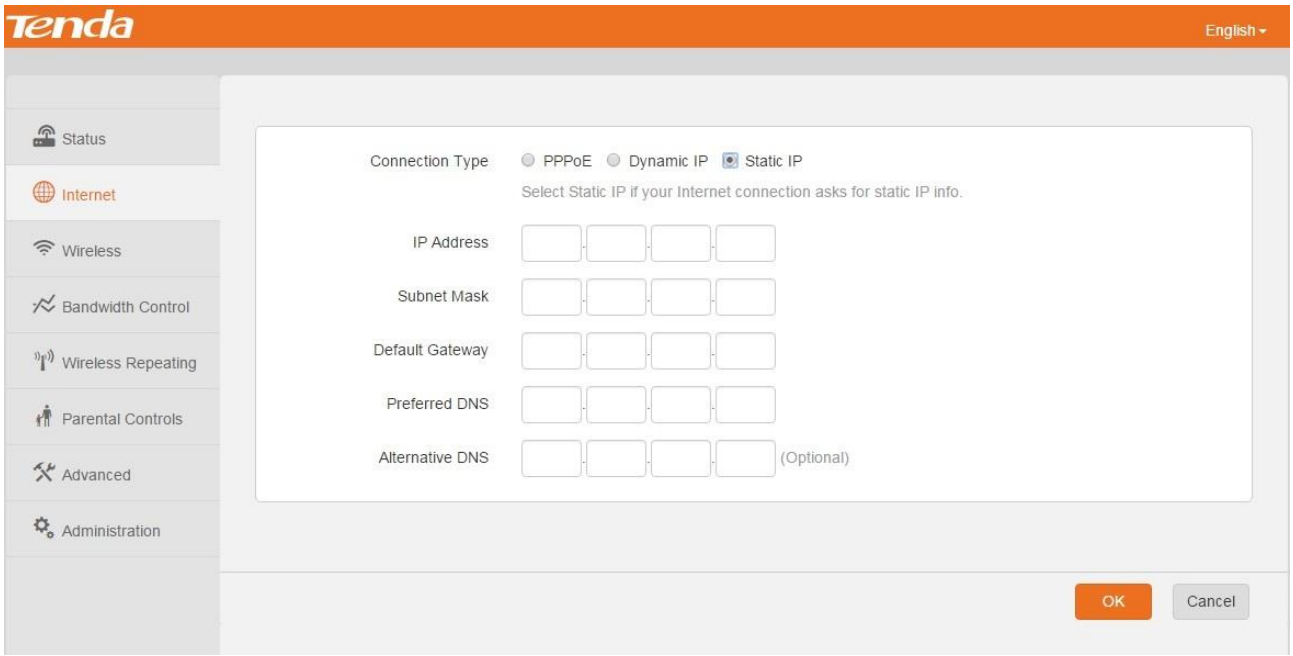
❶ Select **Dynamic IP** and click **OK**.



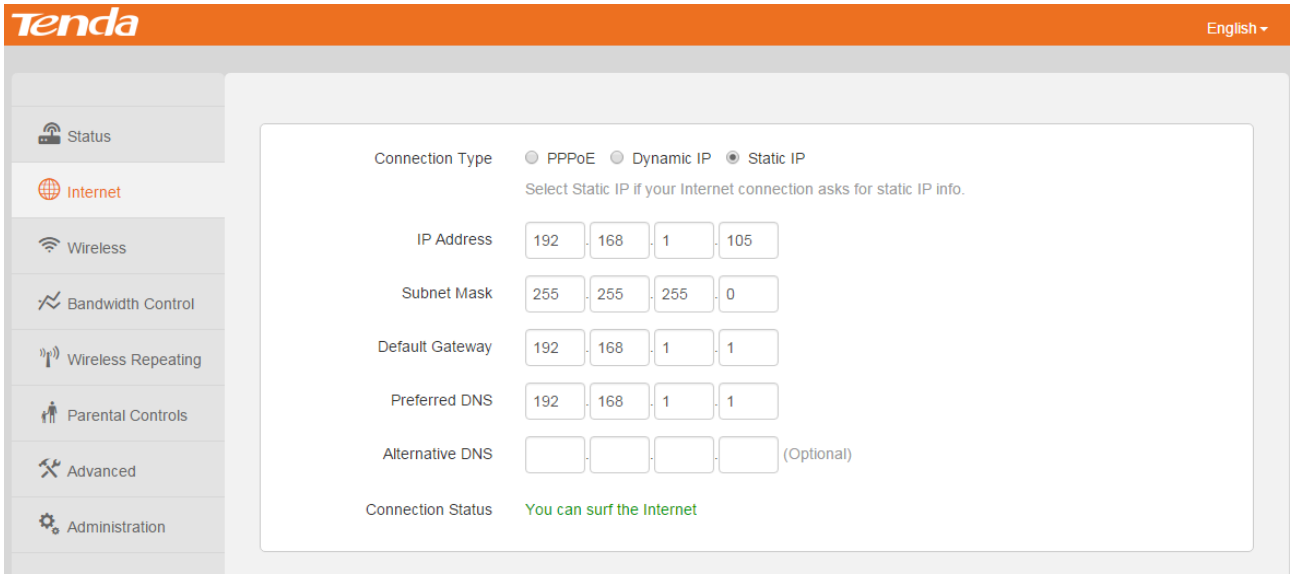
❷ Check the **Connection Status**. If it displays You can surf the Internet, it indicates you can access the Internet now.



Static IP



1. Select **Static IP**.
2. Enter the Static IP and other parameters provided by your ISP in the corresponding field.
3. Click **OK**.
4. Check the **Connection Status**. If it displays You can surf the Internet, it indicates you can access the Internet now. (Parameters below in the picture are for an example only.)


Tenda
English
Status
Internet
Wireless
Bandwidth Control
Wireless Repeating
Parental Controls
Advanced
Administration
Connection Type
PPPoE
Dynamic IP
Static IP
Select Static IP if your Internet connection asks for static IP info.
IP Address
192 168 1 105
Subnet Mask
255 255 255 0
Default Gateway
192 168 1 1
Preferred DNS
192 168 1 1
Alternative DNS
(Optional)
Connection Status
You can surf the Internet

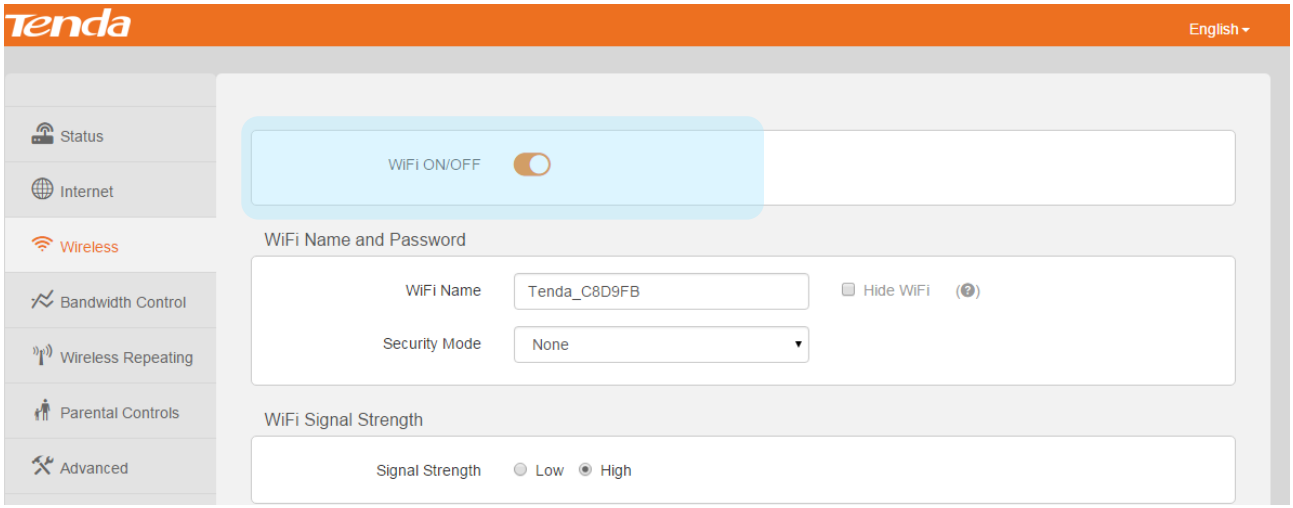
3 Wireless

This section offers some features to manage your wireless network, such as WiFi Signal Strength, WiFi Schedule, and etc.

WiFi ON/OFF Button

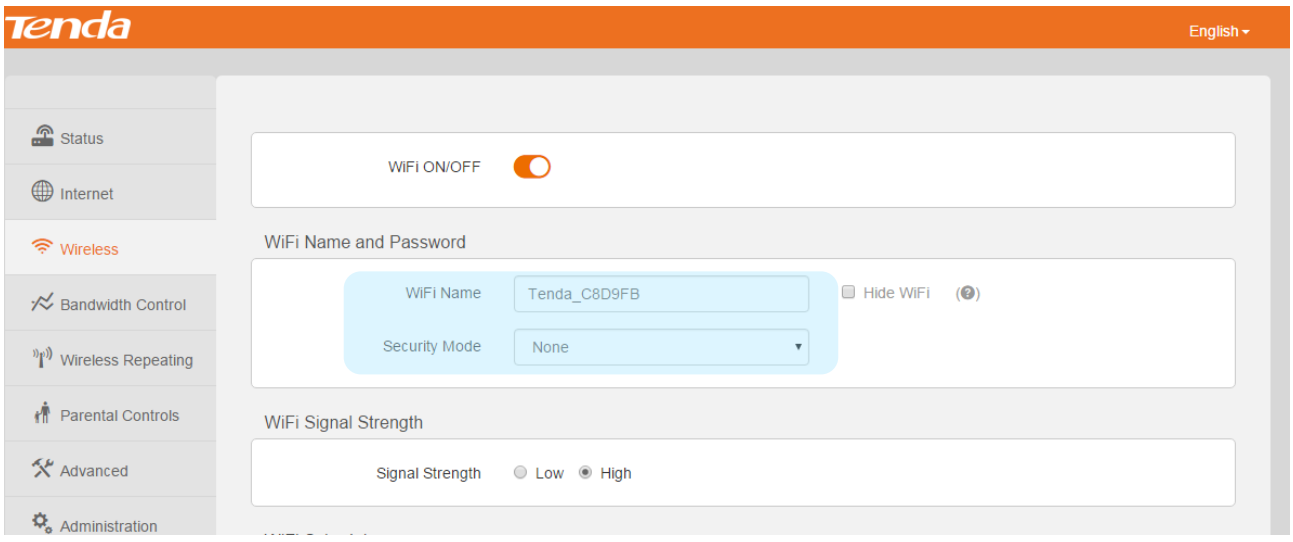
The WiFi ON/OFF button allows you to turn on/off your WiFi. It is enabled by default.

Log in to the Router's User Interface, click **Wireless**. Click **WiFi ON/OFF** button to enable/disable your WiFi, and click **OK** on the bottom of the page to activate the settings.



Change your WiFi name/password

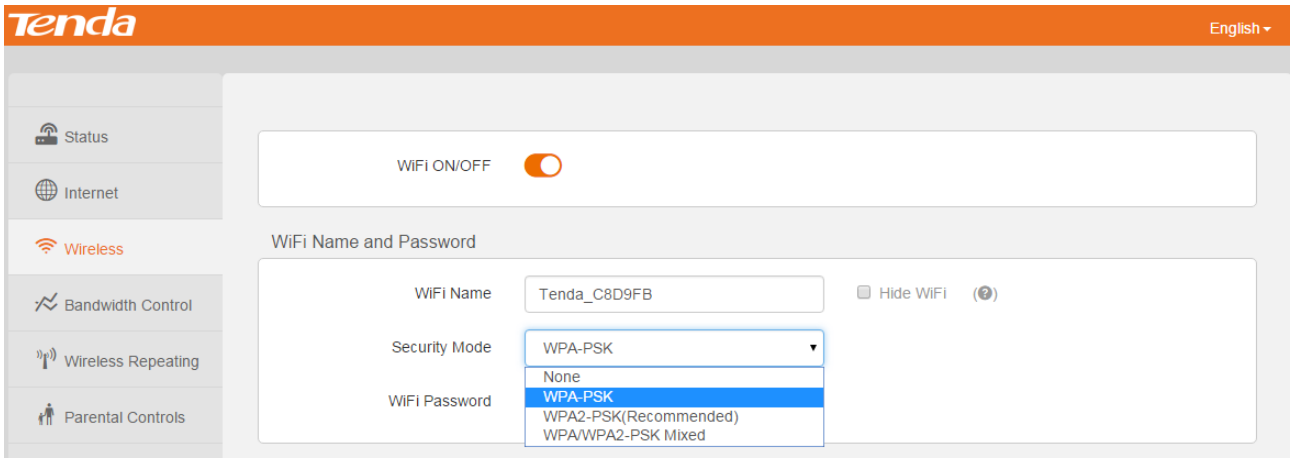
This part allows you to change your WiFi name, select your wireless security mode, and set up or change your WiFi password. Remember to click **OK** on the bottom of the page to save the settings you configure.



Hide WiFi: If the **Hide WiFi** option is checked, the wireless devices cannot search the WiFi name of the Router. To connect to your Router's WiFi, you need know the WiFi name in advance and enter

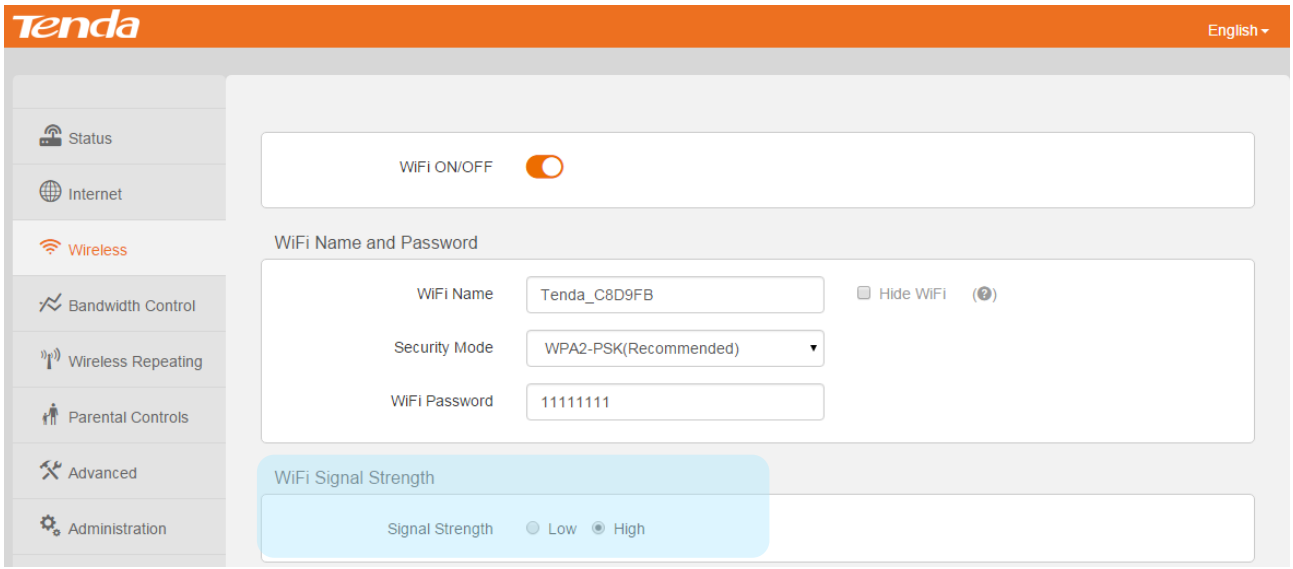
the WiFi name on each wireless client manually.

Security Mode: The router offers three security modes: WPA-PSK, WPA2-PSK (Recommended), and WPA/WPA2-PSK Mixed. You can select one according to your needs. Or you can select **None** to share your WiFi with others without requiring a password. There is no WiFi password and security mode set by default. But if you set up a WiFi password in Quick Setup Wizard, the security mode will be changed to WPA2-PSK (Recommended).



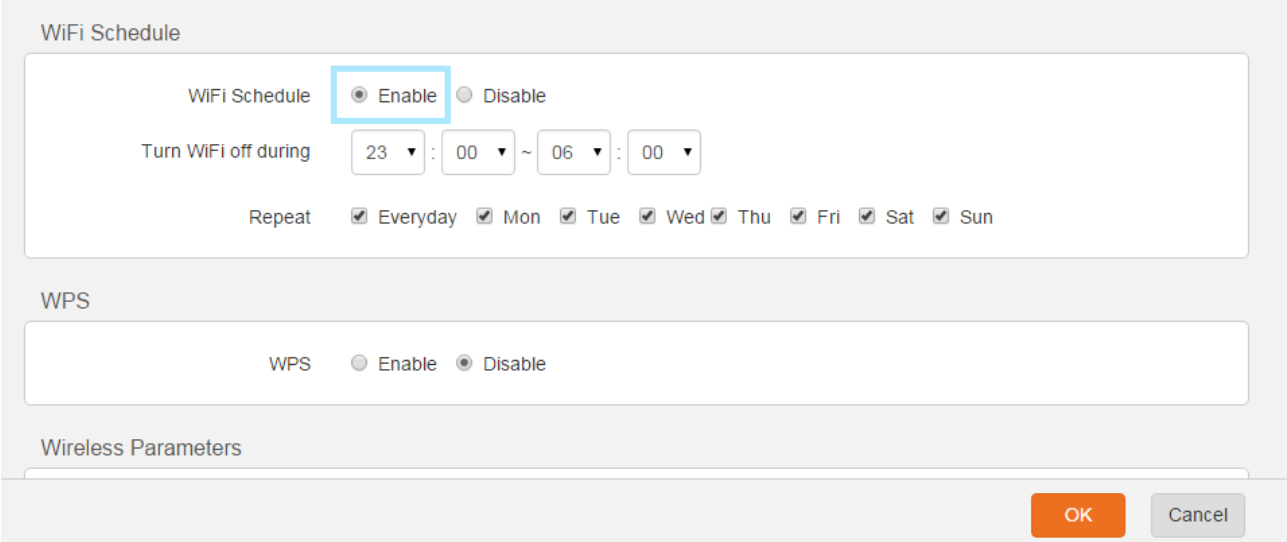
WiFi Signal Strength

The Router offers two levels of signal strength: low and high (default). Select **Low** if it can satisfy you. **Standard** offers the widest coverage range while **High** has strong capability of penetrating wall. Select one from them according to your needs. Remember to click **OK** on the bottom of the page to save the settings you configure.



WiFi Schedule

This feature allows you to specify WiFi ON/OFF time. For example, assume that you want to turn off your WiFi during 23:00~06:00, from Monday to Sunday, you can configure it as follows:



1. Click **Enable** button to enable the feature.
2. Select **23:00** and **06:00**.
3. Select **Everyday**, or check the options before the days, from **Mon** to **Sun**.
4. Click **OK** to activate the settings.

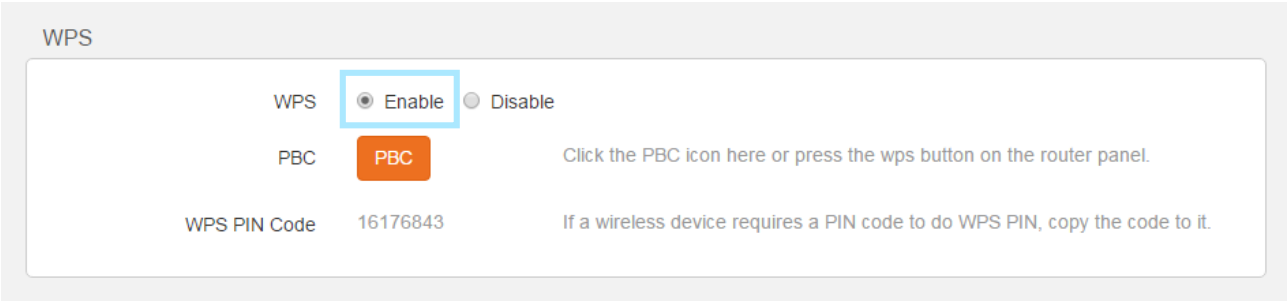
WPS

WPS (Wi-Fi Protected Setup) allows you to join the WiFi network without typing the WiFi password.

You can establish a WPS connection to your wireless Router via WPS button, or PIN code.

To establish a WPS connection:

Log in to the Router's User Interface, click **Wireless**, and click to enable the WPS feature.



Use a WPS button

If your wireless device has a WPS push button, you can use it to connect to the Router.

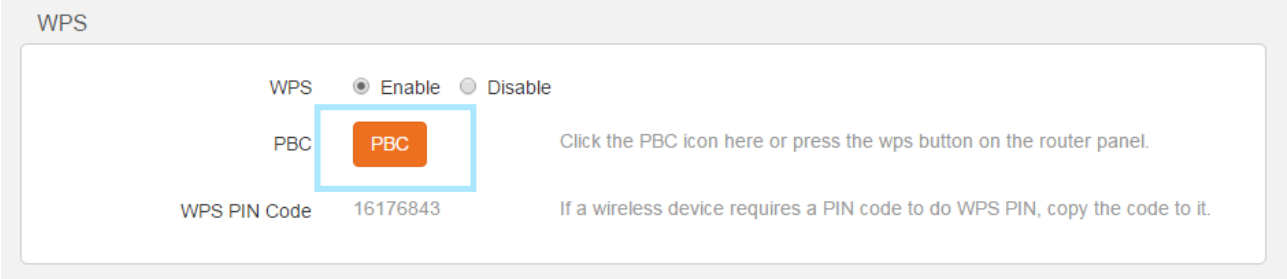
Method:

Click the PBC button on the webpage, OR push the WPS button on the router.

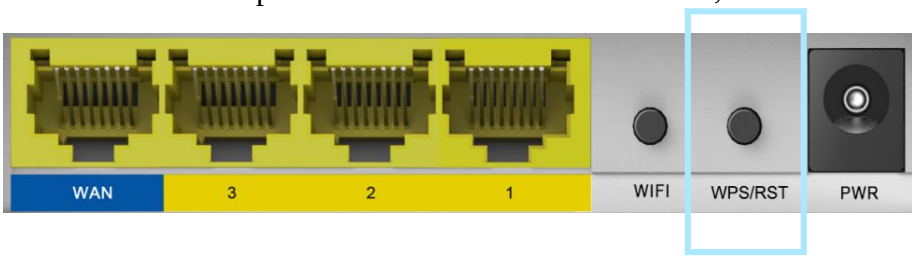
1. Click the **WPS** button on the Webpage.

❷ Click **OK** on the bottom of the page to activate the settings.

You can also use the hardware button on the rear panel of the router.



Press the WPS button on the back panel of the Router for 1~3 seconds, and then release it.

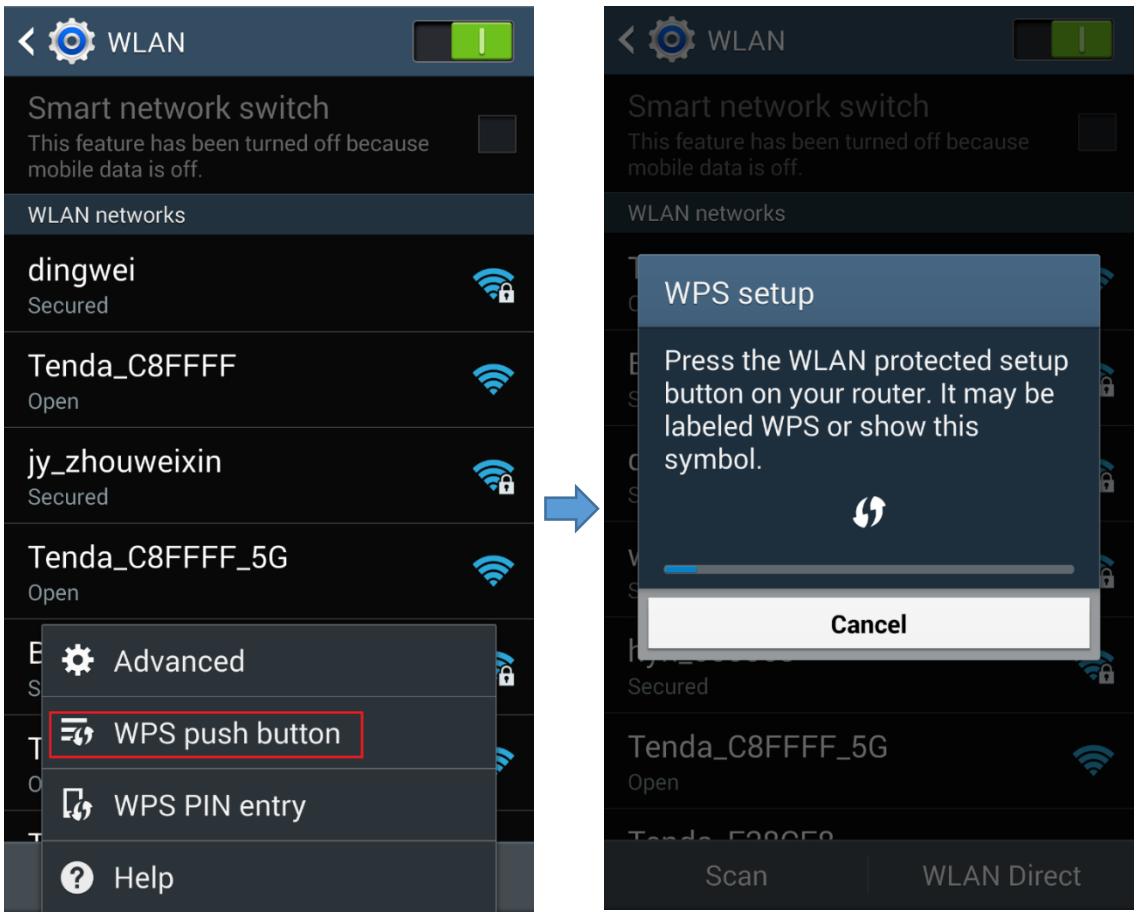


❸ Within 2 minutes, enable WPS feature on your wireless device.

(Take SAMSUNG cellphone as an example)

Enter the **WLAN** setting page, and tap the icon on the bottom left corner on the cellphone.

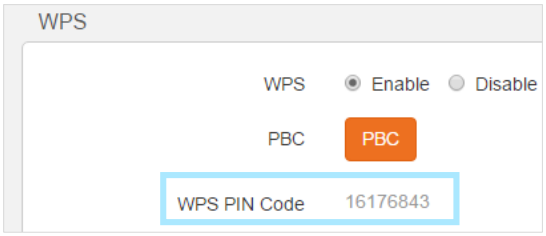
Then select **WPS push button** on the pop-up subpage. The cellphone's WPS feature is enabled.



Then the Router will negotiate with the cellphone, and establish WPS connection.

Use a PIN code

If your wireless device requires a PIN code, enter the PIN code on the page into the required box.



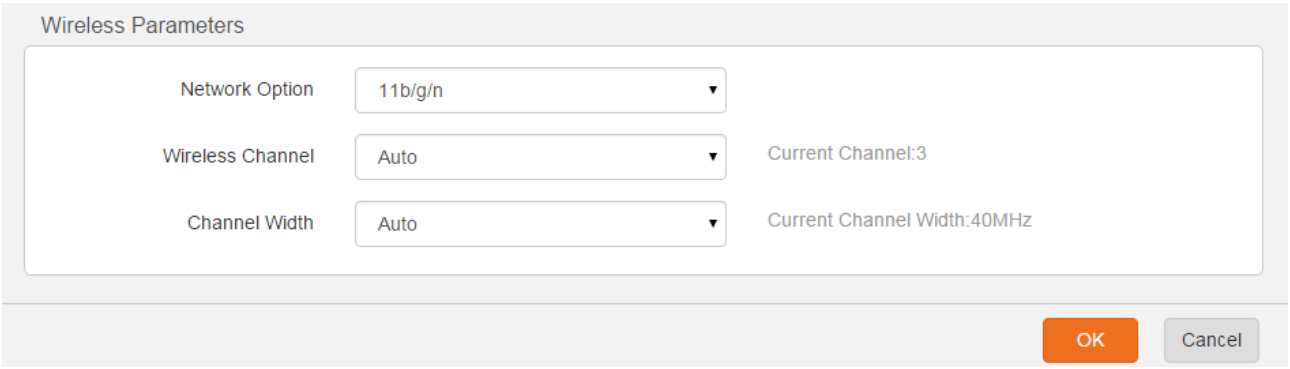
Tips

1. When the WPS feature is enabled, the security mode and WiFi password cannot be changed.

2. If you use the PIN code to establish a WPS connection, the WiFi password will be changed into a random password with 63 characters.

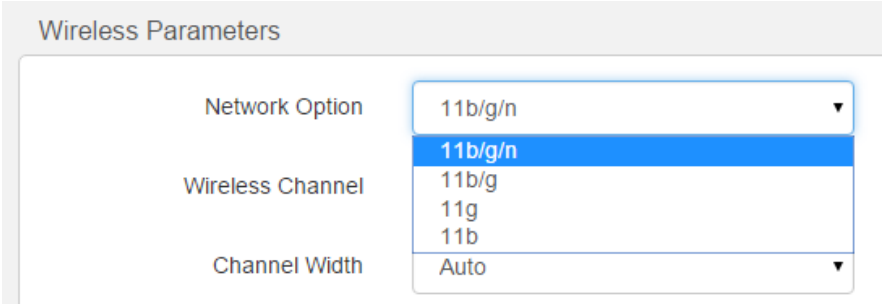
Wireless Parameters

In this part, you can change the basic settings of your wireless network.



Network Option

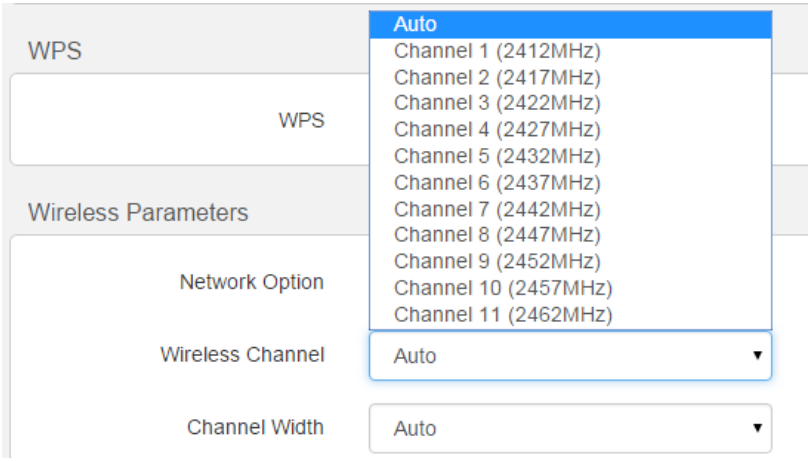
This Router supports 4 network options. To change the network option, select it from the **Network Mode** list. The default one is optimum.



Mode	Compatibility	Wireless Speed
11b/g/n	Allows 802.11b, 802.11g, and 802.11n devices to join the network.	Up to 300 Mbps
11b/g	Allows 802.11b and 802.11g devices to join the network.	Up to 54 Mbps
11b	Allows 802.11b devices to join the network.	Up to 11 Mbps
11g	Allows 802.11g devices to join the network.	Up to 54 Mbps

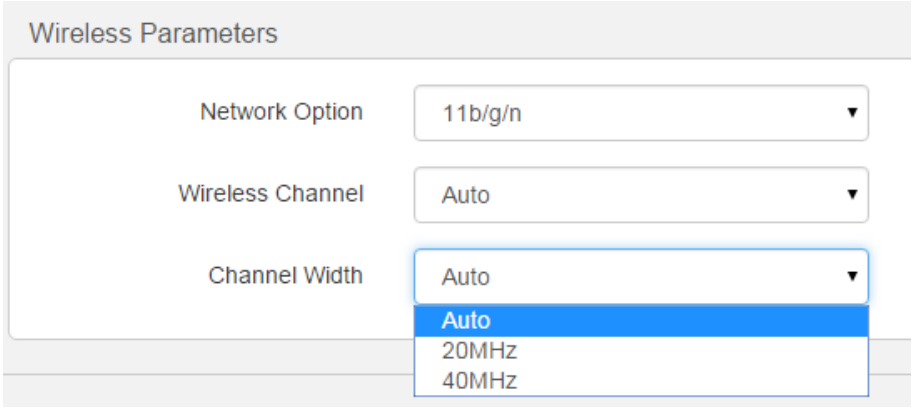
Wireless Channel

To change the wireless channel, select one from the **Wireless Channel** list. Do not change the channel unless you experience interference (shown by lost wireless connection or slow data transfers). If this happens, experiment with different channels to see which the best is. The recommended channel spacing between adjacent access points is four channels (for example, use channel 1 and 5, or 6 and 10).



Channel Width

Select any of these channel widths to accommodate higher transmission speeds:



- **Auto**: When the channel width is Auto, the channel width will switch among 20MHZ and 40MHZ according to the situation of the current wireless network. The channel width is set to Auto by default. Keep the default unless you encounter some issues with your wireless

connection.

- **20MHZ**: Select this width if you encounter some issues with your wireless connection.
- **40MHZ**: This bandwidth can maximize the wireless throughput. But it can only be selected when the **Network Option** is **11b/g/n**.

4 Bandwidth Control

Bandwidth Control improves network performance by specifying the download/upload speed for connected clients. The example below is for you to consult to configure Bandwidth Control based on your own demands.

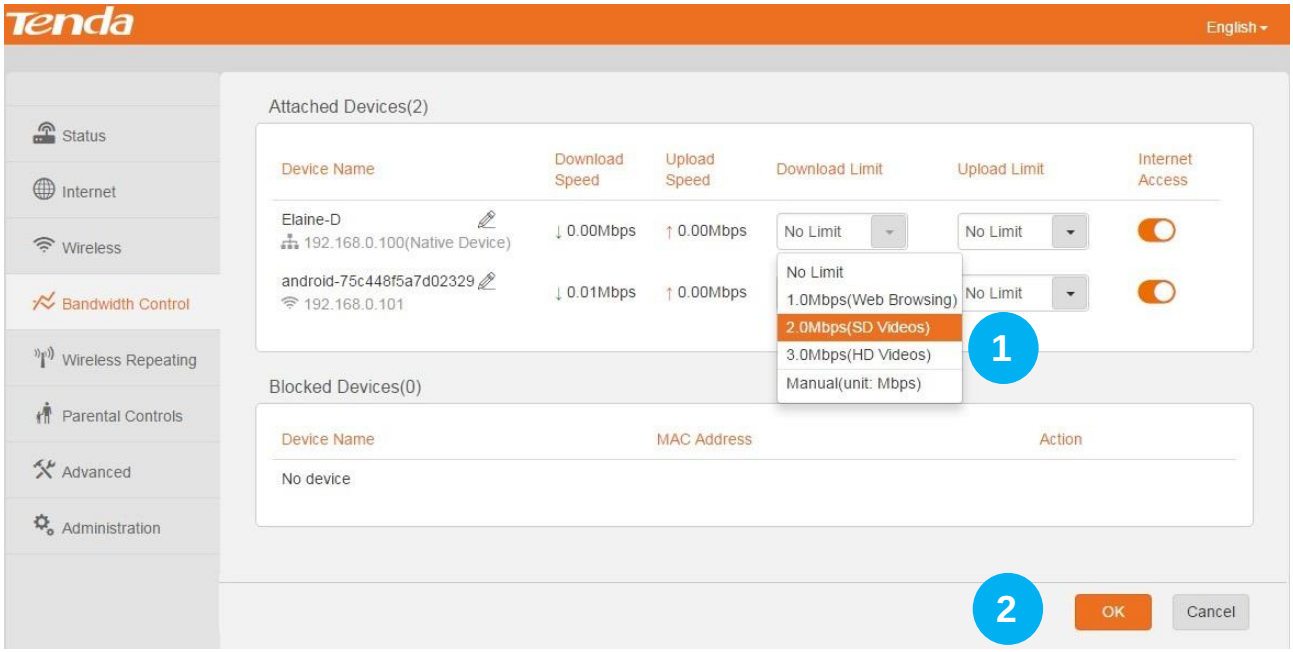
Example

Always several devices share 4M broadband service in your home. You recently have to watch lots of news videos to prepare for a special program but only to find it's hard to go through the videos smoothly. Your notebook starves for more bandwidths.

In this case, you can choose to configure a download bandwidth rule in Bandwidth Control to allocate sufficient bandwidth for your notebook. Upload bandwidth rule is not always used unless you have to upload lots of files and videos.

Configuration

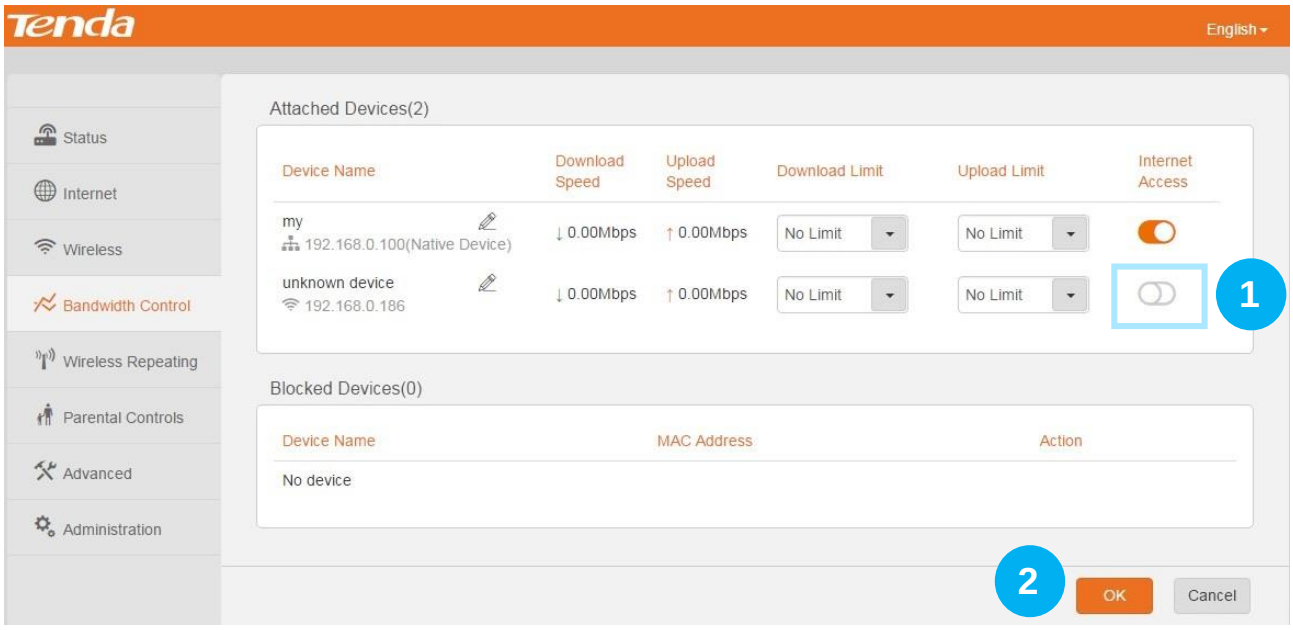
Log in to the Router's User Interface, and click **Bandwidth Control**.



❶ Select a download speed for your notebook. ❷ Click **OK** to activate your settings.

To prevent unknown device from assessing the Router

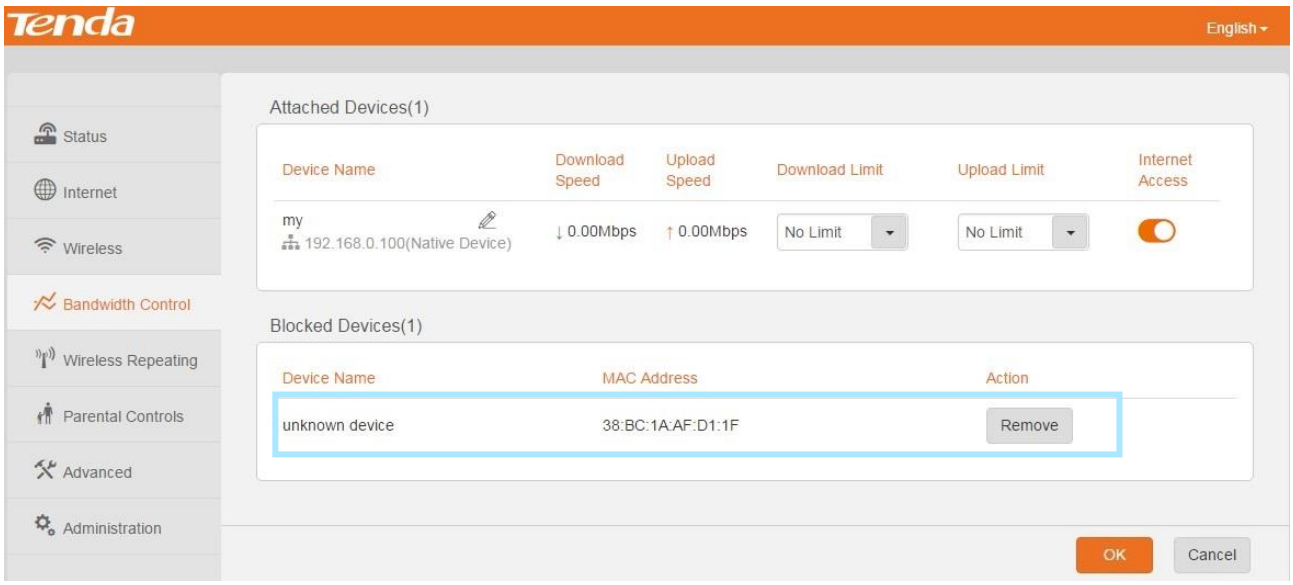
You can see the attached devices in **Attached Devices** list. If you find that there is unknown device connected to your router, you can click the **Internet Access** button to prevent it from accessing the Internet via your Router.



❶ Click the unknown device's **Internet Access** button to block it.

❷ Click **OK** to activate the settings.

After the settings saved successfully, you can find the unknown device will appear in **Blocked Devices** list.

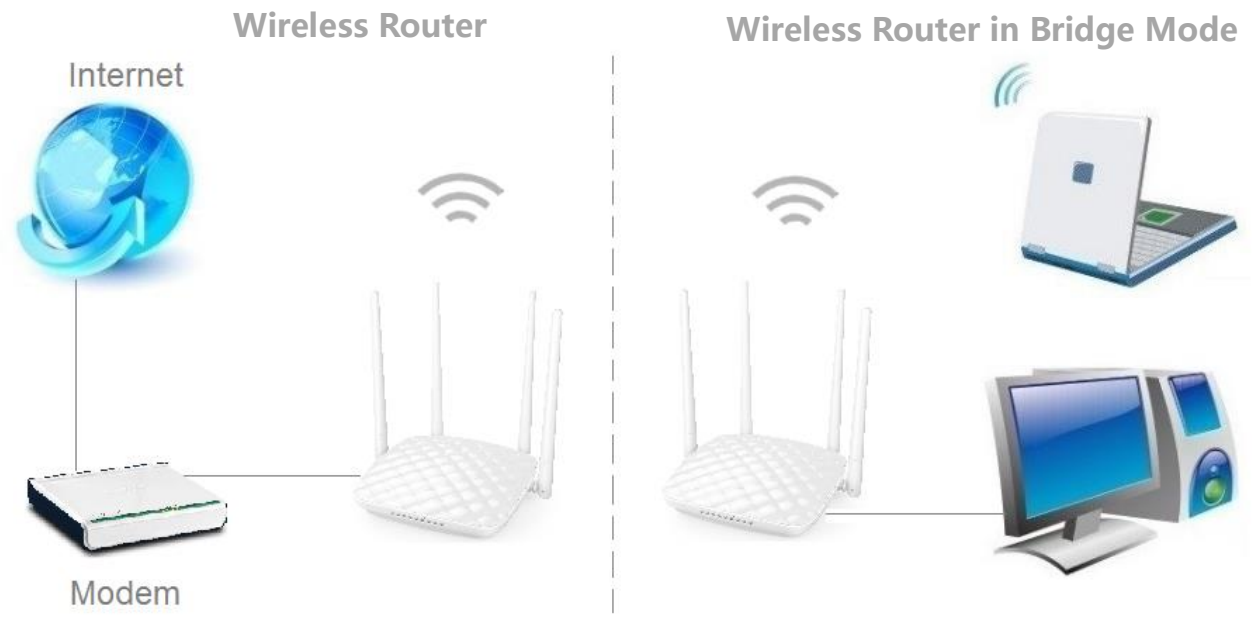


Click **Remove** and **OK** button if change your mind. It will come back to **Attached Devices** list.

5 Wireless Repeating

The Router can also act as a wireless repeater to extend wireless signal. The wireless repeater can have wired and wireless devices, and access the Internet when it connects to the wireless base station. There are two types of Wireless Repeating: **WISP** and **Universal Repeater**. When the Router works under **WISP** mode, it assigns IP addresses to its clients by itself. And the clients obtain IP addresses from the base station the Router bridges when the Router works under **Universal repeater** mode. You can select **WISP** OR **Universal repeater** to extend your wireless network.

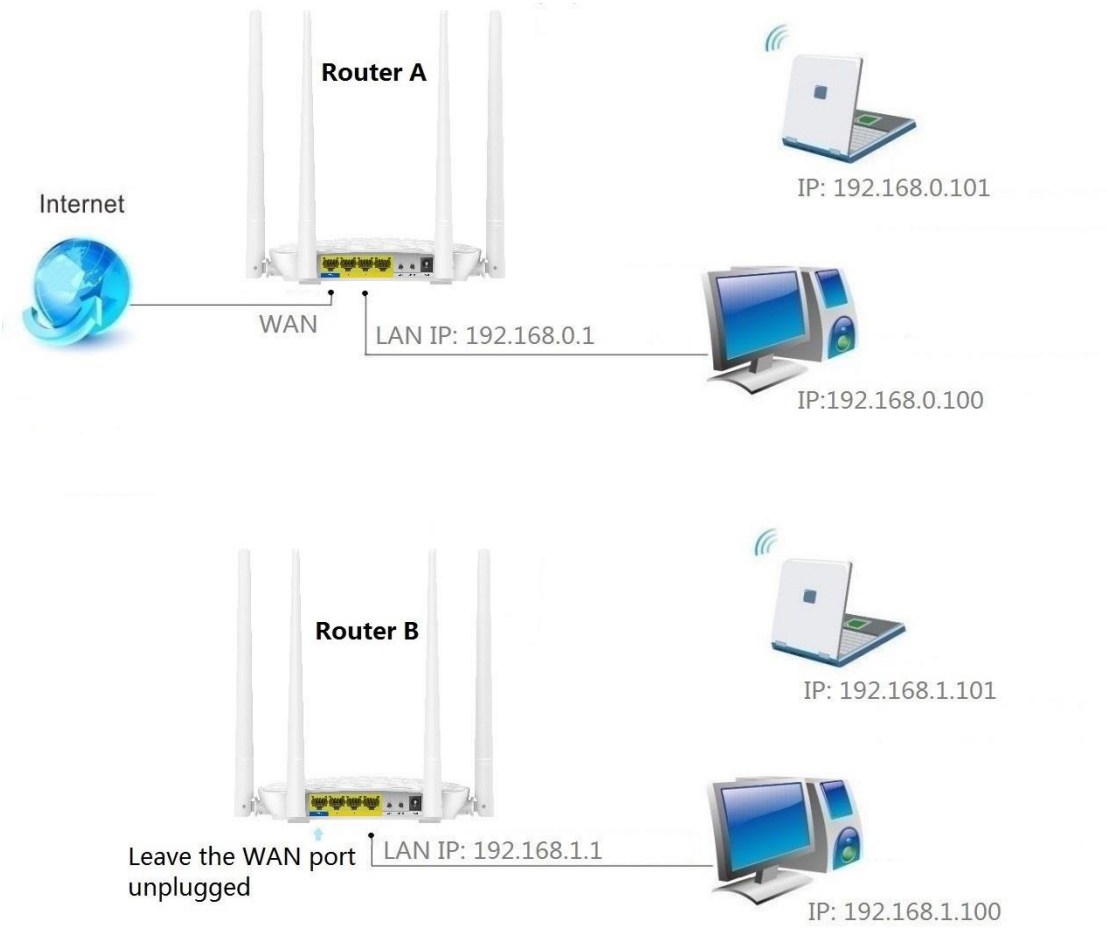
You need two routers: one set up as a Router which acts as a base station, and the other set up as a bridge.



Example

You can install the first Router (Router A) in a room that located on the first floor which has your Internet connection, then set up the second Router (Router B) in bridge modes. And place the Router B in a different room that has your home entertainment center which located on the second floor. Connect the second Router (Router B) to your computer, game console, and etc.

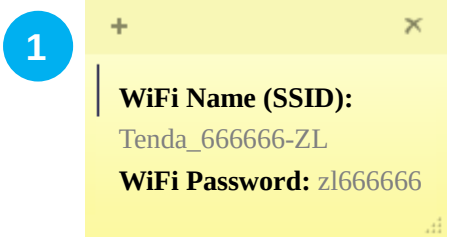
To set up a WISP bridge



Configure Router B:

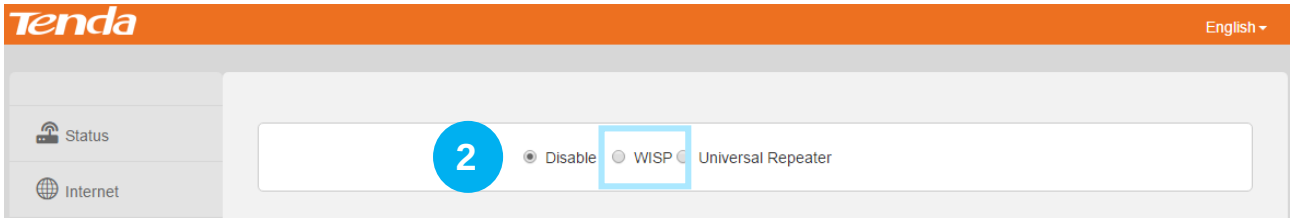
Generally, you don't need configure the Router A.

❶ Check and make a note of the WiFi name and password of the Router A to which this Router (Router B) will connect.



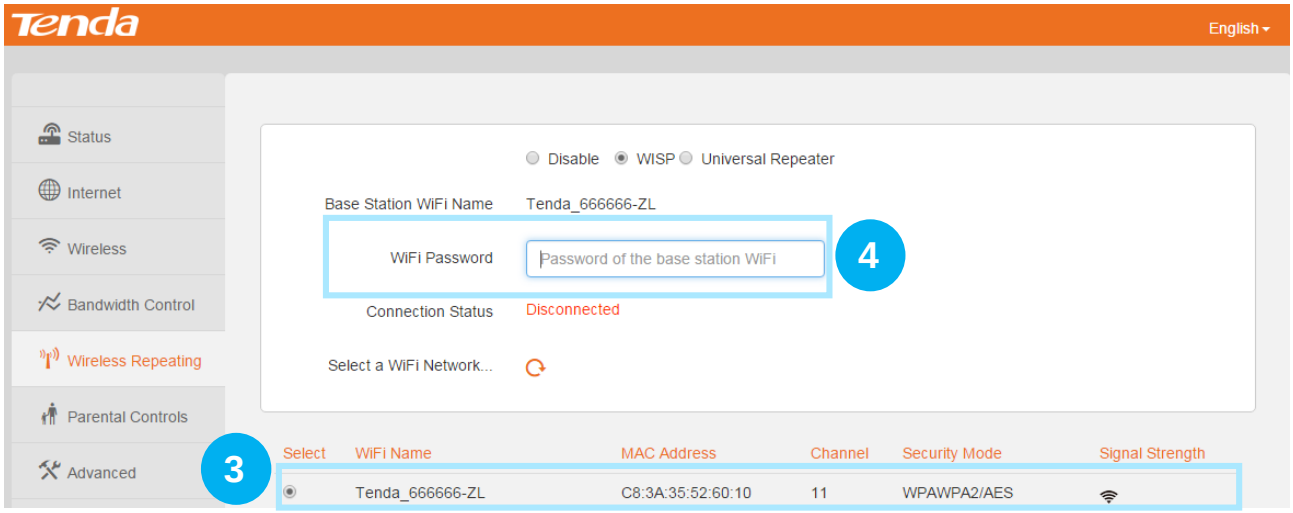
(Parameters here are for an example)

❷ Log in to the Router's User Interface, and click **Wireless Repeating**. Click the **WISP** button to enable the WISP feature.



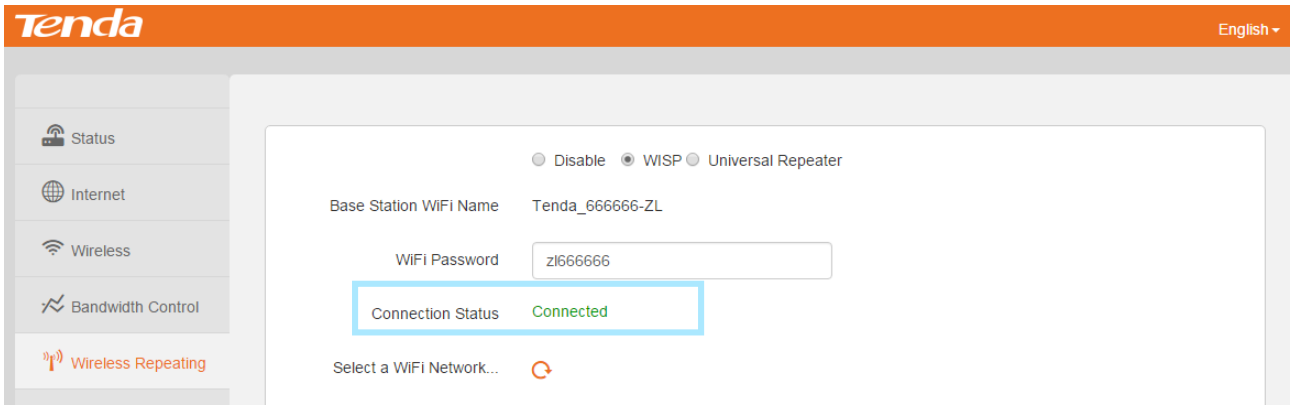
❸ Find and click the WiFi name (wireless network name) of the base station (Router A).

❹ Type the WiFi password of the base station (Router A), and click **OK** on the bottom of the page.

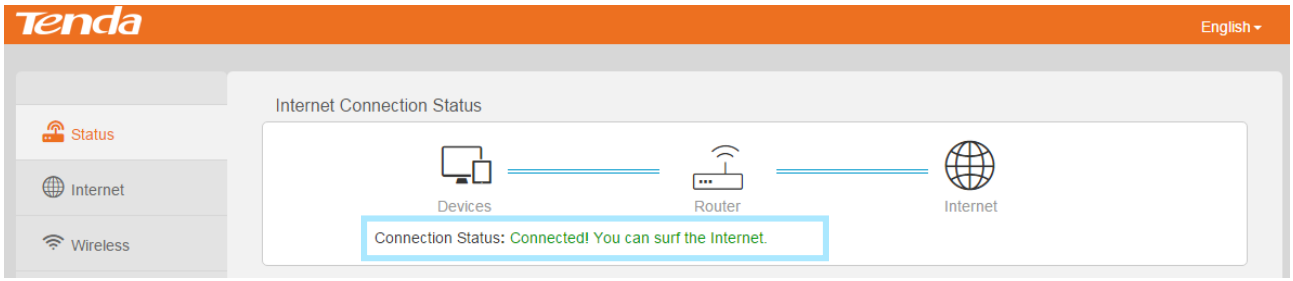


❺ Click **OK** on the prompt window.

After this Router (Router B) auto-reboots, it will log in to the Router's (Router B's) User Interface automatically. Click **Wireless Repeating**, and check **Connection Status**. When it displays Connected, it indicates that you bridge successfully.



Click **Status**, and check the **Connection Status**. When it displays Connected! You can surf the Internet, it indicates that you can access the Internet. If not, please refer to Internet Connection Status.



If the bridge failed, try solving the problem as follows:

Verify that the Router A's DHCP server is enabled. If not,

• Enable the Router A's DHCP sever.

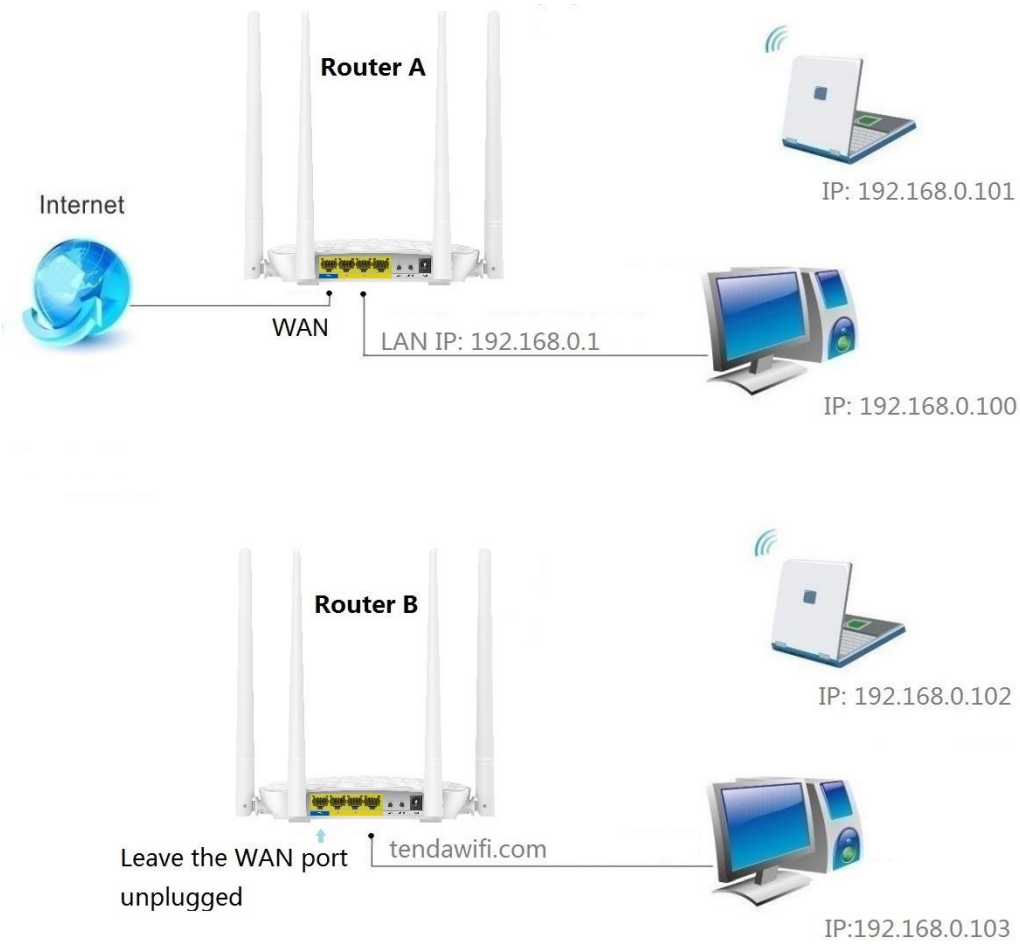
• Or log in to Router B's User Interface, click **Internet**, select **Static IP**, type the required info in the corresponding field, and click **OK**.

Tips

1. When the Wireless Repeating feature is enabled, the Wireless Schedule and WPS features are not available.

2. If Router A has a PPPoE server, and it's enabled, log in to Router B's User Interface, click **Internet**, select **PPPoE**, and type the required user name and password in the corresponding field, and click **OK**.

To set up a Universal Repeater bridge



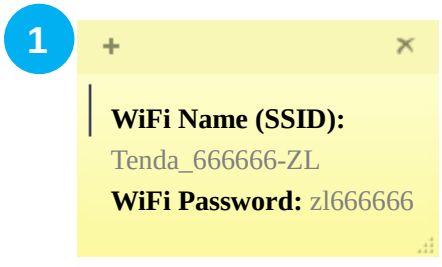
Configure Router B:

Generally, you don't need configure the Router A.

Note

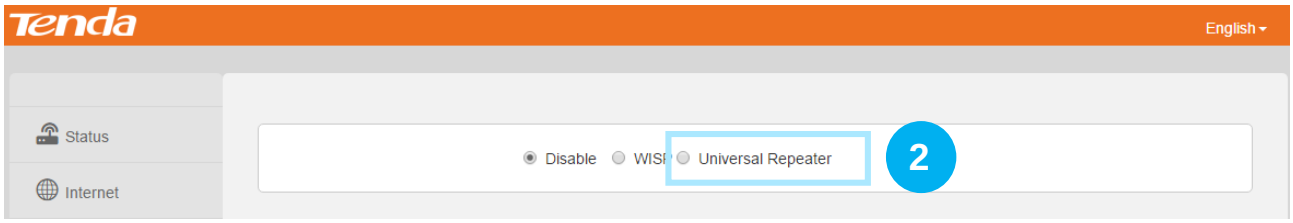
The DHCP of Router A MUST be enabled.

❶ Check and make a note of the WiFi name and password of the Router A to which this Router (Router B) will connected.



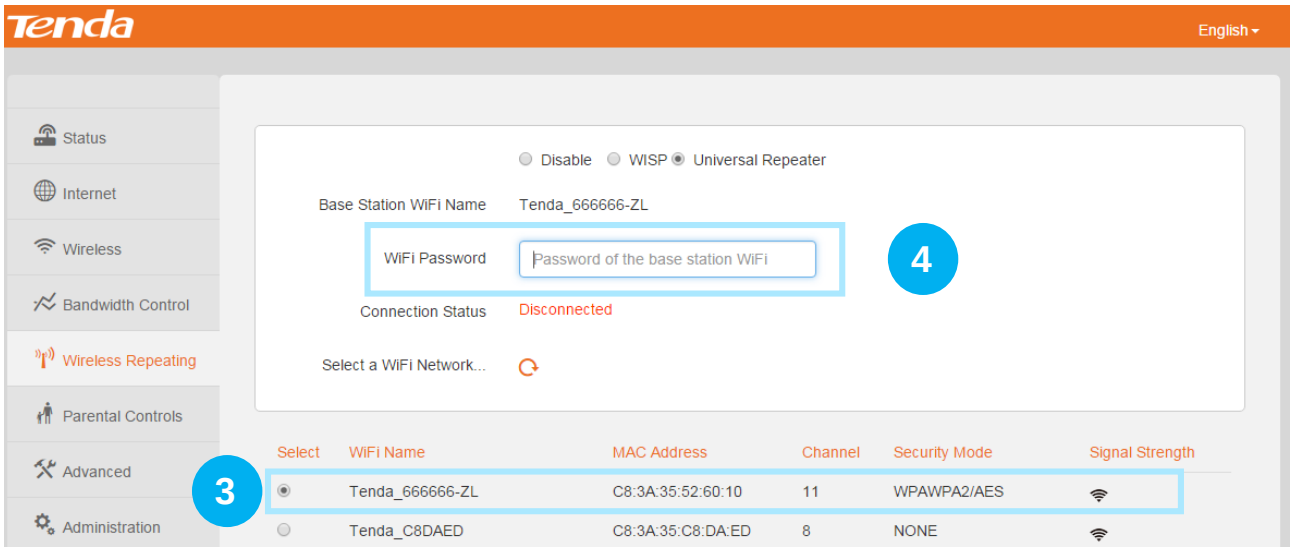
(Parameters here are for an example)

❷ Log in to the Router's User Interface, and click **Wireless Repeating**. Click the **Universal Repeater** button to enable the Universal Repeater feature.



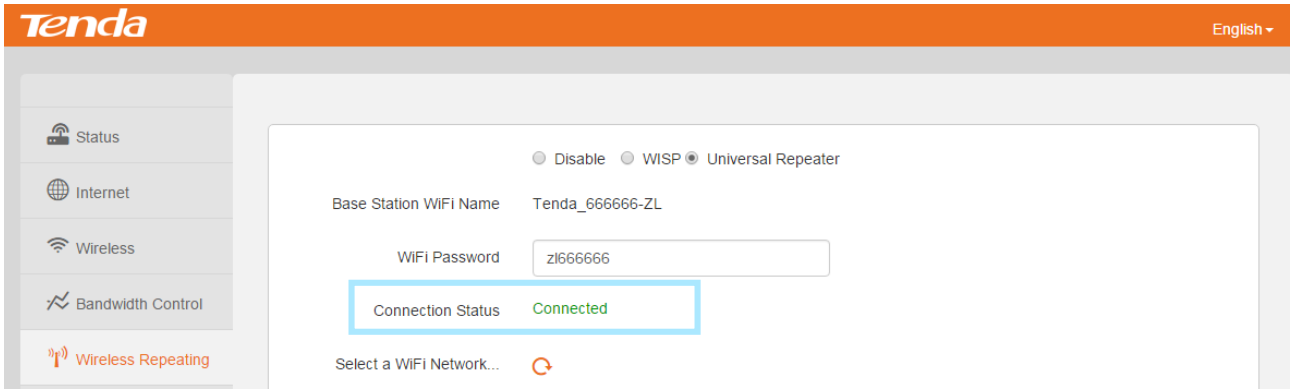
❸ Find and click the WiFi name (wireless network name) of the base station (Router A).

❹ Type the WiFi password of the base station, and click **OK** on the bottom of the page.

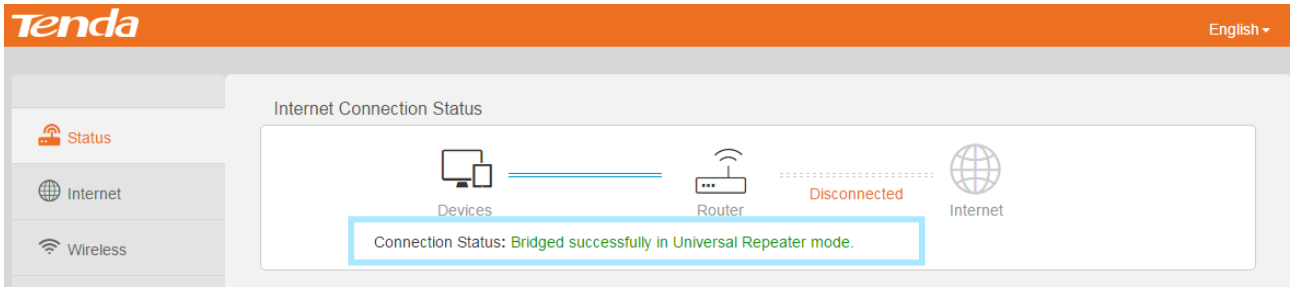


❺ Click **OK** on the prompt windows.

After this Router (Router B) auto-reboots, it will log in to the Router's (Router B's) User Interface automatically. Click **Wireless Repeating**, and check **Connection Status**. When it displays it indicates that you bridge successfully.



Click **Status**, and check the **Connection Status**. When it displays Bridged successfully in Universal Repeater mode, it indicates that you can access the Internet. If not, please refer to Internet Connection Status.



Tips

1. When the Wireless Repeating feature is enabled, the Wireless Schedule and WPS features are not available.

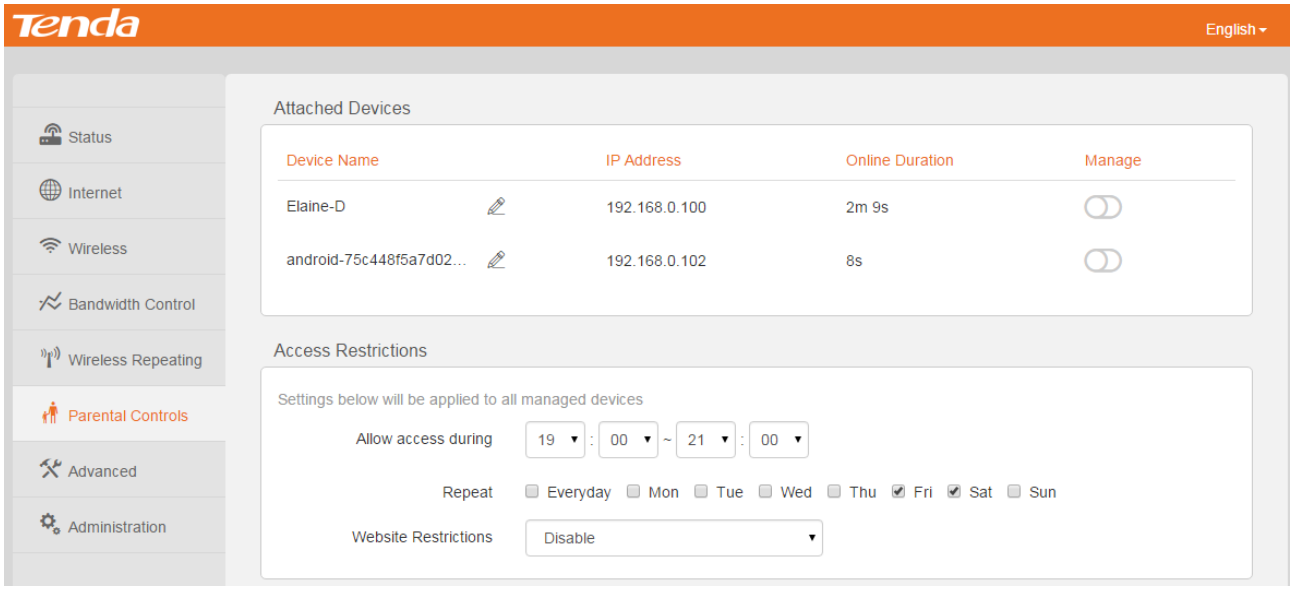
2. You can only use the domain name www.tendawifi.com to login to the router B's user interface.

6 Parental Controls

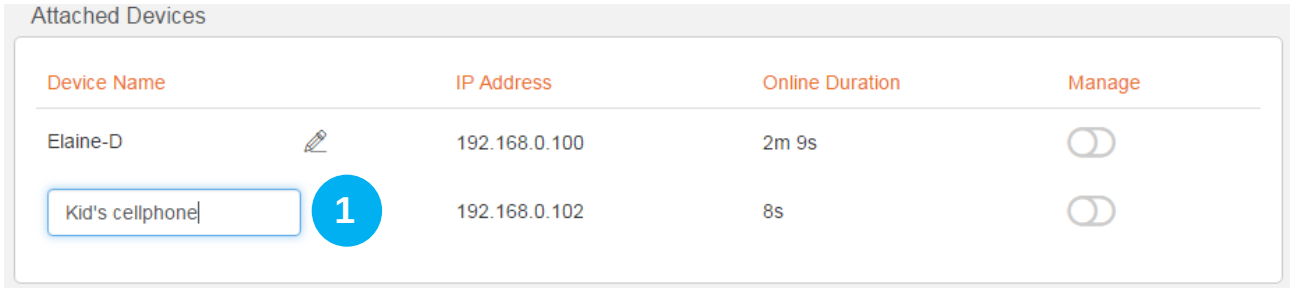
With Parental Controls, you can only allow your teenager to visit some specified sites and restrict access by time.

To control access to the Internet:

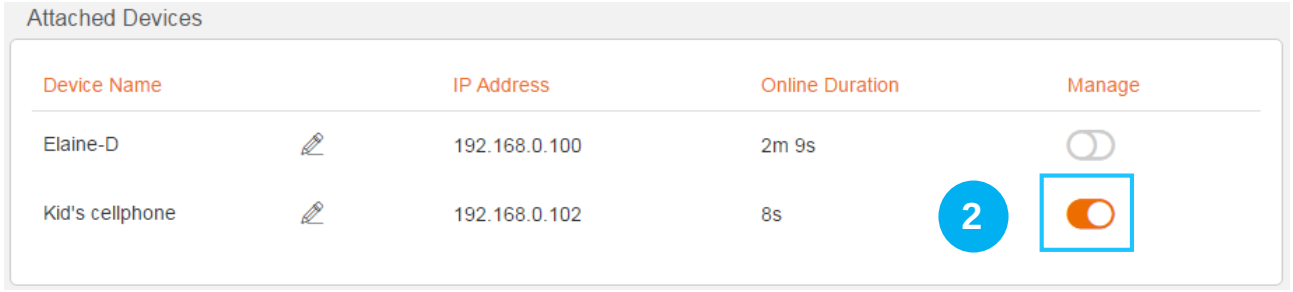
Log in to the Router's User Interface, and click **Parental Controls**.



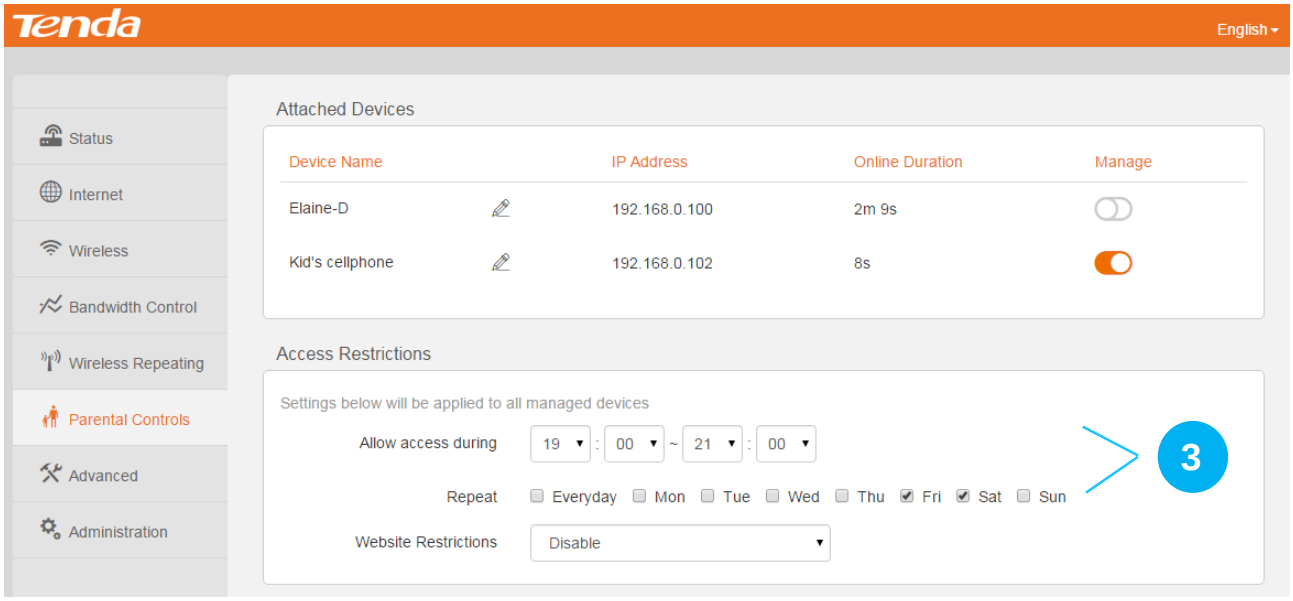
❶ Click the pen icon to customize a name for the device you want to control, for example: *Kid's cellphone*.



❷ Select the device you want to control, and click the **Manage** button to enable the feature.



❸ Select the time you allow your teenager to access the Internet, for example: *19:00~21:00*. And specify the days for repeat. Check the options before the days, such as *Friday and Saturday*.

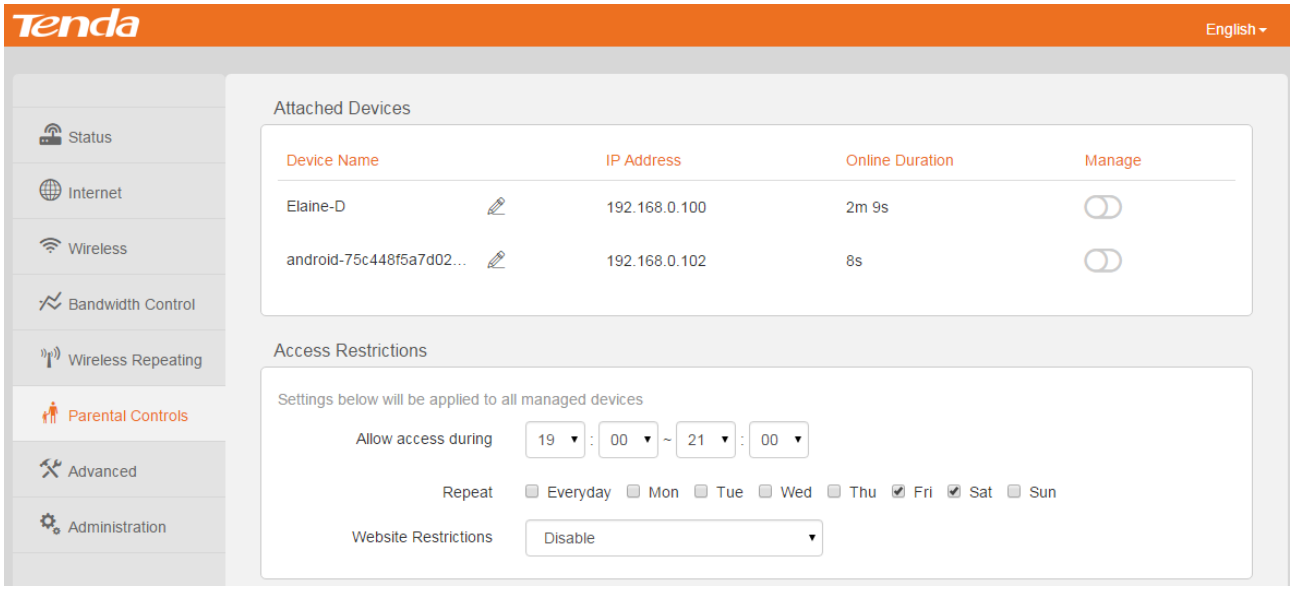


❹ Click **OK** on the bottom of the page.

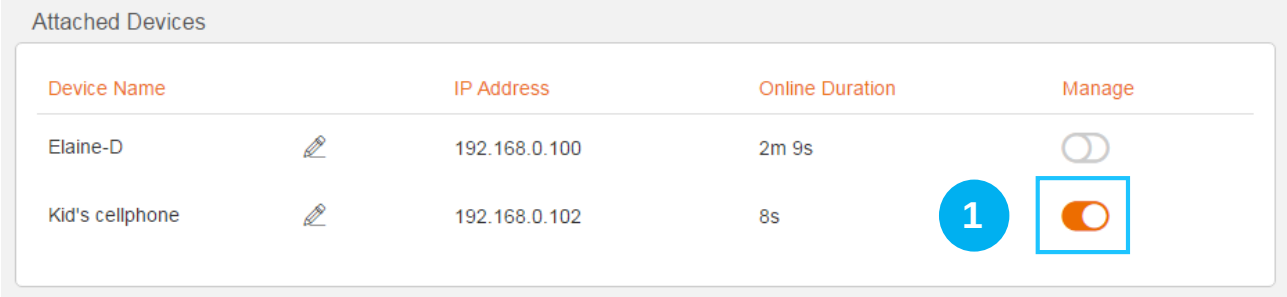
To use key words to allow Internet Websites

To block your teenager from visiting some inappropriate and dangerous sites, you can only allow them to visit the appropriate and safe Internet websites you specify or forbid them to visit the Internet sites you specify.

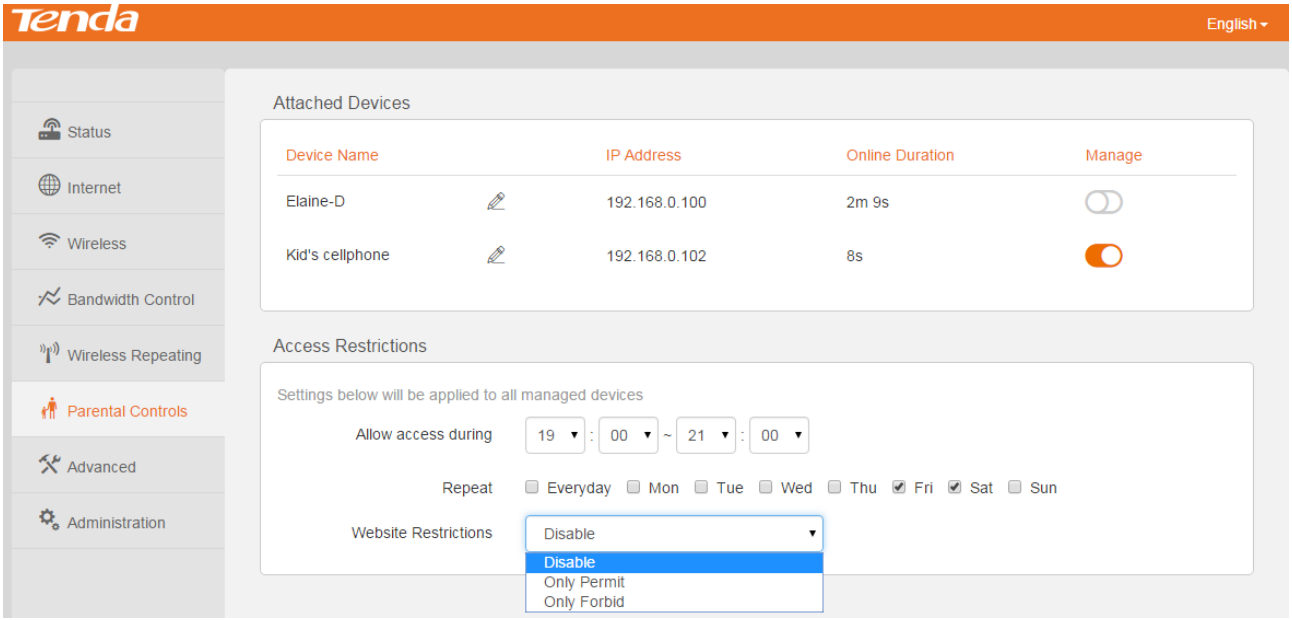
Log in to the Router's User Interface, and click **Parental Controls**.



❶ Select the device you want to control, and click the **Manage** button to enable the feature.



❷ Select **Only Permit** or **Only Forbid** according to your needs.

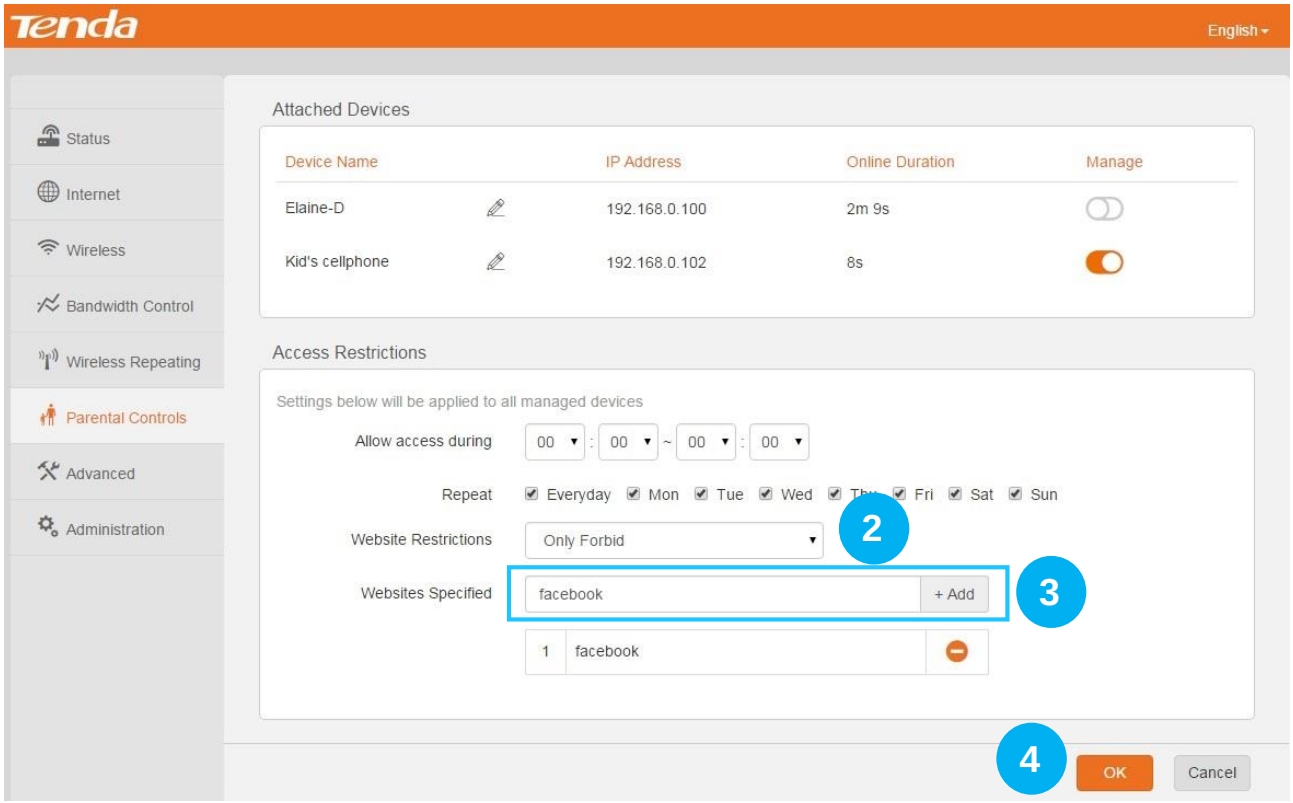


For example, you want to forbid your teenager to visit *facebook* website. Configure it as follows:

Select *Only Forbid* from **Website Restrictions**.

❸ Type *facebook* in **Website Specified** field, and click **Add**.

❹ Click **OK** on the bottom of the page to activate the settings.



When the settings take effect, your teenager cannot visit *facebook* website, and the websites that contain *facebook*.

7 Advanced

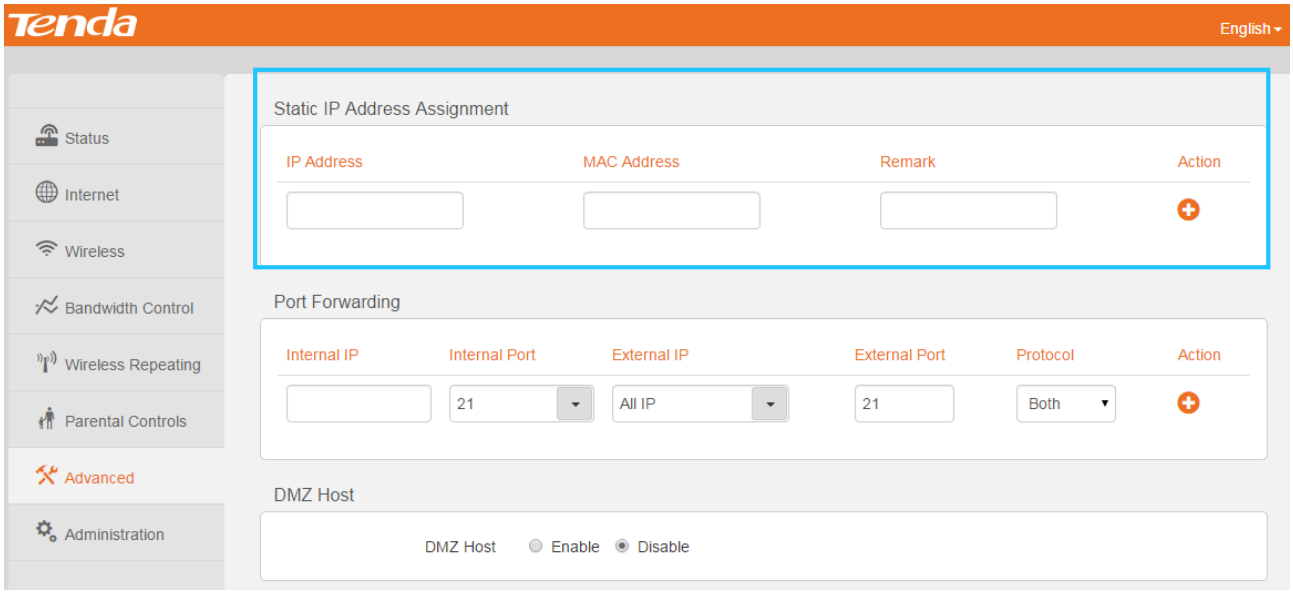
This section will explain more features such as: Static IP Address Assignment, Port Forwarding, DMZ Host, DDNS, and UPnP.

Static IP Address Assignment

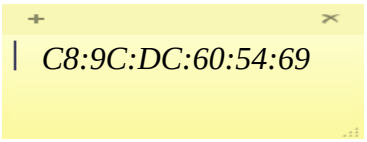
Some features, such as Bandwidth Control, Parental Controls, Port Forwarding, and DMZ Host, require the devices to have a static IP. Static IP address assignment feature can assign a static IP to a specified device manually for some IP-based features.

If you want your computer always to get a static IP address ***192.168.0.100***, follow the steps below:

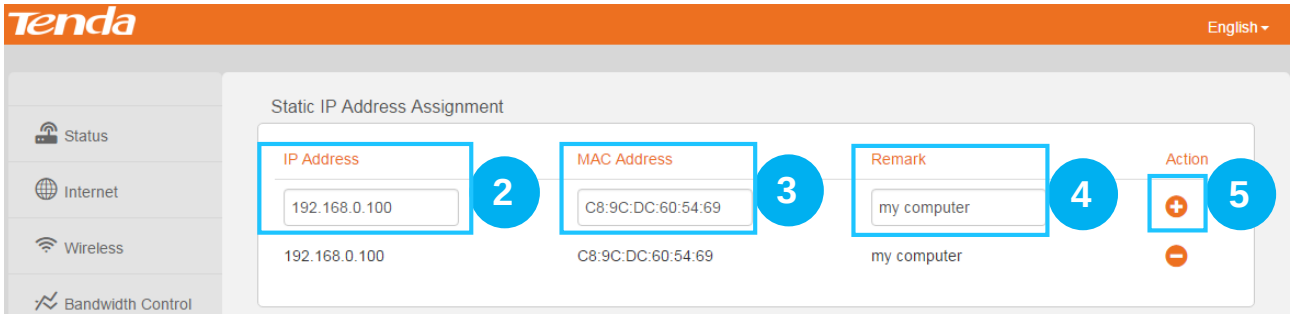
Log in to the Router's User Interface, and click **Advanced**.



❶ Make a note of the MAC address of your computer. Assume that it's *C8:9C:DC:60:54:69* here.



❷ Type *192.168.0.100* in **IP Address** field.



❸ Type *C8:9C:DC:60:54:69* in **MAC Address** field.

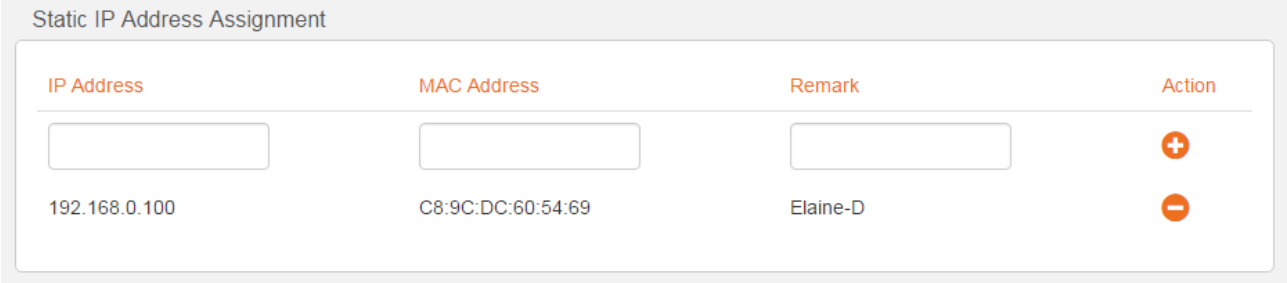
❹ Customize a name for your computer for easy recognition.

❺ Click the icon, and click **OK** on the bottom of the page to activate the settings.

When the settings take effect, your computer will always obtain the IP address *192.168.0.100*.

Tips:

1. When you set up some IP-based features, such as Bandwidth Control or Parental Controls, for a device, the device's MAC address will be attached to its current IP address automatically. You can see it in **Static IP Address Assignment** field. And this rule cannot be deleted.



2. If you want to detach an IP address from a device, click the icon, and then click **OK** on the bottom of the page to activate the settings.

Port Forwarding

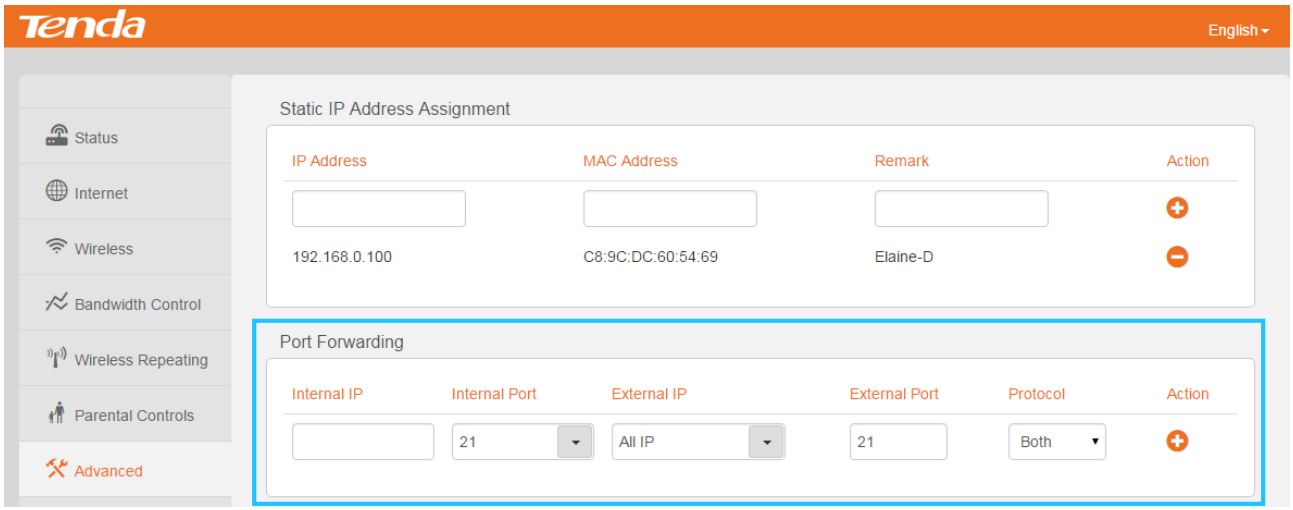
Port Forwarding feature helps you to direct network traffic from the Internet to a specific port of the device on your local network. If you have a server in your home network, you can allow certain types of incoming traffic to reach the server. For example, you might want to make a local web server or FTP server visible and available to the Internet.

Example

You have a FTP server (IP: 192.168.0.150) in your home network. When work in the company, you want to visit the resources on the FTP server.

Configuration

Log in to the Router's User Interface, and click **Advanced**.



❶ Type the IP address of the computer that established the FTP server *192.168.0.150*.

❷ Select the FTP server default port (21).

❸ If you know the WAN IP address (public IP address) of your company's network, select **Manual** in **External IP** pull-down list, and type it in the **External IP** box. If you don't know that, select **All IP**.

❹ When you select an internal port from the **Internal Port** pull-down list, the extranet port will be auto-filled. If you select **Manual**, you need to enter the external port manually, too.

❺ Select a protocol for the rule. If you don't know which protocol the rule will use, you can select **Both**.

❻ Click the icon, click **OK** on the bottom of the page to activate the settings.

Verification

When you're in the company, you can use your computer to access the FTP server by entering *"ftp://183.37.211.8:21"* in a browser.

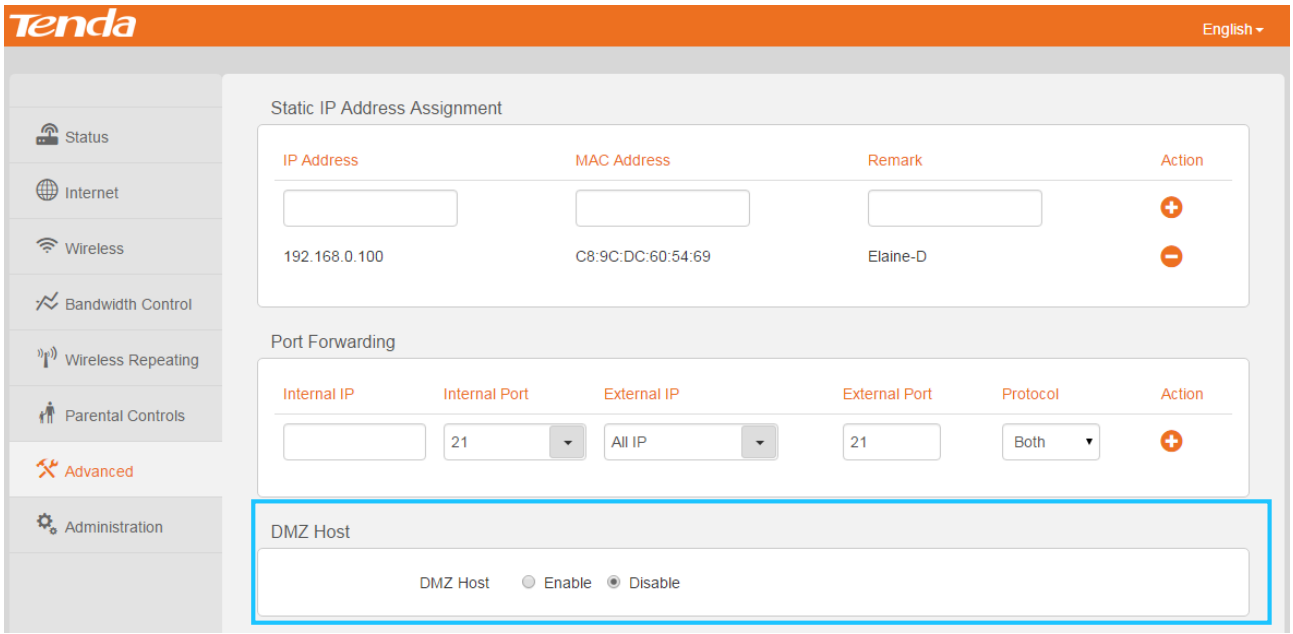
Note

1. For the stability of the feature, you'd better attach the IP address of your local server (Here in the example: 192.168.0.150) to the device established the FTP server. Please refer to Static IP Address Assignment for details.

2. You can use the public WAN IP address of the Router to access the FTP server remotely, but most people don't know it is or when this number changes as the public WAN IP of the Router is usually dynamic. To solve the problem, you can use the DDNS feature.

DMZ Host

The DMZ host allows a particular interface or computer to have a direct access to some special massages via the Router without any firewall or network address translator (NAT) to mask the true identity of the interface or computer. These special messages refer to an HTTP server or FTP server. Your Router contains its DMZ settings shown as the screenshot below.

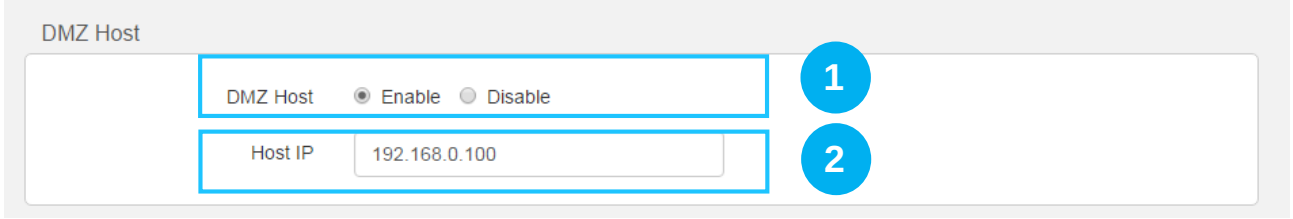


Example

You want to create a DMZ host in your computer for messages transmitting via the HTTP server.

Configuration

Login to the Router's User Interface, click **Advanced** to configure detailed settings.



❶ Select **Enable** button to enable the feature.

❷ Enter the IP address of your computer *(for example: 192.168.0.100 here. It is the IP address of the computer with DMZ host created)* in the **Host IP** field.

❸ Click **OK** on the bottom of the page to activate your settings.

Note

Once enabled, the DMZ host loses protection from the firewall and becomes vulnerable to Internet attacks. If you do not need to use DMZ host, disable it as soon as possible.

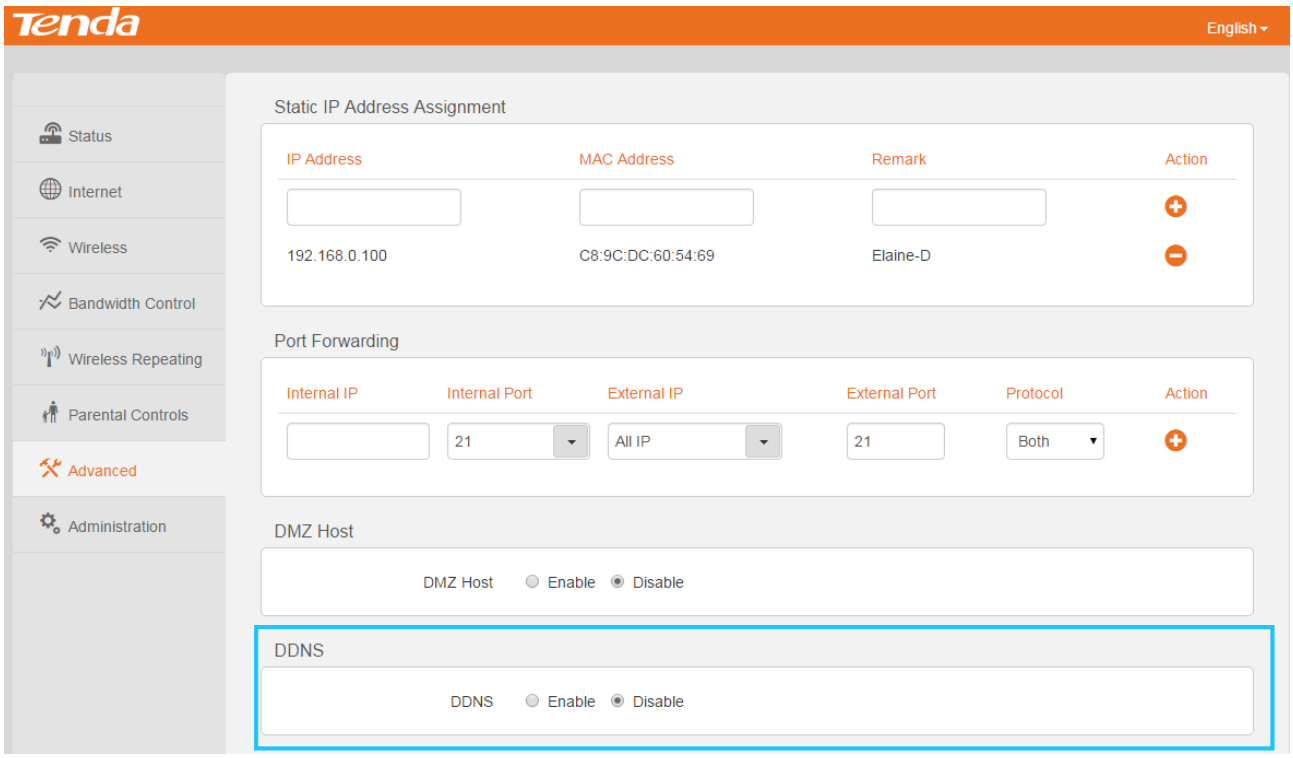
DDNS

Generally, Internet service providers (ISPs) assign IP addresses to identify each Internet account. Most ISPs use dynamically assigned IP addresses. It means that the IP address can change at any time. So when you use some WAN IP-based features, such as Port Forwarding, and etc., you cannot know the WAN IP of your Router. To solve the problem, you can use DDNS feature.

Register a free DDNS account, and set up your Router to use this account.

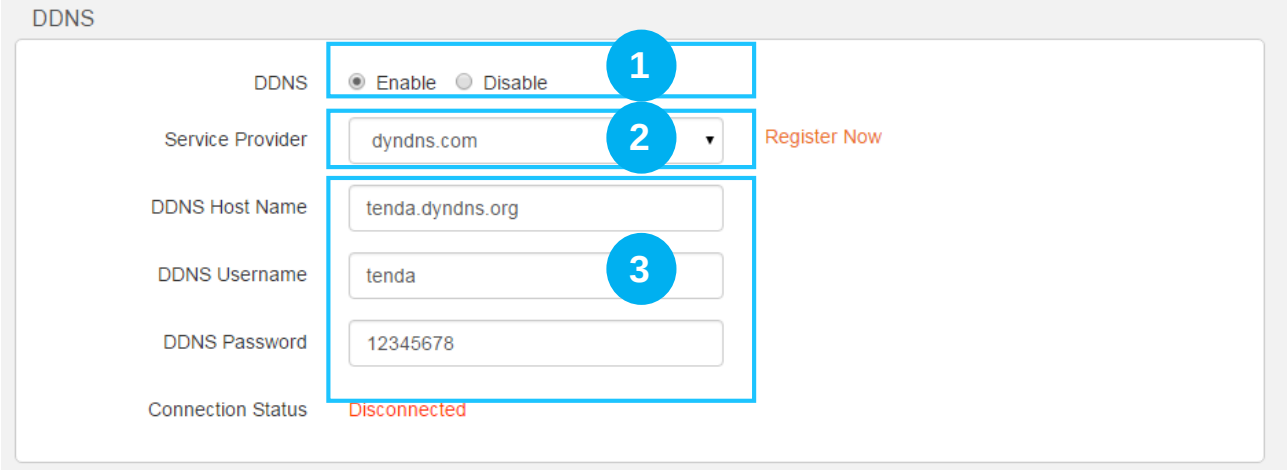
Configuration

Login to the Router's User Interface, click **Advanced**.



If you don't register a free DDNS account, click Register Now to get one.

If you already have a DDNS account, follow the steps below to set up the Router.



❶ Check the **Enable** option to enable the feature.

❷ Select the service provider of your DDNS account, *dyndns.org* here.

❸ Type the DDNS host name, username, and password in the corresponding boxes: *tenda*, *12345678* and *tenda.dyndns.org*.

❹ Click **OK** on the bottom of the page to activate the settings.

When it's connected successfully, you can use the domain name *tenda.dyndns.org* to replace the WAN IP address of the Router. For example, you can use *ftp://tenda.dyndns.org:21* instead of *ftp://183.37.211.8:21* to visit FTP server when you use Port Forwarding feature.

Note

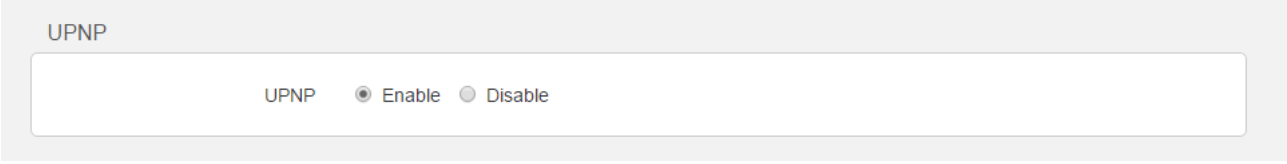
If your ISP assigns a private WAN IP address (such as 192.168.x.x or 10.x.x.x), the DDNS feature does not work because private addresses are not routed on the Internet.

UPnP

When UPnP is enabled on your Router, a network device possessing a specific purpose can be identified and used automatically by another computer or device in your network.

Log in to the Router's User Interface, and click **Advanced > UPnP**.

It is advisable to keep the default settings.

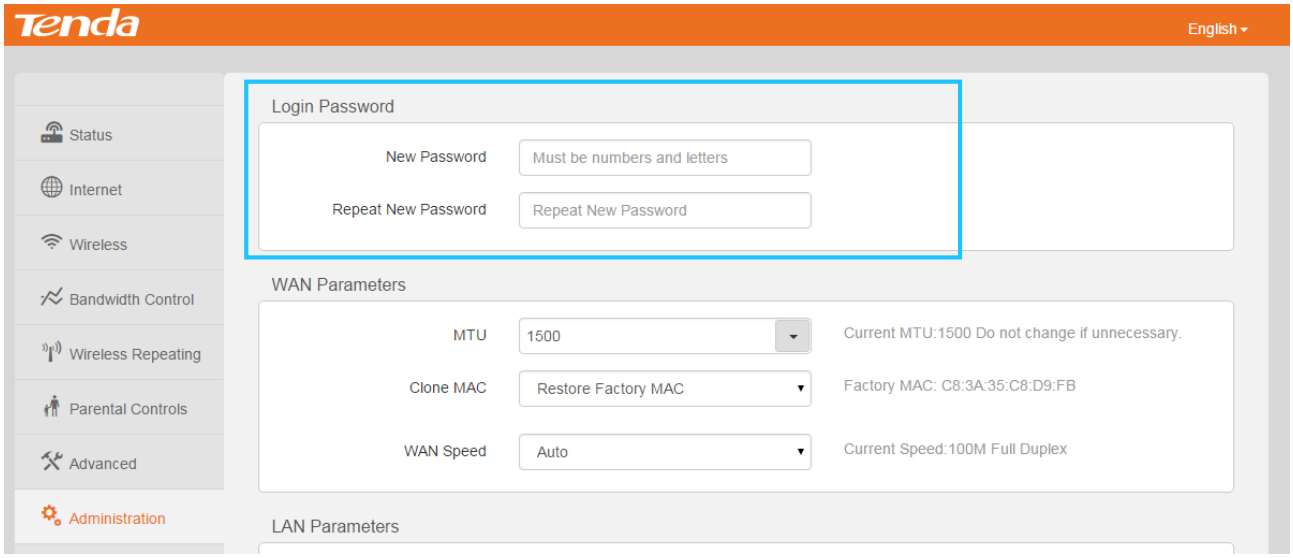


8 Administration

This section describes how to administer and maintain your Router and home network.

Login Password

To secure your network, you'd better change the login password termly.



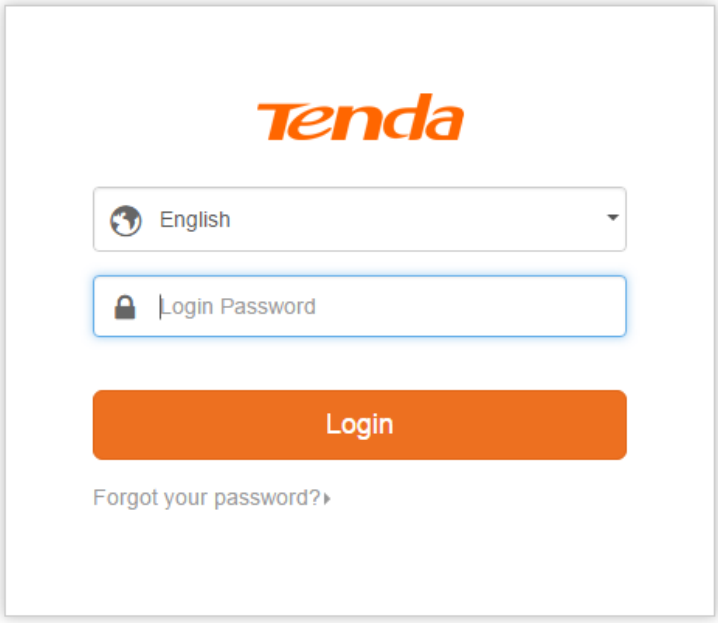
To set up a login password:

❶ Type a password (5-32 characters) in **New Password** field.

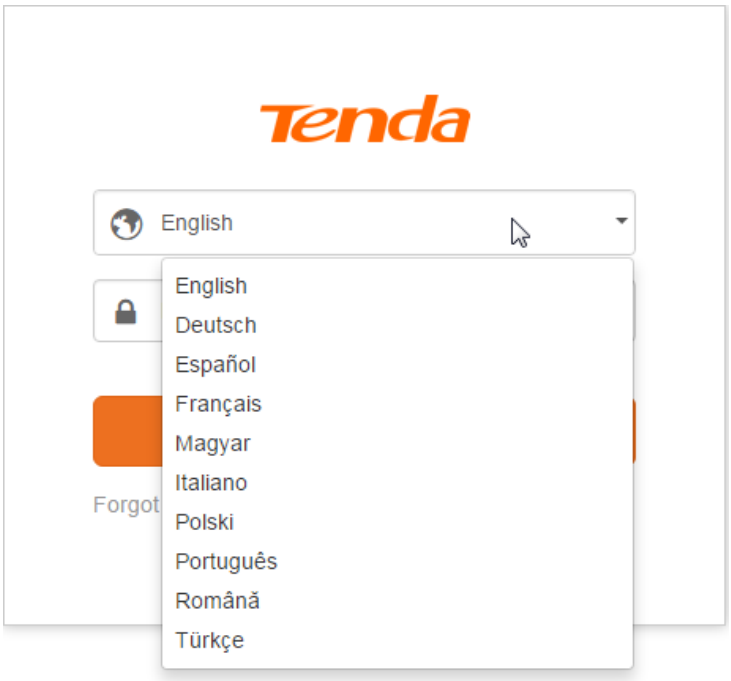
❷ Type the password again in Repeat New Password to confirm it.

❸ Click **OK** on the bottom of the page to activate the settings.

After you set up a login password, a password is required when you log in to the Router's User Interface.

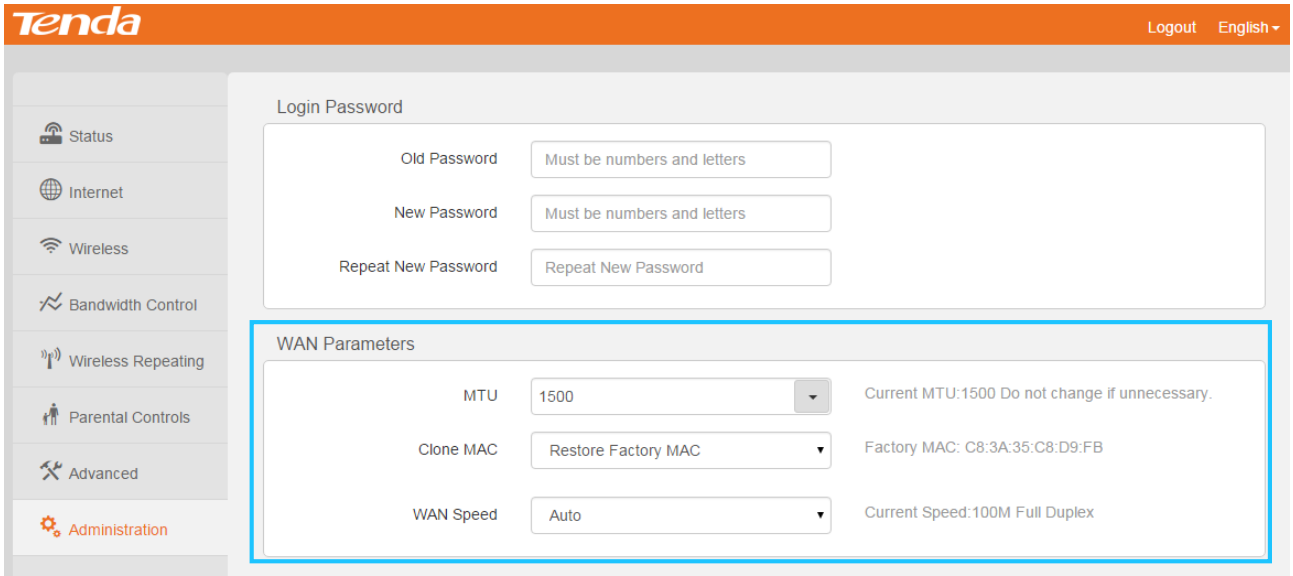


Here you can select a language according to your needs.



WAN Parameters

Log in to the Router's User Interface, and click **Administration**.



MTU

Do not change the default value unless necessary. If you are unable to open some website, to receive or send emails, etc., try to minimize the MTU value until your network returns to normal.

MTU	Applications
1500	Typical for connections that do not use PPPoE or VPN
1492	Used in PPPoE environments.

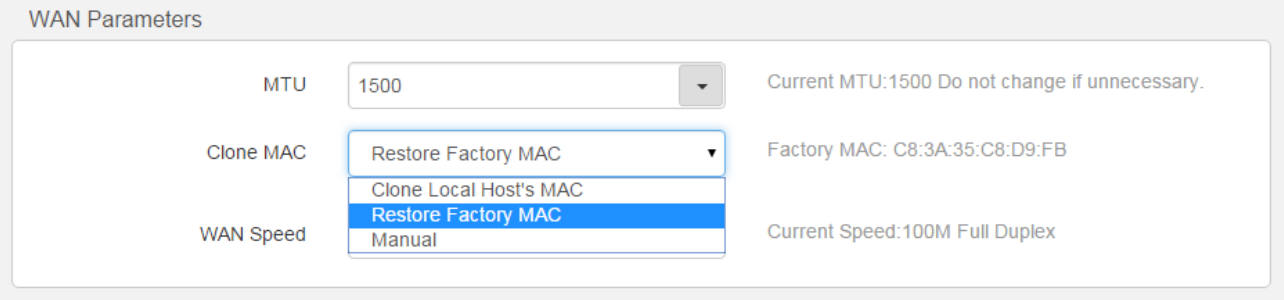
1472	Maximum size to use for pinging. (Larger packets are fragmented.)
1468	Used in some DHCP environments.
1436	Used in PPTP environments or with VPN.

Tips

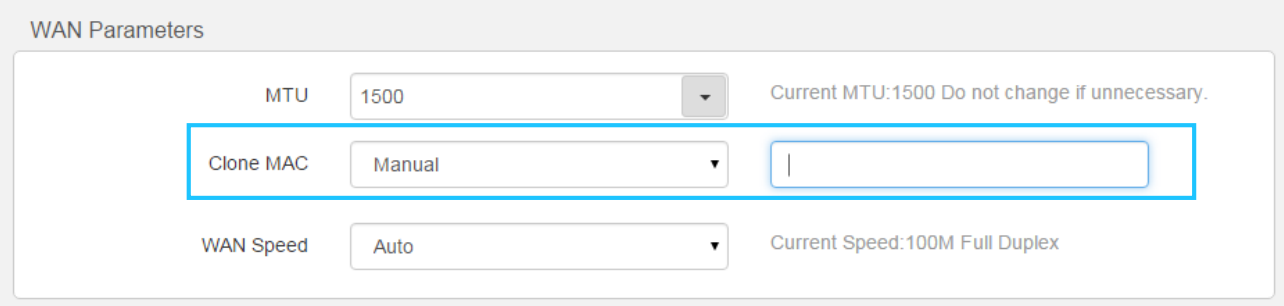
An incorrect MTU setting can cause Internet communication problems. You might not be able to access certain websites, secure login pages, or FTP or POP servers.

Clone MAC

Some ISPs will bind your broadband account info and a specified MAC address of your computer together. If you can only access the Internet with a specified computer without a Router, you can try cloning MAC address for normal Internet access. By default, it clones the factory MAC address (the MAC address of the router). If you want to clone the MAC address of the current attached computer, select **Clone Local Host's MAC** and click **OK** on the bottom of the page.



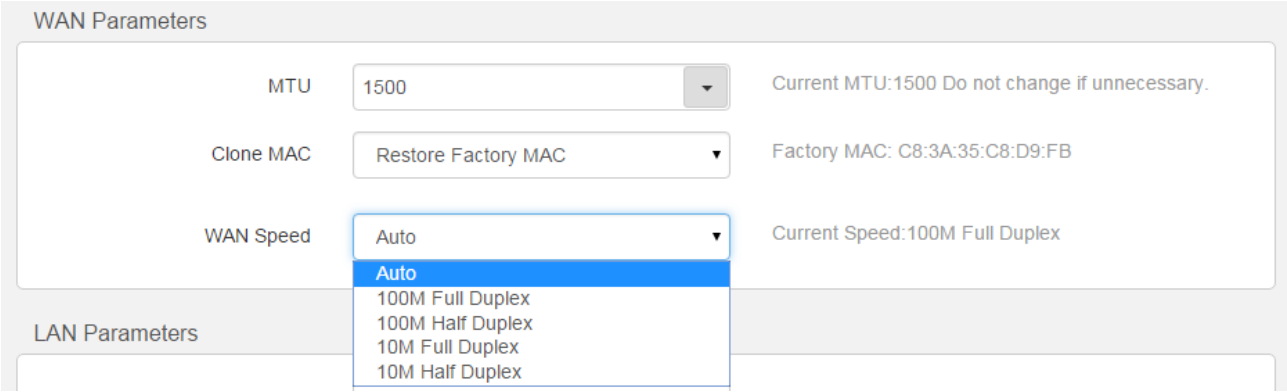
If you want to clone other MAC address, or change the Router's MAC address, select **Manual** and type the Mac address in the following box.



WAN Speed

By default, the WAN rate is **Auto**. Generally, it is not advisable to change the default value. When the cable length between your Router and the remote device (modem, Router, etc.) is relatively long,

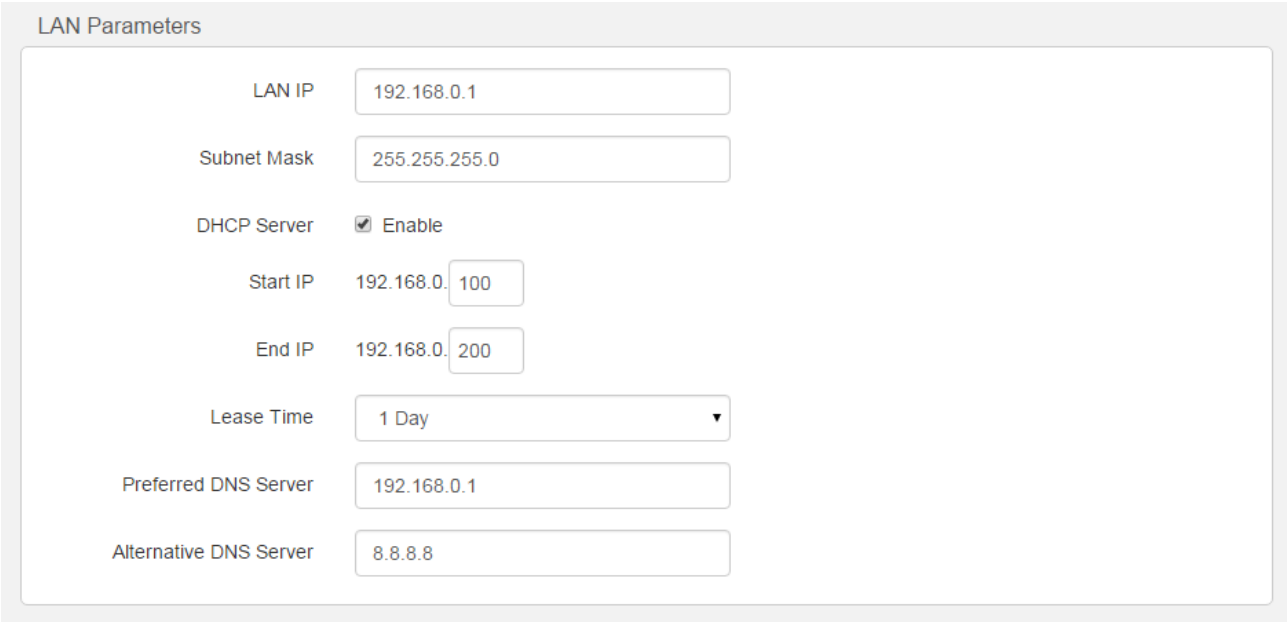
you can set WAN rate to 10M FDX or 10MHDX to enhance transmission rate.



LAN Parameters

Here you can change the LAN IP address, enable/disable DHCP server, or specify the LAN IP address pool and the lease time.

Log in to the Router's User Interface, and click **Administration**.



LAN IP & Subnet Mask

Here you can customize a LAN IP for your Router.

When you use the wireless repeating feature, you might need to change the LAN IP address in case there is an IP conflict between the LAN IP of the Router and base station.

The Subnet Mask indicates the network number of the LAN IP address.

DHCP Server

DHCP server can automatically assign the broadband service information (IP Address, Subnet Mask,

Gateway and DNS Server Address) to the computer or smartphone, or other devices in your network wirelessly or via Ethernet cables. Do not disable this function until you want to configure the IP address manually for each device in your network by yourself.

Tips

The DHCP Server option will be unchecked automatically when you use the Universal Repeater feature.

Start and End IP

When the DHCP server is enabled, the Router will assign IP addresses to the attached devices. Start and End IP address indicate the range of their IP addresses.

Lease Time

Select the lease time of the IP assigned automatically, say **1 day**. When the lease time is used up, the IP will renew automatically. So you don't need to reset it manually.

Preferred DNS Server & Alternative DNS Server

The Preferred DNS and Alternative DNS server are usually the auto-filled when your connection type is Dynamic IP or PPPoE. If your connection type is Static IP, the Preferred DNS and Alternative DNS server info will be provided by your Internet Server Provider (ISP). You can also change them in this field if it is required.

Remote Web Management

This section can help you to manage your Router remotely.

Example

You want to manage your home network when you are in the company. Assume that the WAN IP address of your company's network is ***202.165.100.105***, and it is a **public IP** address (because private addresses are not routed on the Internet). And your Router at home is working properly, the WAN IP is ***190.136.2.5***, and it's a **public IP** address as well.

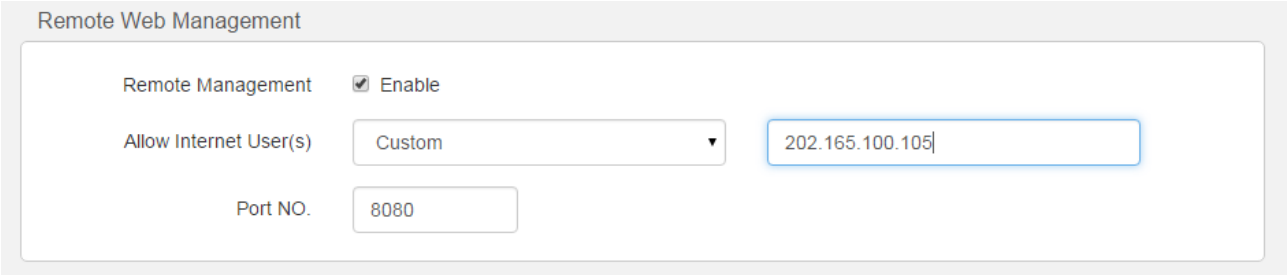
Now configure the Router to provide remote web management.

Configuration

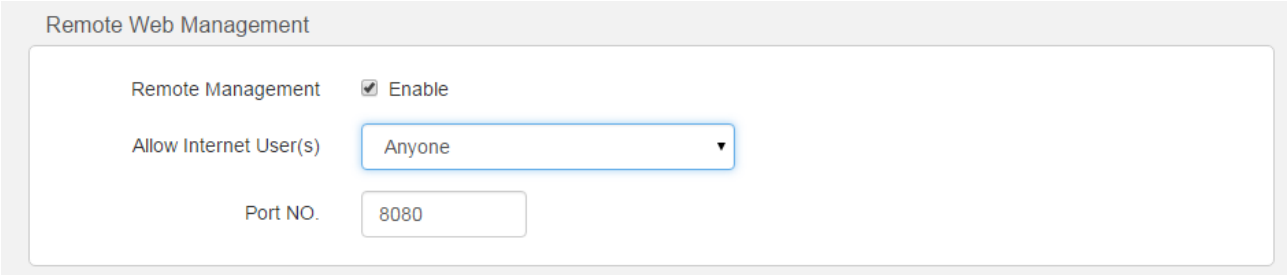
Log in to the Router's User Interface, and click **Administration**.

❶ Check the **Enable** option to enable the feature.

❷ Select **Custom** and type the remote IP Address in the box: *202.165.100.105* here.



If you don't know the WAN IP of your company's network, you can select Anyone here.

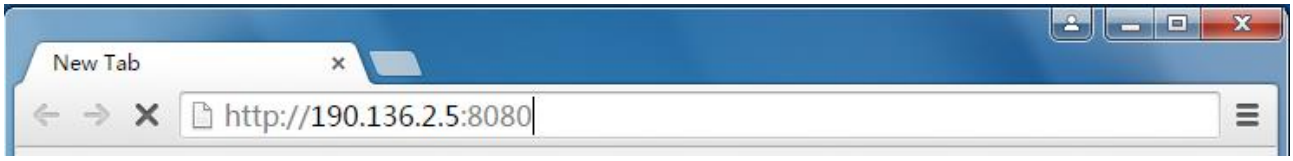


❸ 8080 is the default port number of remote Web management. Don't change the default settings if unnecessary.

❹ Click **OK** on the bottom of the page to activate the settings.

Verification

When you're in the company, you can use your computer to access your Router's User Interface by entering *http://190.136.2.5:8080* in a browser.



Remote Web Management + DDNS

However, in the example above, the WAN IP of the Router in your home may be dynamic. You can give the WAN IP a static host name via DDNS to maintain the connection between your Router and the computer in your company. Go to "DDNS" for details to configure a username, password, and domain name.

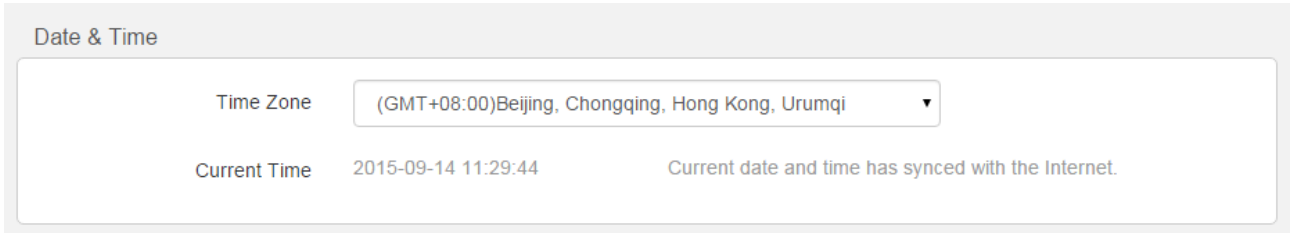
Assume you signed up an account *tenda01.dyndns.org* from dyndns.org, the username is *tenda01*, and the password is *1234567890*.

After you bind a static hostname to the WAN IP, when you're in the company, you can also access

the Router's User Interface by entering *http://tenda01.dyndns.org:8080* in a browser of your computer in the company.

Date & Time

Log in to the Router's User Interface, and click **Administration**.



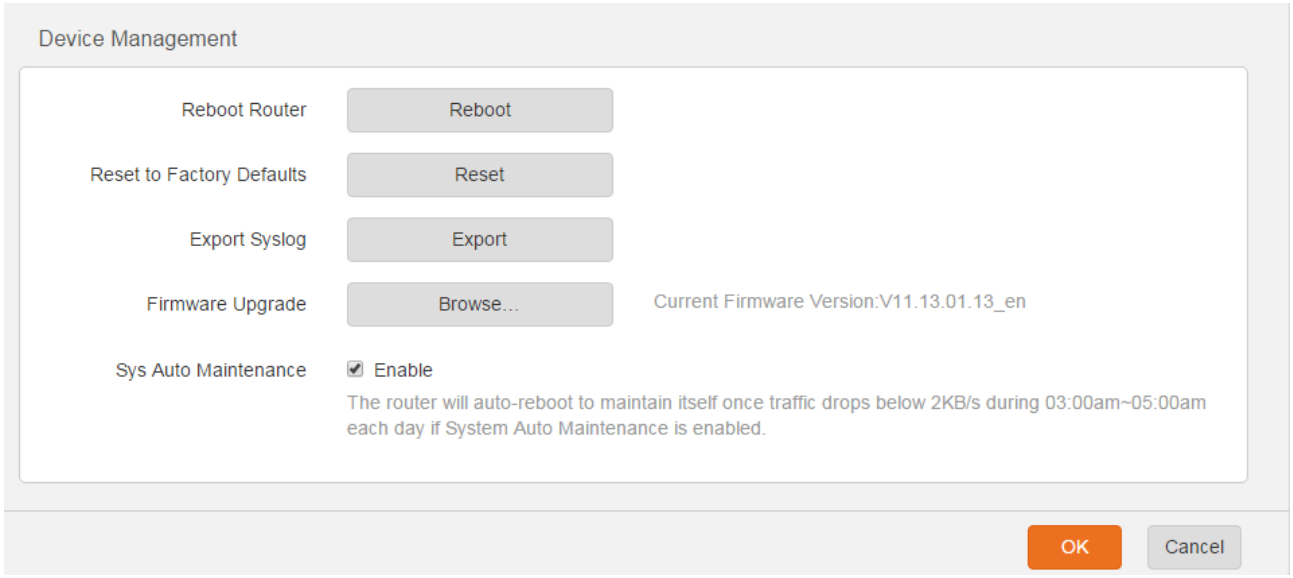
This part is used to set the Router's system time. The Router can auto-recognize your computer's time zone. You can also select your time zone. When the Router accesses the Internet, you will get the GMT time from the Internet and the system will automatically connect to NTP server to synchronize the time.

Tips

To make some time-based features (e.g. WiFi Schedule, and Parental Controls) effective, the time should be set correctly.

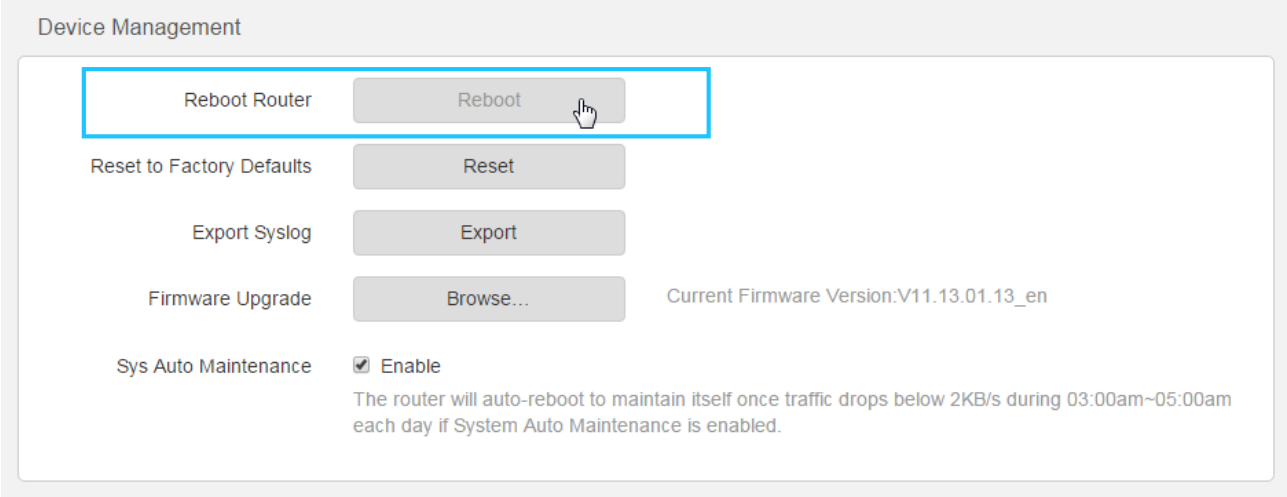
Device Management

Log in to the Router's User Interface, and click **Administration**.



Reboot Router

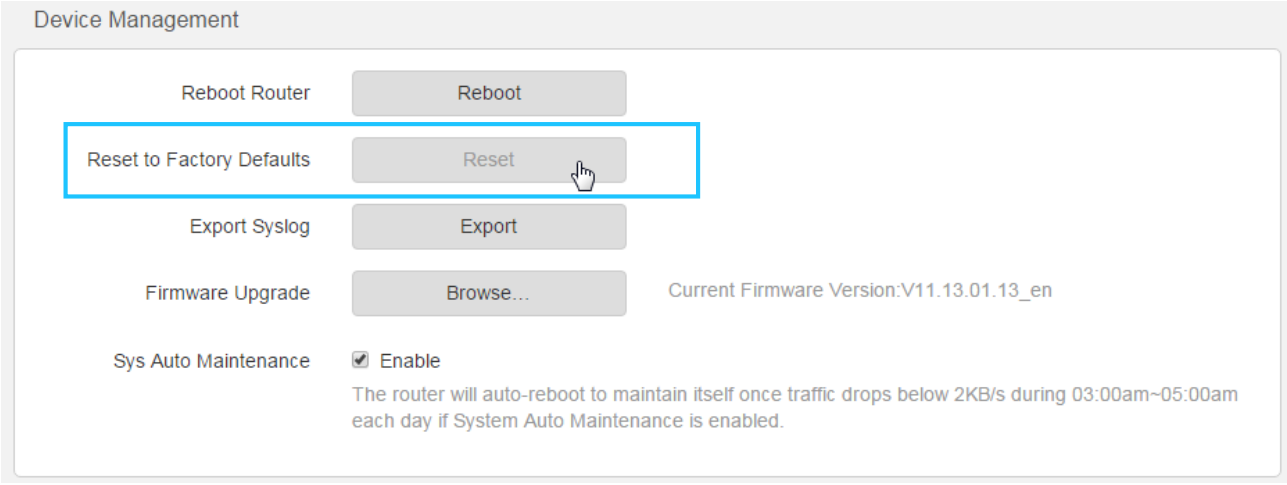
Rebooting the Router will activate any modified settings on the Router. When the parameters you set cannot take effect or the Router cannot be used normally, please try rebooting your Router to solve these problems. Note that when the Router is rebooting, do not power off any relevant devices (Router, computer, etc.).



Reset to Factory Defaults

Here you can restore this Router to factory default. Two methods are available here.

Method One: Log in to the Router's User Interface, click **Administration**, and click **Reset**.



Method Two: Press and hold the **RST** button on the back panel of the Router for about 8 seconds and then release it to reset the Router to factory default settings.

Note

1. During the restoration, do not disconnect the power of the Router and other relevant devices.
2. Strongly recommend you not to restore the Router, unless the following sequence appears:

• You have to access the Router but you cannot remember the login name and password.

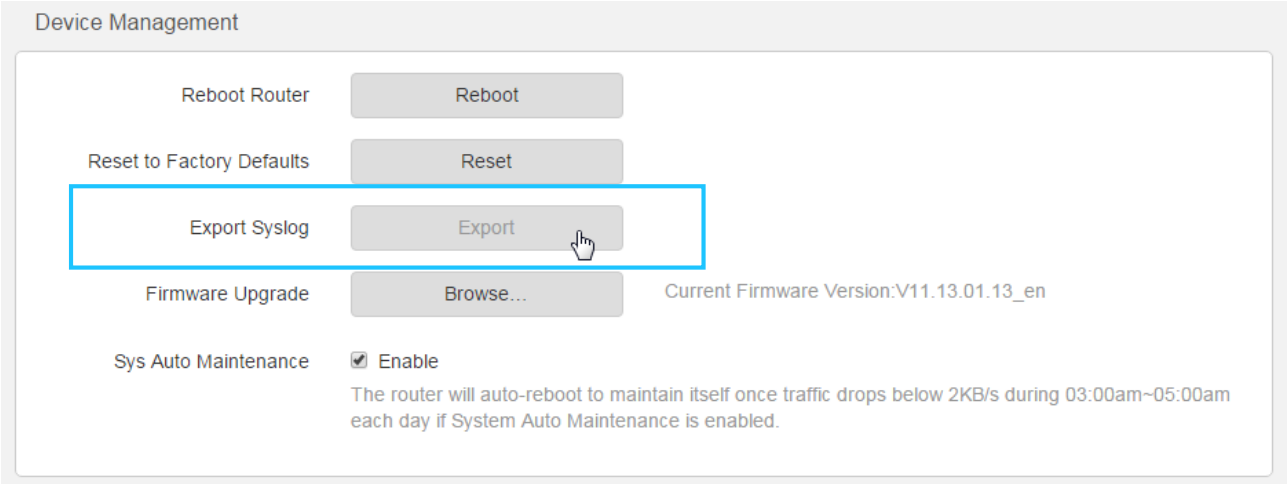
• Your Router does not work well, and you want to reconfigure it by following the Setup Wizard.

• You cannot access the Internet, and Tenda technical support recommends you to restore to factory default.

Export Syslog

If you want to have a good knowledge of system operation, or when you have difficulties in surfing the Internet, you need to send your system logs to Tenda technical supporters, you can go to this field to export your Royer's syslog.

Just click **Export**, then the syslog will be downloaded to your computer.



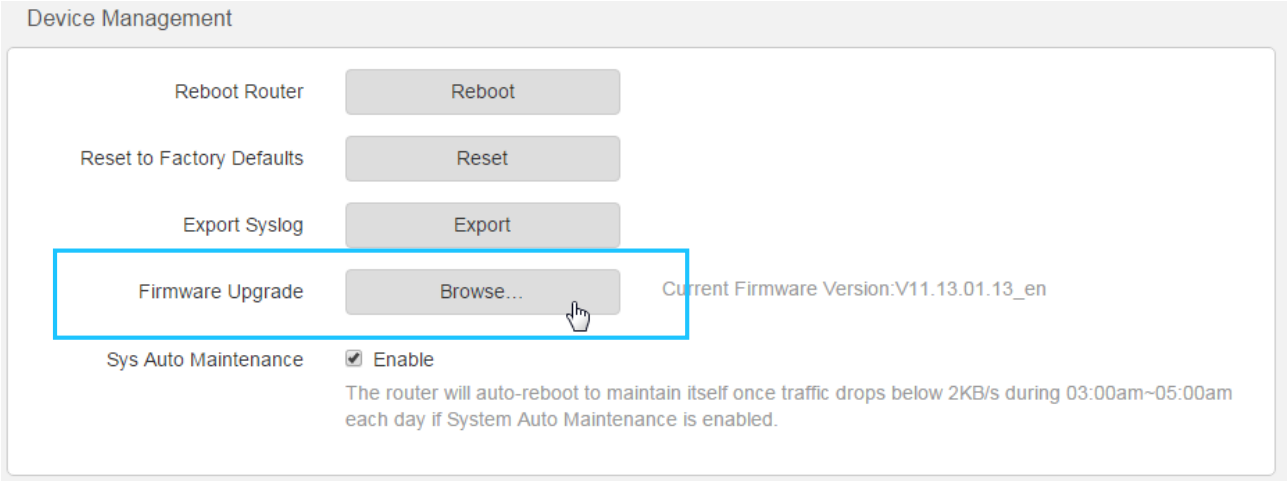
Firmware Upgrade

Tenda official website offers the latest software version for your Router. Follow steps below to upgrade the device if you want.

Configuration

❶ Download the firmware file from Tenda official website http://www.tendacn.com, save and unzip it to your local computer.

❷ Click **Browse…** to locate and select the upgrade file (*.bin* file) you saved.



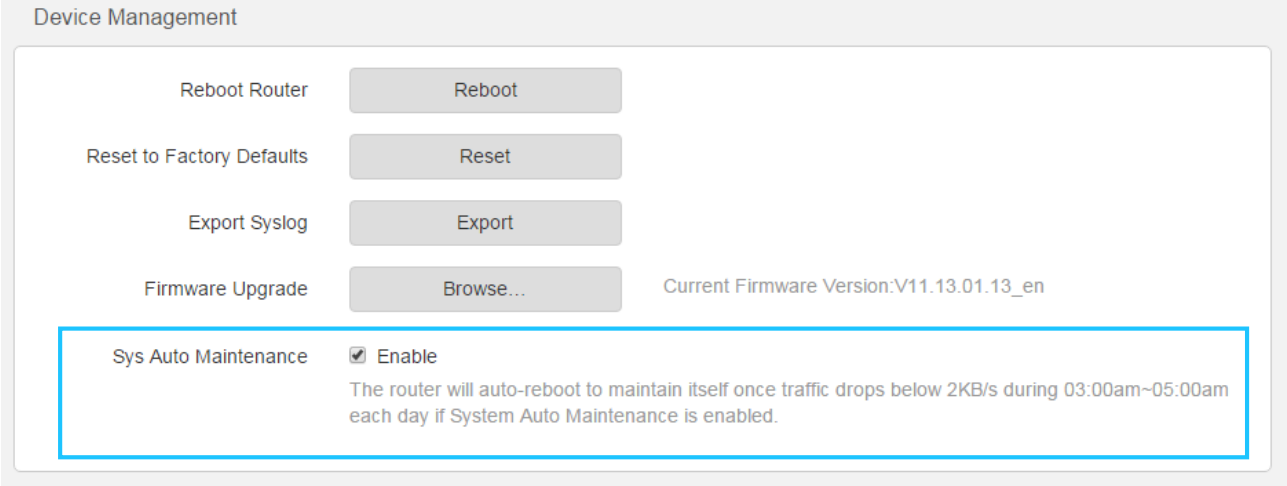
❸ Click **OK** on the pop-up window to start the upgrade process.

Note

While upgrading, verify that your computer is connected to the Router with an Ethernet cable, and the Router and your computer are kept with power supply. If not, damage might be done to the Router.

Sys Auto Maintenance

Auto Maintenance helps you to maintain your Router, improve your Router's performance and extend the Router's lifecycle. So keep the **Enable** option be checked if unnecessary.



IV Appendix

This Chapter provides you with more information about how to configure your computer, common questions and answers, and etc.

This section contains the following items:

1 Configure Your Computer

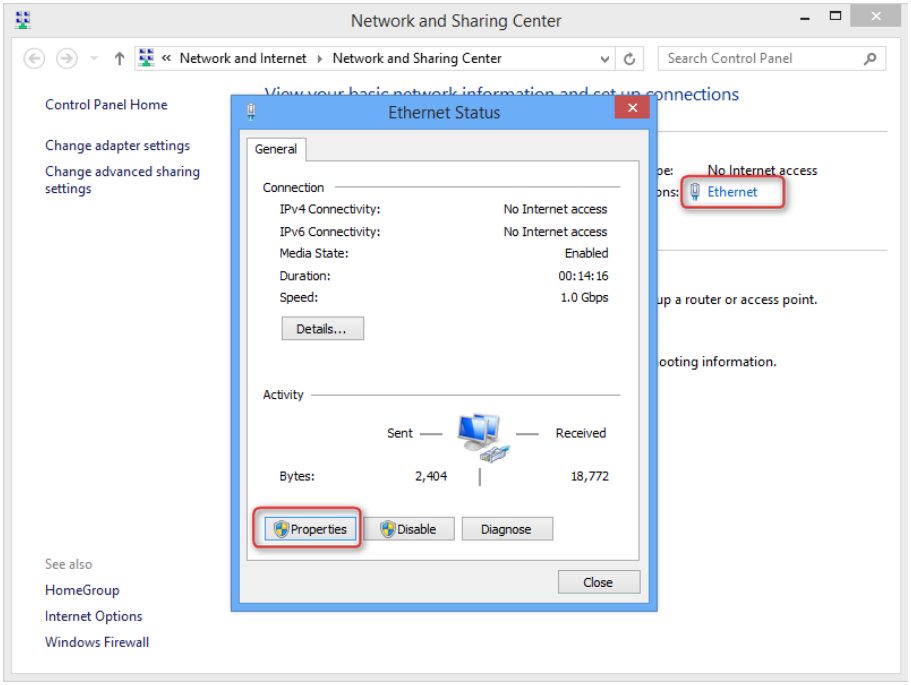
Windows 8

1 Right click the icon on the bottom right corner of your desktop. Click **Open Network and Sharing Center**.

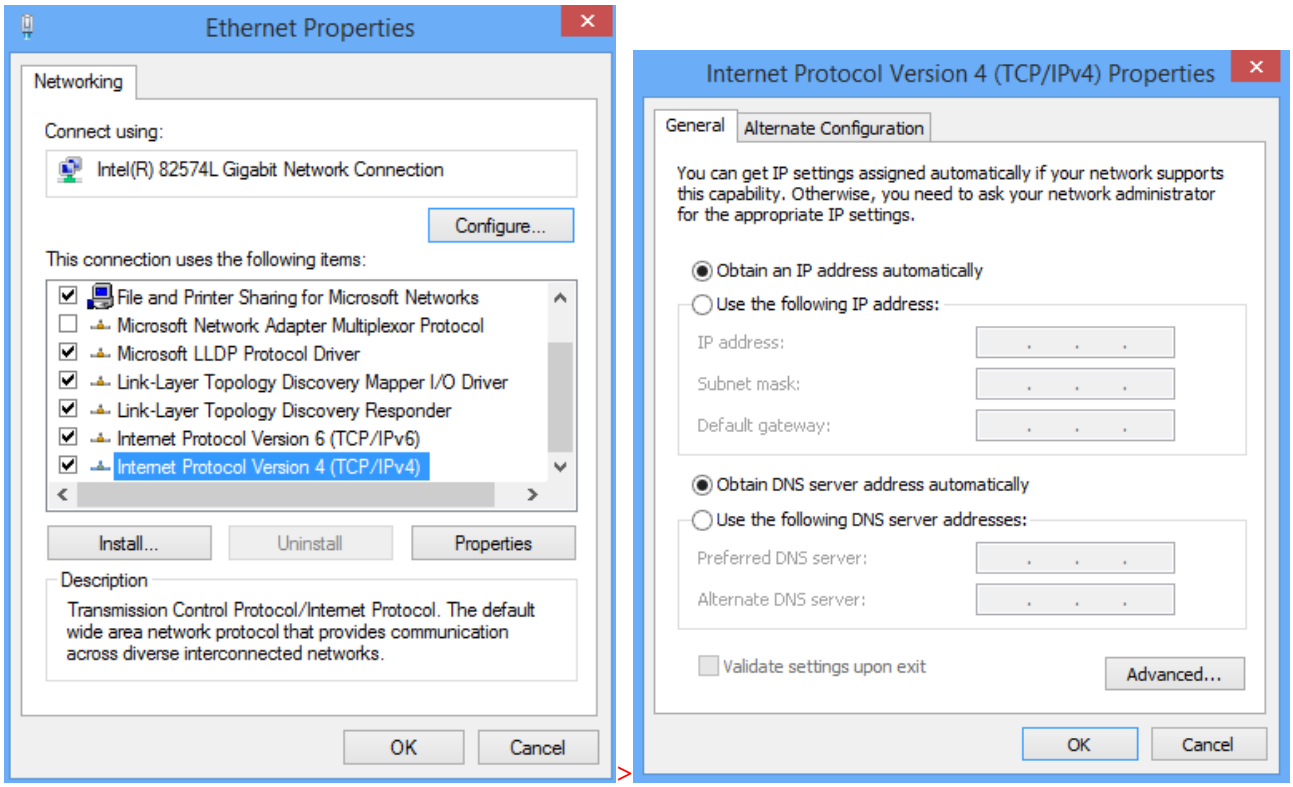
Tips

If you cannot find the icon, please move your cursor to the top right corner of your desktop, select **Settings > Control Panel > Network and Internet > Network and Sharing**.

2 Click **Ethernet > Properties**.



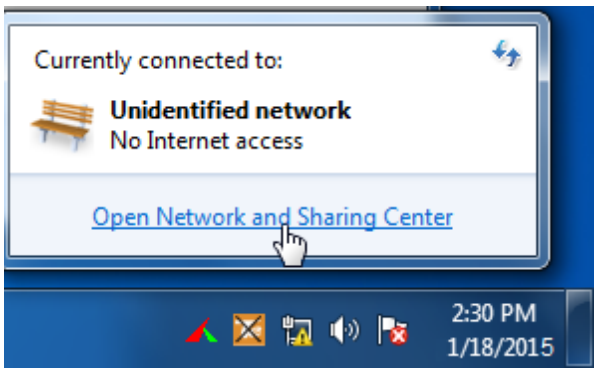
3 Find and double click **Internet Protocol Version 4(TCP/IPv4)**. Select **Obtain an IP address automatically** and **Obtain DNS server address automatically** and click **OK**.



4 Click **OK** on the **Ethernet Properties** window (see 3 for the screenshot).

Windows 7

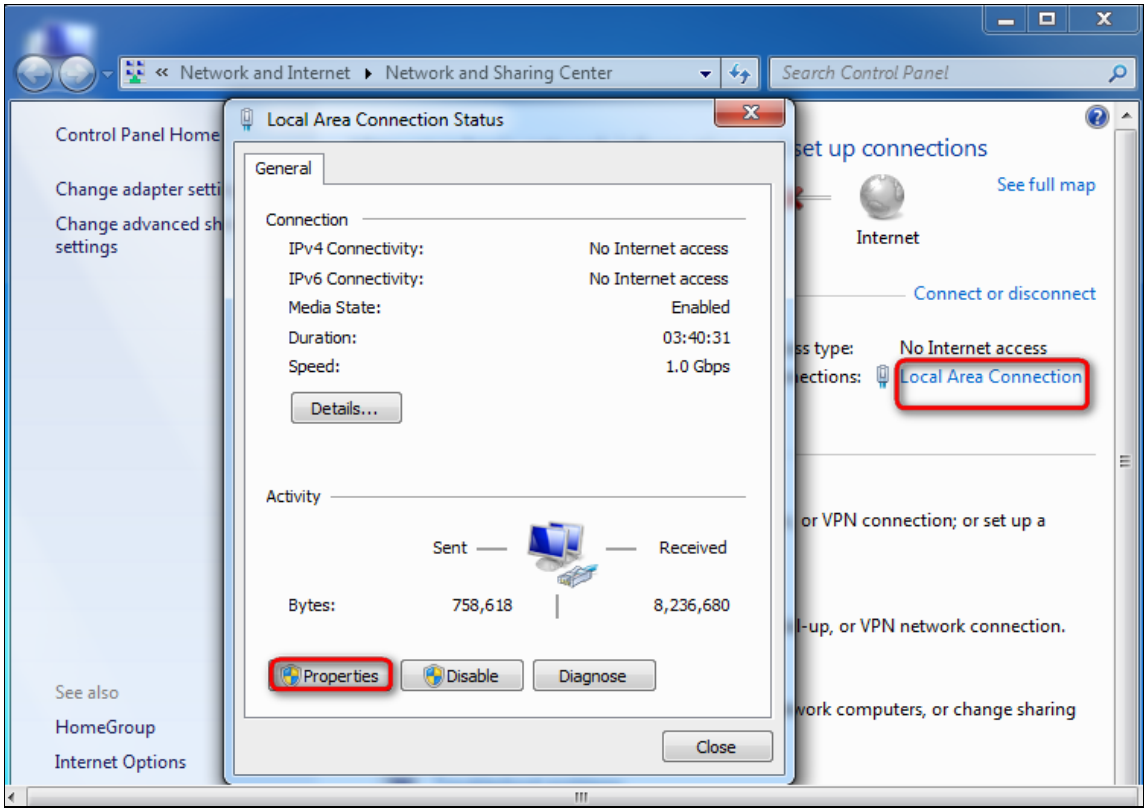
1 Click the icon on the bottom right corner of your desktop. Click **Open Network and Sharing Center**.



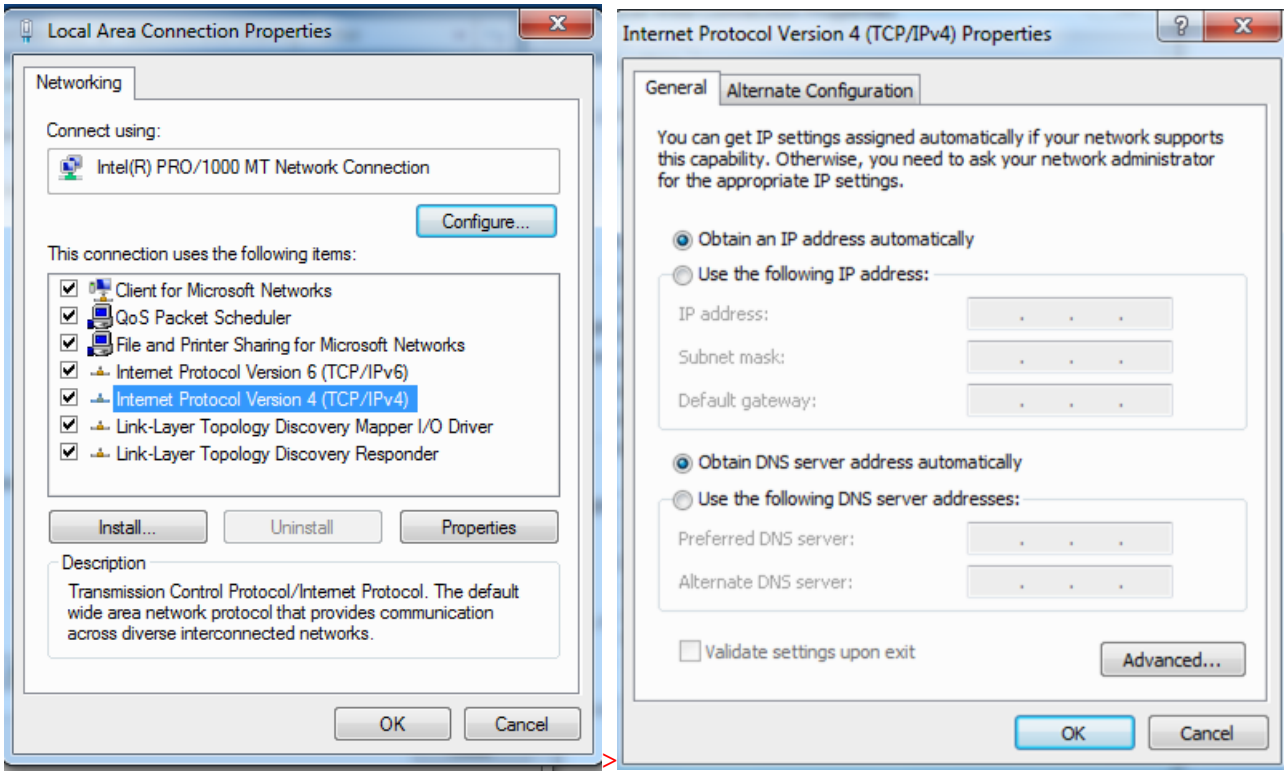
Tips

If you cannot find the icon on the bottom right corner of your desktop, follow steps below: Click **Start > Control Panel > Network and Internet > Network and Sharing Center**.

2 Click **Local Area Connection > Properties**.



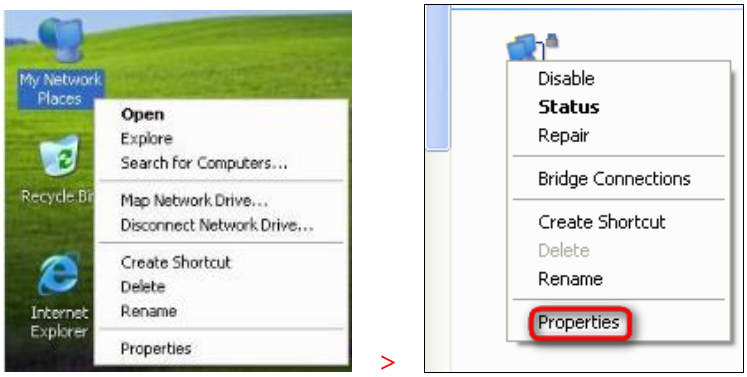
3 Find and double click **Internet Protocol Version 4(TCP/IPv4)**. Select **Obtain an IP address automatically** and **Obtain DNS server address automatically** and click **OK**.



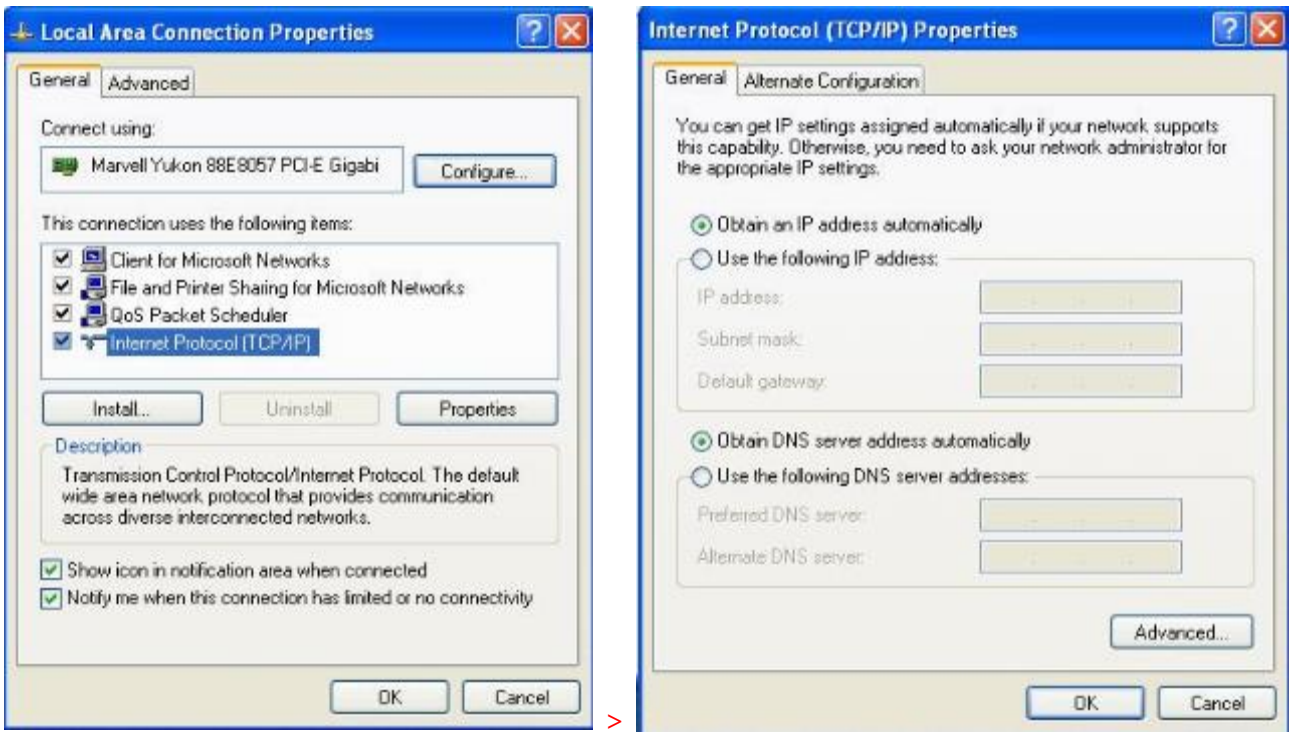
4 Click **OK** on the **Local Area Connection Properties** window (see 3 for the screenshot).

Windows XP

1 Right click **My Network Places** on your desktop and select **Properties**. Right click **Local Area Connection** and select **Properties**.



2 Scroll down to find and double click **Internet Protocol (TCP/IP)**. Select **Obtain an IP address automatically** and **Obtain DNS server address automatically** and click **OK**.



3 Click **OK** on the **Local Area Connection Properties** window (see 2 for the screenshot).

2 FAQs

Read the following **Frequently Asked Questions** if you are running into problems.

Q1: I cannot log in to the wireless router's User Interface. What should I do?

A1: Please follow the instructions below step by step.

a. Verify the Ethernet cable between your computer and the router is intact and well-connected. If not, use another Ethernet cable.

b. Clear cache of your browser, or open another web browser.

c. Double check the TCP/IP settings on your computer. Verify if it is set to obtain an IP automatically.

d. Press and hold the **WPS/RST** button for about 8 seconds, and then release it to restore factory settings; then try to login again.

e. Try to login on another computer, smart phone or iPad.

Q2: I forget my WiFi password, what should I do?

A2: Please follow the instructions below step by step.

a. Log in to the wireless router's User Interface, and find **Wireless > WiFi Name and Password**.

b. If you also forget the login password unfortunately, restore the router to factory default, and set up a WiFi password and a login password again. There are no WiFi password and login password by default.

Restore Method: Press and hold the **WPS/RST** button for about 8 seconds and then release it.

Q3: I cannot access the Internet after completing the configuration according to the instructions. What should I do?

A3: Please follow the instructions below step by step.

a. Please check the connection and verify if it is well-connected.

b. Check whether you can access the Internet by connecting to the modem directly (without the router). If not, please double check the configuration of your modem or consult your ISP.

3 Technical Support

If you still have some problems, please contact our technical support.

Country	Hotline
Global Hotline	(86) 755-27657180
United States	1-800-570-5892
Australia	1300787922
New Zealand	800787922
HongKong	00852-81931998
Canada Hotline	1-888-998-8966

Type	Details
Skype	Tendasz
Website	http:// www.tendacn.com
E-mail	support@tenda.com.cn

4 Safety and Emission Statement

CE Mark Warning

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures. This device complies with EU 1999/5/EC.

NOTE: (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.

FCC Statement

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

— Reorient or relocate the receiving antenna.

— Increase the separation between the equipment and receiver.

— Connect the equipment into an outlet on a circuit different from that to which the receiver is

connected.

— Consult the dealer or an experienced radio/TV technician for help.

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

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

NOTE: (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.

NOM

<table>
<tr><td>Producto</td><td colspan="2">NOMBRE DEL PRODUCTO:
Router Inal ámbrico N300 de Alto Poder
MODELO: FH456</td></tr>
<tr><td colspan="2">Alimentador de Energ á:
Alimentaci ón: 100-240 ca 50/60Hz, 0.3A
Salida: 9V cc 0.6A</td><td rowspan="2">NOM NYCE</td></tr>
<tr><td colspan="2">PAIS DE ORIGEN: CHINA</td></tr>
</table>

LA OPERACI óN DE ESTE DISPOSITIVO ESTA SUJETA A LAS SIGUIENTES CONDICIONES:

a) Es posible que este equipo o dispositivo no cause interferencia perjudicial.

b) Este equipo o dispositivo debe aceptar cualquier tipo de interferencia, incluyendo la que pueda causar su operaci ón no deseada.

Estimado usuario: Antes de utilizar este producto lo invitamos a leer el siguiente manual para que conozca todas sus funciones y caracteristicas.

EAC